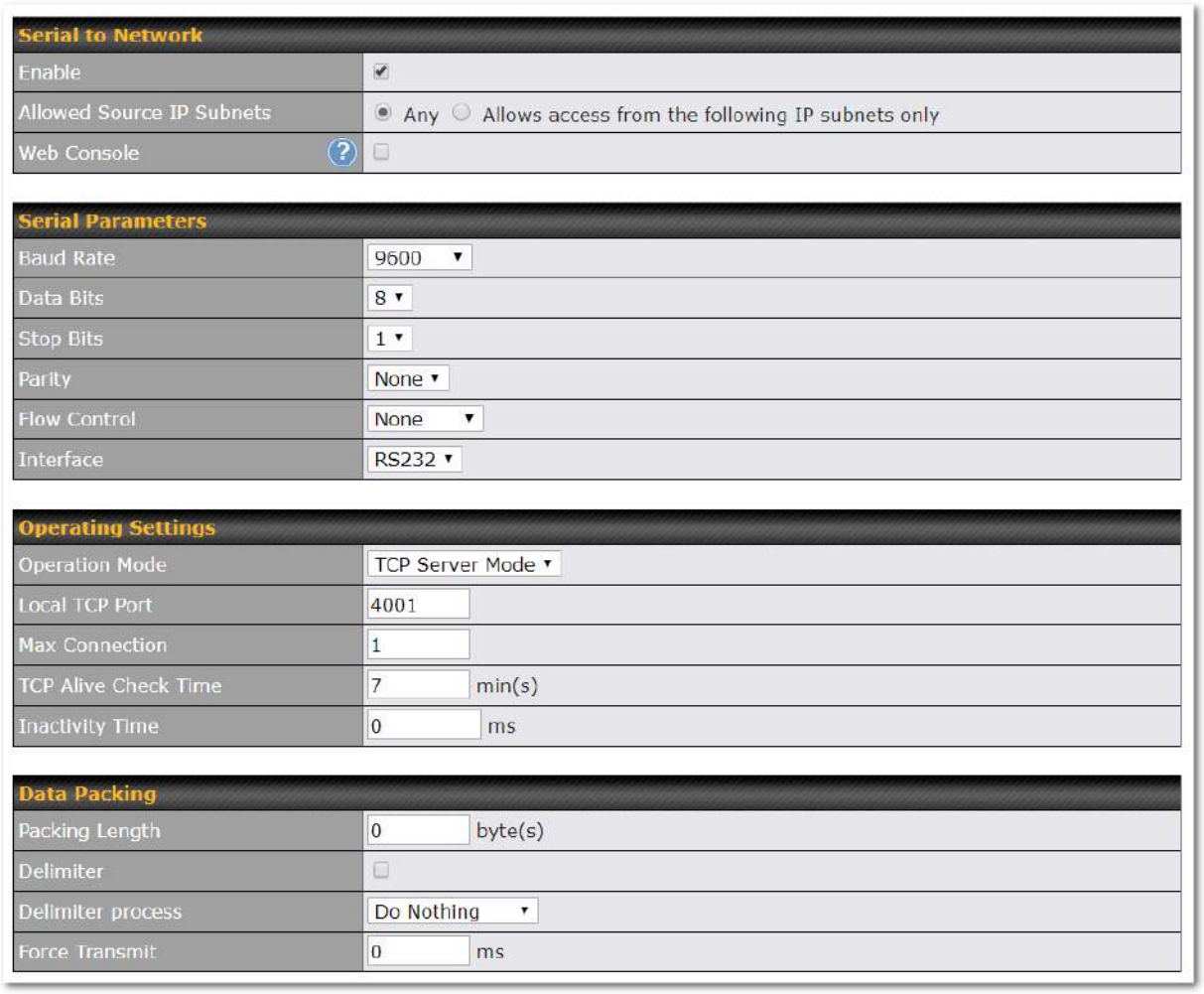
IPsec NAT-T	This field is for enabling the support of IPsec NAT-T passthrough. UDP ports 500, 4500, and 10000 are monitored by default. You may add more custom data ports that your IPsec system uses by checking **Define custom ports**. If the VPN contains IPsec site-to-site VPN traffic, check **Route IPsec Site-to-Site VPN** and choose the WAN connection to route the traffic to.

24.5 UART

Selected Pepwave MAX routers feature a RS-232 serial interface on the built-in terminal block. The RS-232 serial interface can be used to connect to a serial device and make it accessible over an TCP/IP network.

The serial interface can be enabled and parameters can be set on the web admin page under **Advanced > UART**. Make sure they match the serial device you are connecting to.



There are 4 pins i.e. TX, RX, RTS, CTS on the terminal block for serial connection and they correspond to the pins in a DB-9 connector as follows:

DB-9	Pepwave MAX Terminal Block
Pin 1	–
Pin 2	Rx (rated -+25V)
Pin 3	Tx (rated -+12V)
Pin 4	–
Pin 5	–
Pin 6	–
Pin 7	RTS
Pin 8	CTS
Pin 9	–

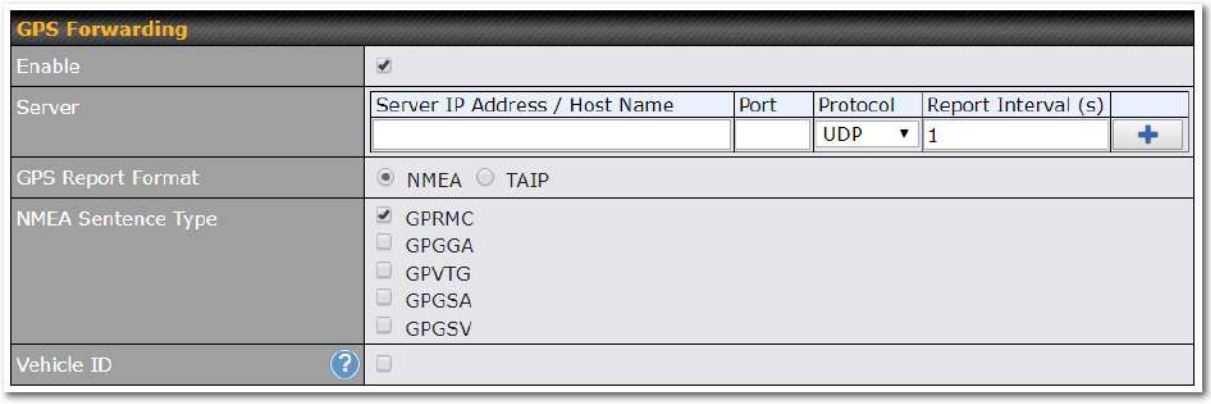
The RS232 serial interface is not an isolated RS232. External galvanic isolation may be added if required.

Be sure to check whether your serial cable is a null modem cable, commonly known as crossover cable, or a straight through cable. If in doubt, swap Rx and Tx, and RTS and CTS, at the other end and give it another go.

Once connected, your serial device should be accessible on your Pepwave MAX router LAN IP address at the specified TCP port.

24.6 GPS Forwarding

Using the GPS forwarding feature, some Pepwave routers can automatically send GPS reports to a specified server. To set up GPS forwarding, navigate to **Advanced>GPS Forwarding**.



GPS Forwarding	
Enable	Check this box to turn on GPS forwarding.
Server	Enter the name/IP address of the server that will receive GPS data. Also specify a port number, protocol (**UDP** or **TCP**), and a report interval of between 1 and 10 seconds. Click + to save these settings.
GPS Report Format	Choose from NMEA or TAIP format for sending GPS reports.
NMEA Sentence Type	If you've chosen to send GPS reports in NMEA format, select one or more sentence types for sending the data (**GPRMC**, **GPGGA**, **GPVTG**, **GPGSA**, and **GPGSV**).
Vehicle ID	The vehicle ID will be appended in the last field of the NMEA sentence. Note that the NMEA sentence will become customized and non-standard.
TAIP Sentence Type/TAIP ID (optional)	If you've chosen to send GPS reports in TAIP format, select one or more sentence types for sending the data (**PV—Position / Velocity Solution** and **CP—Compact Velocity Solution**). You can also optionally include an ID number in the **TAIP ID** field.

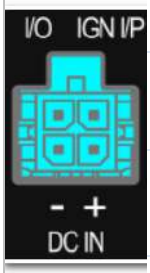
24.7 Ignition Sensing

Ignition Sensing detects the ignition signal status of a vehicle it is installed in.

This feature allows the cellular router to start up or shut down when the engine of that vehicle is started or turned off.

The time delay setting between ignition off and power down of the router is a configurable setting, which allows the router to stay on for a period of time after the engine of a vehicle is turned off.

Ignition Sensing installation

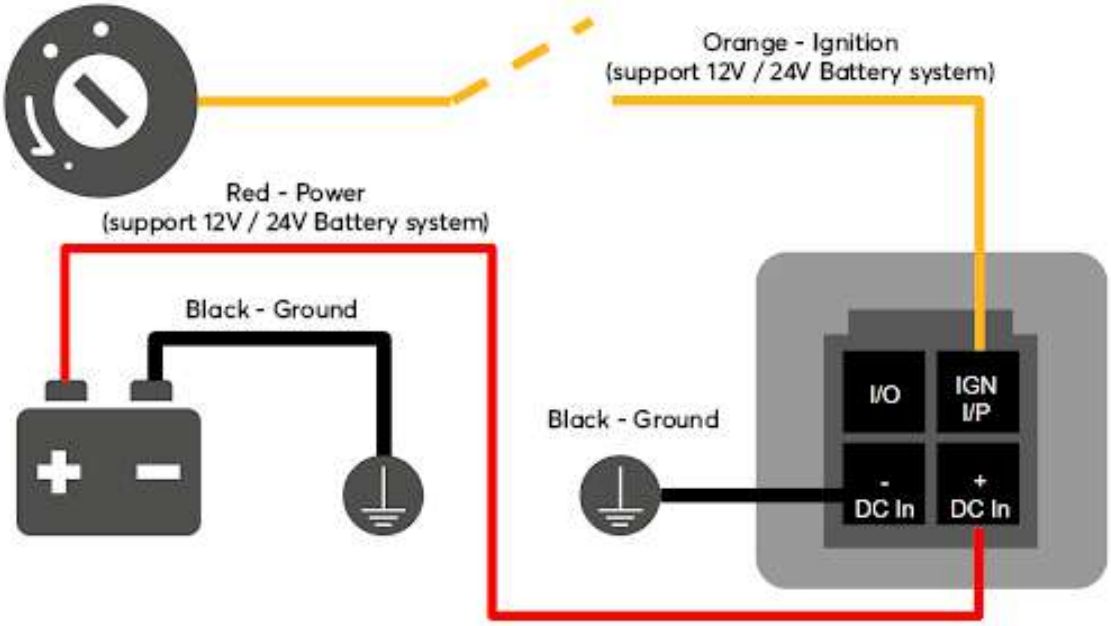


Functoin		Colour Wire
I/O	optional *	Brown
IGN I/P	connected to positive feed on the ignition **	Orange
DC IN -	connected to permanent negative feed (ground)	Black
DC IN +	connected to permanent positive feed (power)	Red

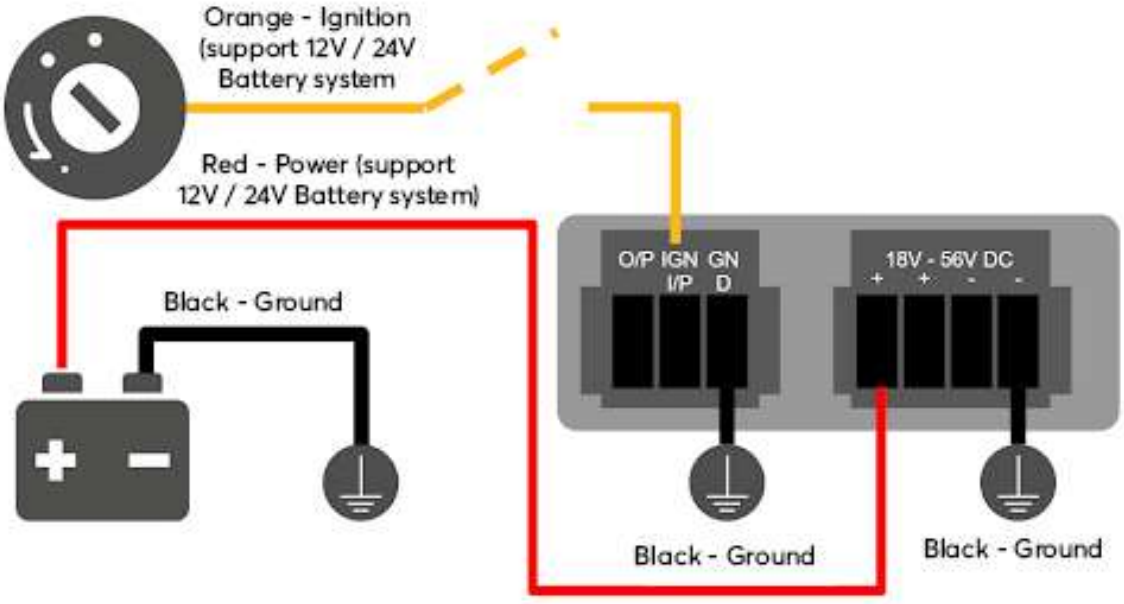
* Currently not functional; will be used for additional features in future firmware.

** Connecting IGN I/P is optional and is needed only if the Ignition Sensing feature is configured.

Connectivity diagram for devices with 4-pin connector



Connectivity diagram for devices with terminal block connection



GPIO Menu

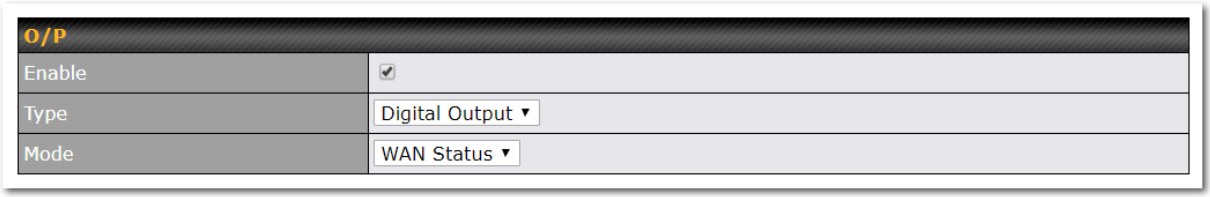
Note: This feature is applicable for certain models that come with a GPIO interface.

Ignition Sensing options can be found in **Advanced > GPIO.**
The configurable option for Ignition Input is **Delay;** the time in seconds that the router stays powered on after the ignition is turned off.

The O/P (connected to the I/O pin on a 4 pin connector) can be configured as a digital input, a digital output, or an analog input.

Digital Input - the connection supports input sensing; it reads the external input and determines if the settings should be 'High' (on) or 'Low' (off).

Digital Output - when there is a healthy WAN connection, the output pin is marked as 'High' (on). Otherwise, it will be marked as 'Low' (off).



Note: The Digital Output state (on/off) upon rebooting the device may vary depending on the model, eg. MAX BR1 MK2 = Persistent; MAX Transit Mini with ContentHub = Reset to default, etc.

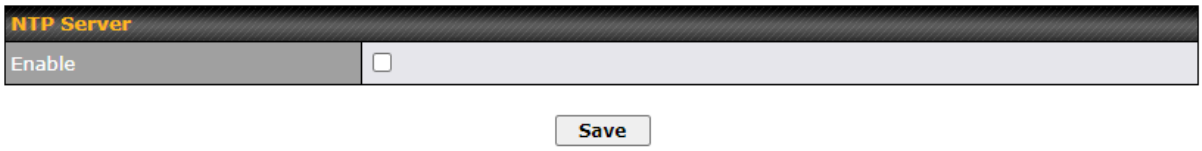
Analog Input - to be confirmed. In most cases, it should read the external input and determine the voltage level.

24.8 NTP Server

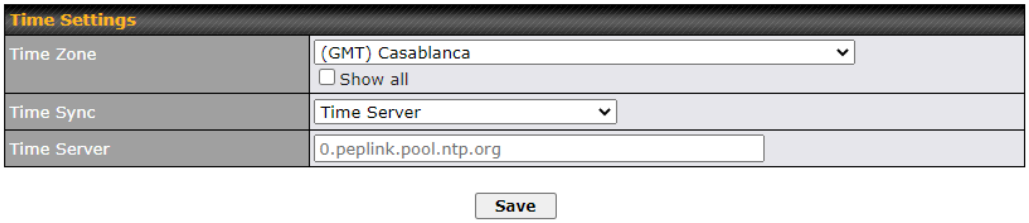
Pepwave routers can now serve as a local NTP server. Upon start up, it is now able to provide connected devices with the accurate time, precise UTC from either an external NTP server or via GPS and ensuring that connected devices always receive the correct time.

Compatible with: BR1 ENT, BR1 Pro CAT-20/5G, 700 HW3, HD2/4, Transit

NTP Server setting can be found via: **Advanced>Misc. Settings>NTP Server**

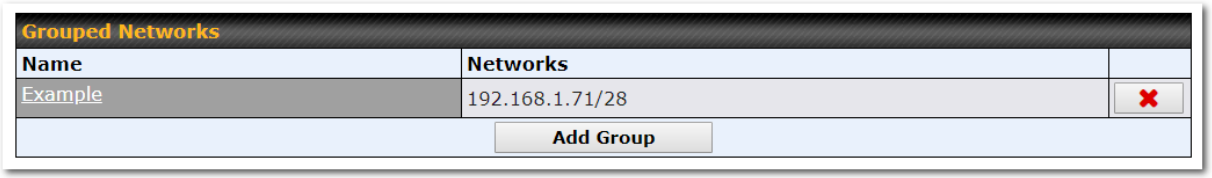


Time Settings can be found at **System>Time>Time Settings**

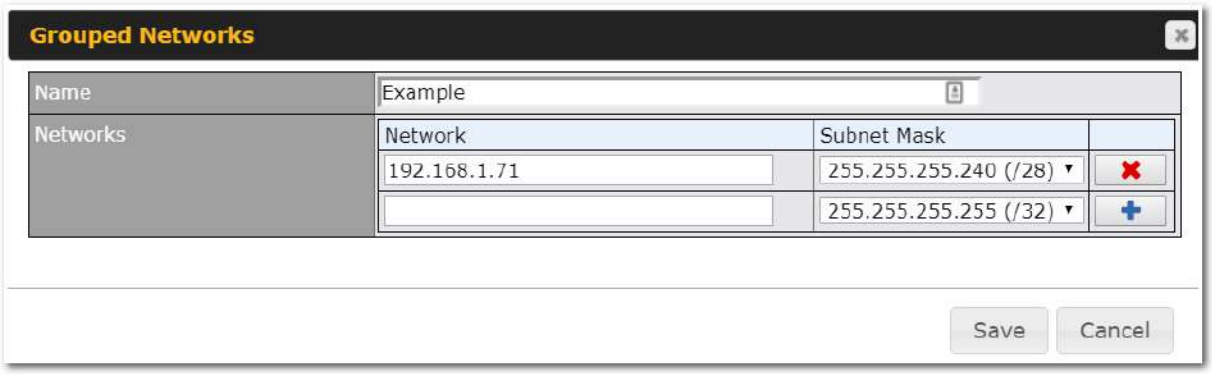


24.9 Grouped Networks

Advanced > Grouped Networks allows to configure destination networks in grouped format.



Select Add group to create a new group with single IPaddresses or subnets from different VLANs.



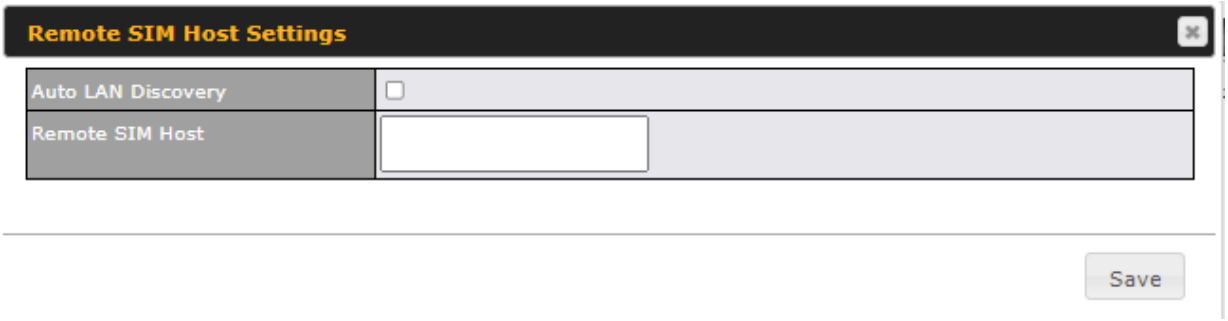
The created network groups can be used in outbound policies, firewall rules.

24.10 Remote SIM Management

The Remote SIM management is accessible via **Advanced > Misc Settings > Remote SIM Management**. By default, this feature is disabled.

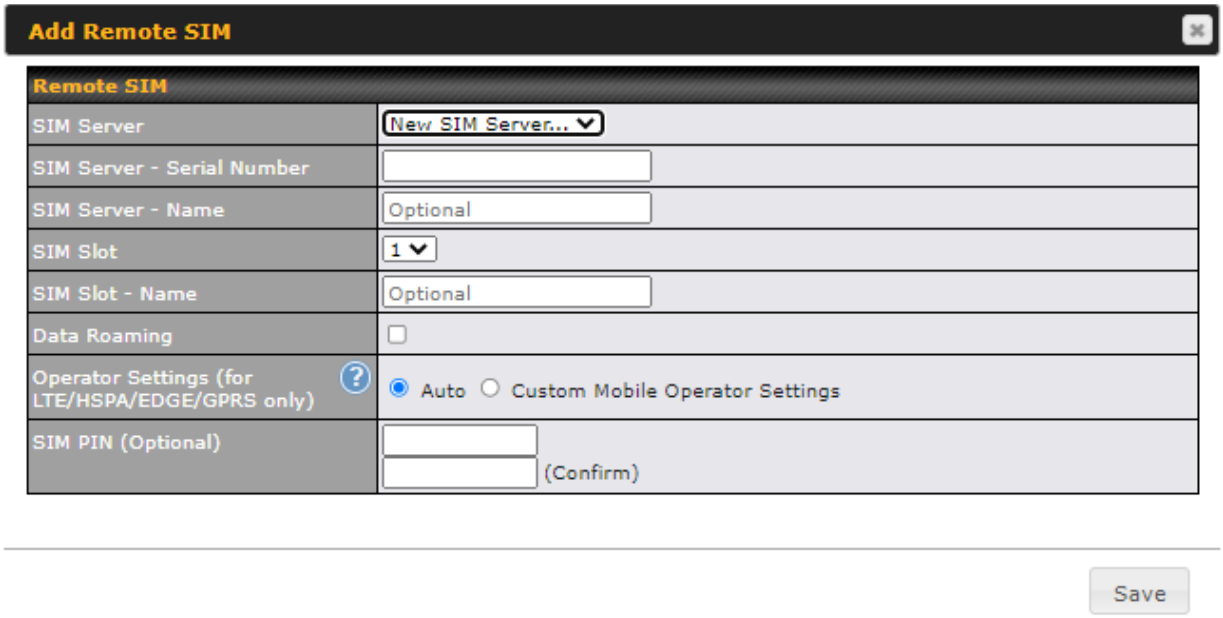
Please note that a limited number of Pepwave routers support the SIM Injector, may refer to the link: https://www.peplink.com/products/sim-injector/ or Appendix B for more details on FusionSIM Manual.

Remote SIM Host Settings



Remote SIM Host Settings	
Active LAN Discovery	Check this box to enable Auto LAN discovery of the remote SIM server..
Remote SIM Host	Enter the public IP address of the SIM Injector. If you enter IP addresses here, it is not necessary to tick the "**Auto LAN Discovery**" box above.

You may define the Remote SIM information by clicking the "**Add Remote SIM**". Here, you can enable **Data Roaming** and **custom APN** for your SIM cards.



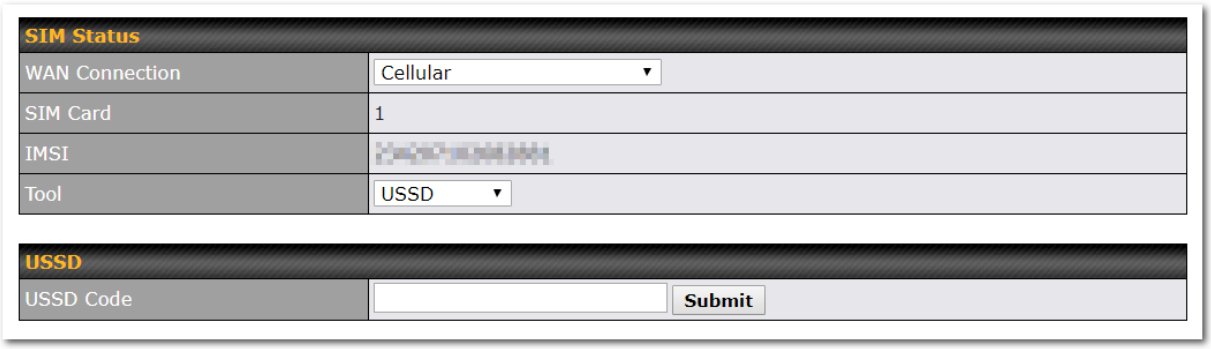
Add Remote SIM Settings	
SIM Server	Add a new SIM Server
SIM Server - Serial Number	Enter the serial number of SIM Server
SIM Server - Name	This optional field allows you define a name for the SIM Server
SIM Slot	Click the drop-down menu and choose which SIM slot you want to connect.
SIM Slot - Name	This optional field allows you define a name for the SIM slot.
Data Roaming	Enables data roaming on this particular SIM card.
Operator Settings (for LTE//HSPA/EDGE/GPRS Only)	This setting allows you to configure the APN settings of your connection. If **Auto** is selected, the mobile operator should be detected automatically. The connected device will be configured and connection will be made automatically. If there is any difficulty in making a connection, you may select **Custom** to enter your carrier's APN, Username and Password settings manually. The correct values can be obtained from your carrier. The default and recommended setting is Auto.

24.11 SIM Toolkit

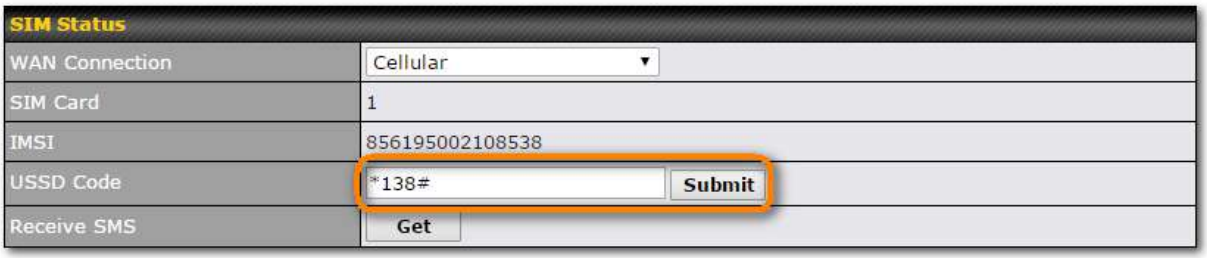
The SIM Toolkit, accessible via **Advanced > Misc Settings > SIM Toolkit**, supports two functionalities, USSD and SMS.

USSD

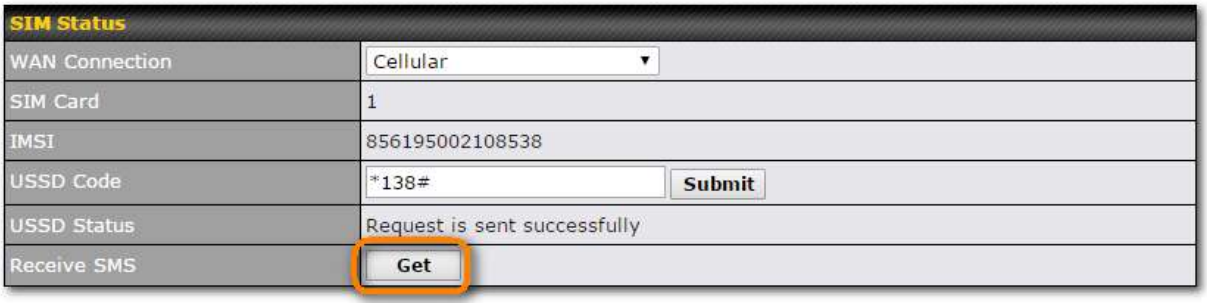
Unstructured Supplementary Service Data (USSD) is a protocol used by mobile phones to communicate with their service provider's computers. One of the most common uses is to query the available balance.



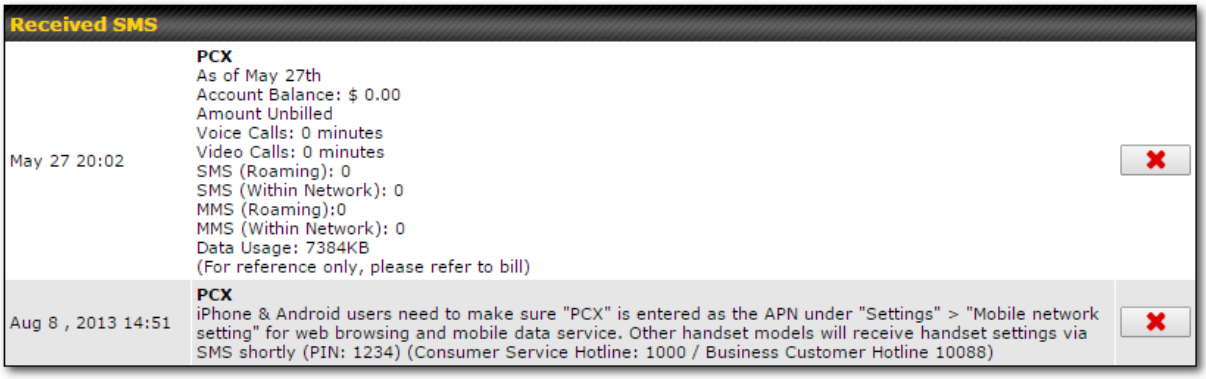
Enter your USSD code under the **USSD Code** text field and click **Submit**.



You will receive a confirmation. To check the SMS response, click **Get**.

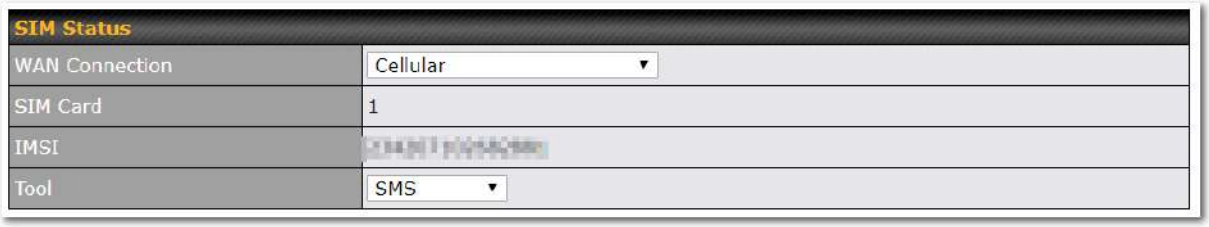


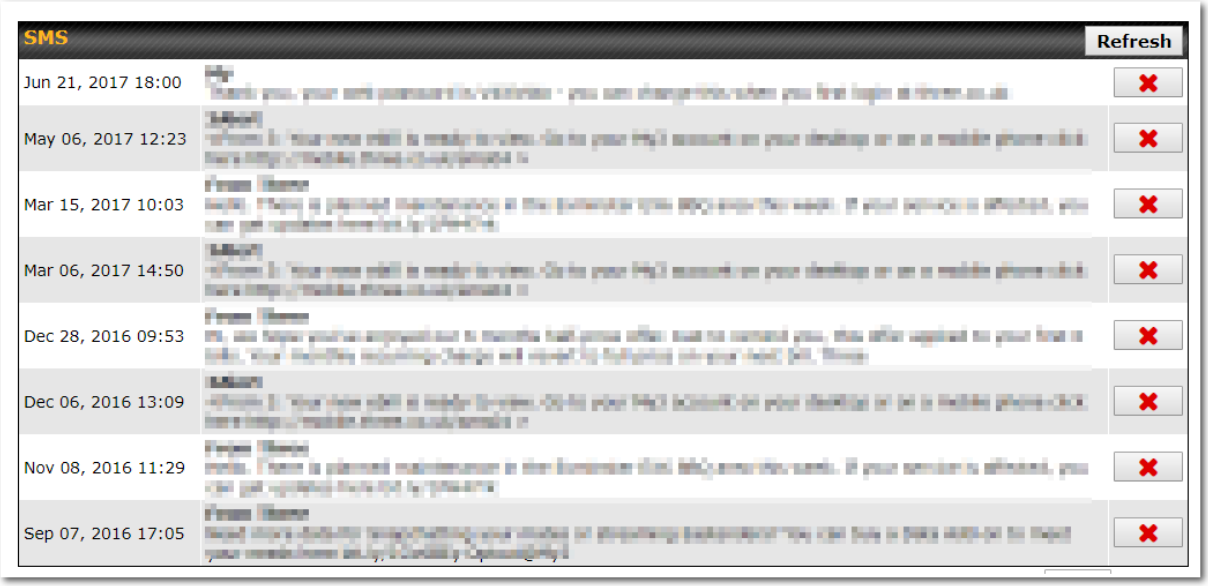
After a few minutes you will receive a response to your USSD code



SMS

The SMS option allows you to read SMS (text) messages that have been sent to the SIM in your Pepwave router.

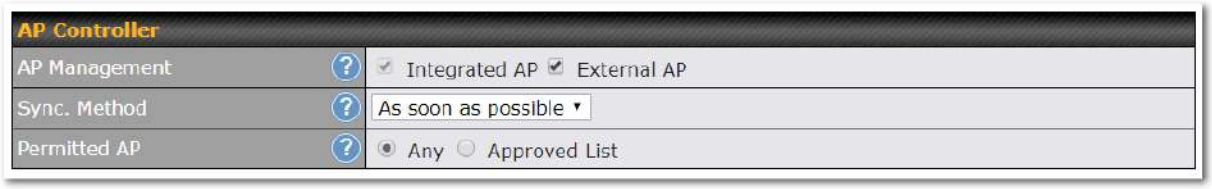




25 AP

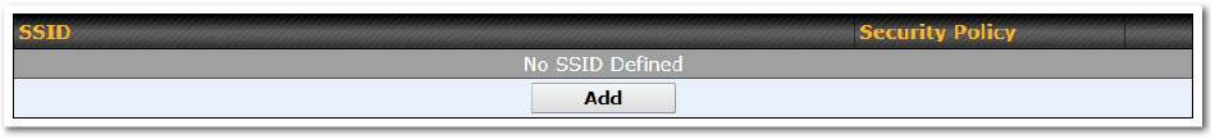
25.1 AP Controller

The AP controller acts as a centralized controller of Pepwave Access Points.
With this feature, users can customize and manage up to 1500 Access Points from a single Pepwave router interface.
To configure, navigate to the **AP** tab. and the following screen appears.

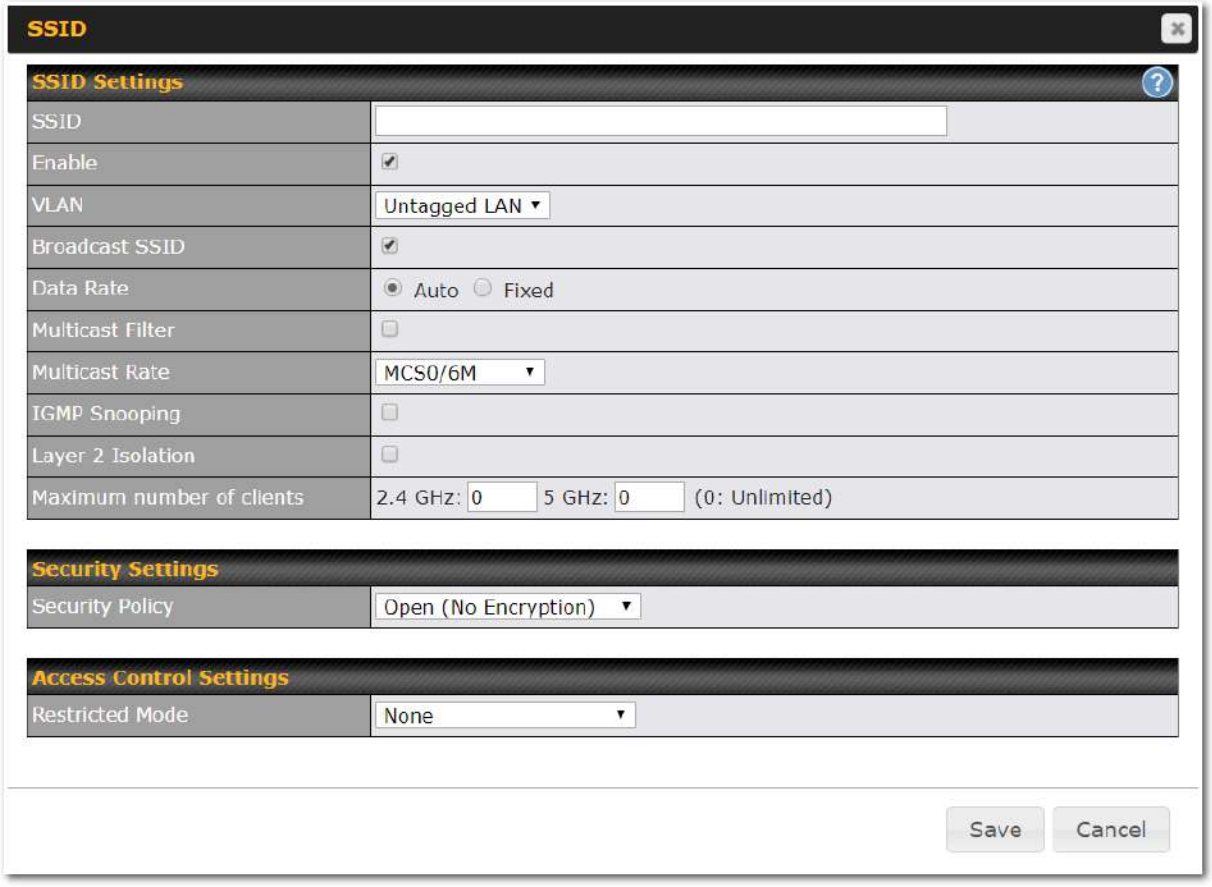


AP Controller	
AP Management	The AP controller for managing Pepwave APs can be enabled by checking this box. When this option is enabled, the AP controller will wait for management connections originating from APs over the LAN on TCP and UDP port 11753. It will also wait for captive portal connections on TCP port 443. An extended DHCP option, **CAPWAP Access Controller addresses** (field 138), will be added to the DHCP server. A local DNS record, **AP Controller**, will be added to the local DNS proxy.
Sync Method	• As soon as possible • Progressively • One at a time
Permitted AP	Access points to manage can be specified here. If **Any** is selected, the AP controller will manage any AP that reports to it. If **Approved List** is selected, only APs with serial numbers listed in the provided text box will be managed.

25.2 Wireless SSID



Current SSID information appears in the **SSID** section. To edit an existing SSID, click its name in the list. To add a new SSID, click **Add**. Note that the following settings vary by model.
The below settings ishows a new SSID window with Advanced Settings enabled (these are available by selecting the question mark in the top right corner).



SSID Settings	
SSID	This setting specifies the SSID of the virtual AP to be scanned by Wi-Fi clients.
Enable	Click the drop-down menu to apply a time schedule to this interface
VLAN	This setting specifies the VLAN ID to be tagged on all outgoing packets generated from this wireless network (i.e., packets that travel from the Wi-Fi segment through the Pepwave AP One unit to the Ethernet segment via the LAN port). The default value of this setting is **0**, which means VLAN tagging is disabled (instead of tagged with zero).

Broadcast SSID	This setting specifies whether or not Wi-Fi clients can scan the SSID of this wireless network. **Broadcast SSID** is enabled by default.
Data Rate [A]	Select **Auto** to allow the Pepwave router to set the data rate automatically, or select **Fixed** and choose a rate from the displayed drop-down menu.
Multicast Filter[A]	This setting enables the filtering of multicast network traffic to the wireless SSID.
Multicast Rate[A]	This setting specifies the transmit rate to be used for sending multicast network traffic. The selected **Protocol** and **Channel Bonding** settings will affect the rate options and values available here.
IGMP Snooping [A]	To allow the Pepwave router to listen to internet group management protocol (IGMP) network traffic, select this option.
DHCP Option 82 [A]	If you use a distributed DHCP server/relay environment, you can enable this option to provide additional information on the manner in which clients are physically connected to the network.
Layer 2 Isolation [A]	**Layer 2** refers to the second layer in the ISO Open System Interconnect model. When this option is enabled, clients on the same VLAN, SSID, or subnet are isolated to that VLAN, SSID, or subnet, which can enhance security. Traffic is passed to the upper communication layer(s). By default, the setting is disabled.
Maximum Number of Clients	Indicate the maximum number of clients that should be able to connect to each frequency.

[A] - Advanced feature. Click the button on the top right-hand corner to activate.

Security Settings	
Security Policy	This setting configures the wireless authentication and encryption methods. Available options : • **Open (**No Encryption) • **Enhanced Open** (OWE) • **WPA3 -Personal** (AES:CCMP) • **WPA2/WPA3 -Personal** (AES:CCMP) • **WPA2 -Personal** (AES:CCMP) • **WPA2 – Enterprise**

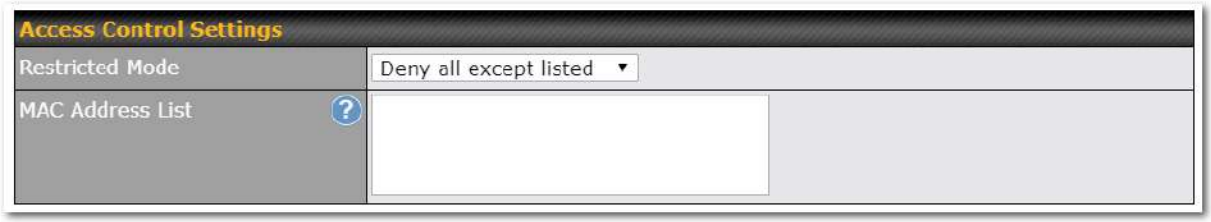
- **WPA/WPA2 - Personal** (TKIP/AES: CCMP)
- **WPA/WPA2 – Enterprise**

When **WPA/WPA2 - Enterprise** is configured, RADIUS-based 802.1 x authentication is enabled. Under this configuration, the **Shared Key** option should be disabled. When using this method, select the appropriate version using the **V1**/**V2** controls. The security level of this method is known to be very high.

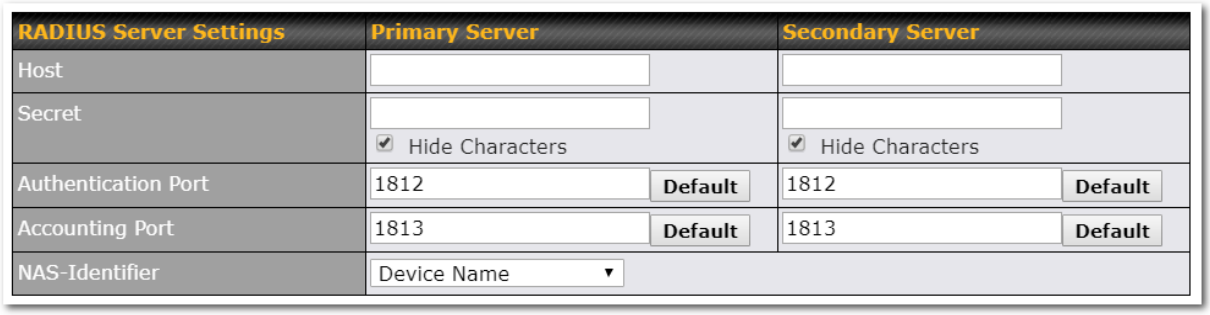
When **WPA/WPA2- Personal** is configured, a shared key is used for data encryption and authentication. When using this configuration, the **Shared Key** option should be enabled. Key length must be between eight and 63 characters (inclusive). The security level of this method is known to be high.

NOTE:

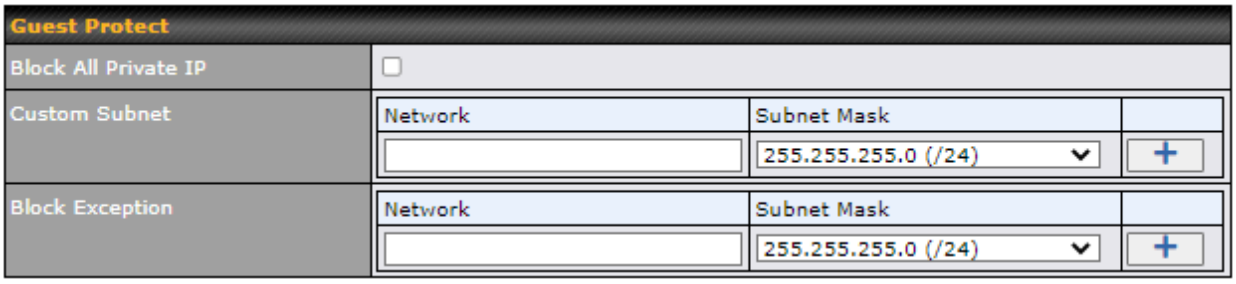
When **WPA2/WPA3- Personal** is configured, if a managed AP which is NOT WPA3 PSK capable, the AP Controller will not push those WPA3 and WPA2/WPA3 SSID to that AP.



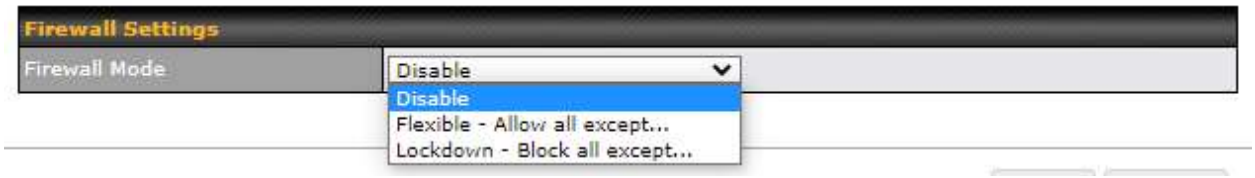
Access Control	
Restricted Mode	The settings allow the administrator to control access using MAC address filtering. Available options are **None**, **Deny all except listed**, **Accept all except listed** and **Radius MAC Authentication.**
MAC Address List	Connection coming from the MAC addresses in this list will be either denied or accepted based on the option selected in the previous field. If more than one MAC address needs to be entered, you can use a carriage return to separate them.



RADIUS Server Settings	
Host	Enter the IP address of the primary RADIUS server and, if applicable, the secondary RADIUS server.
Secret	Enter the RADIUS shared secret for the primary server and, if applicable, the secondary RADIUS server.
Authentication Port	In the field, enter the UDP authentication port(s) used by your RADIUS server(s) or click the **Default** button to enter **1812**.
Accounting Port	In the field, enter the UDP accounting port(s) used by your RADIUS server(s) or click the **Default** button to enter **1813**.
NAS-Identifier	Choose between **Device Name**, **LAN MAC address**, **Device Serial Number** and **Custom Value**



Guest Protect	
Block All Private IP	Check this box to deny all connection attempts by private IP addresses.
Custom Subnet	To create a custom subnet for guest access, enter the IP address and choose a subnet mask from the drop-down menu.
Block Exception	To block access from a particular subnet, enter the IP address and choose a subnet mask from the drop-down menu.

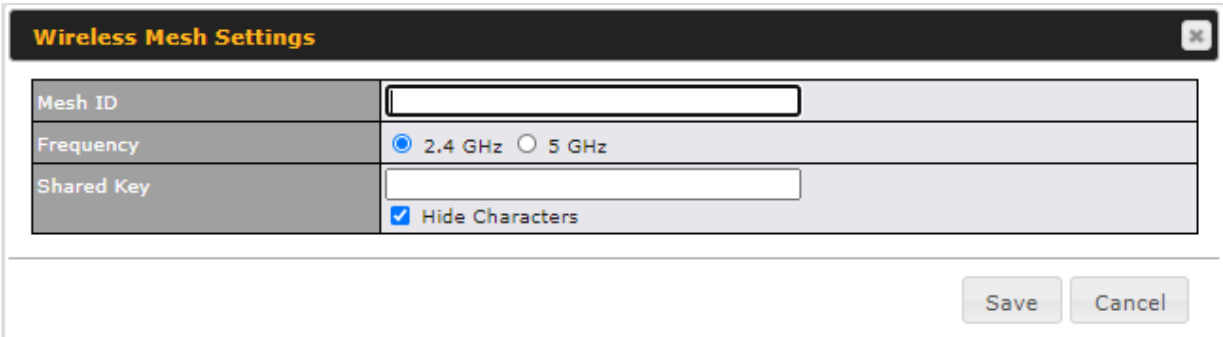


Firewall Settings	
Firewall Mode	The settings allow administrators to control access to the SSID based on Firewall Rules. Available options are **Disable, Lockdown - Block all except...** and **Flexible -Allow all except…**
Firewall Exceptions	Create Firewall Rules based on **Port, IP Network, MAC address** or **Domain Name**

25.3 Wireless Mesh

Wireless Mesh Support is available on devices running 802.11ac (Wi-Fi 5) and above. Along with the AP Controller, mesh network extensions can be established, which can expand network coverage. Note that the Wireless Mesh settings need to match the Mesh ID and Shared Key of the other devices on the same selected frequency band.

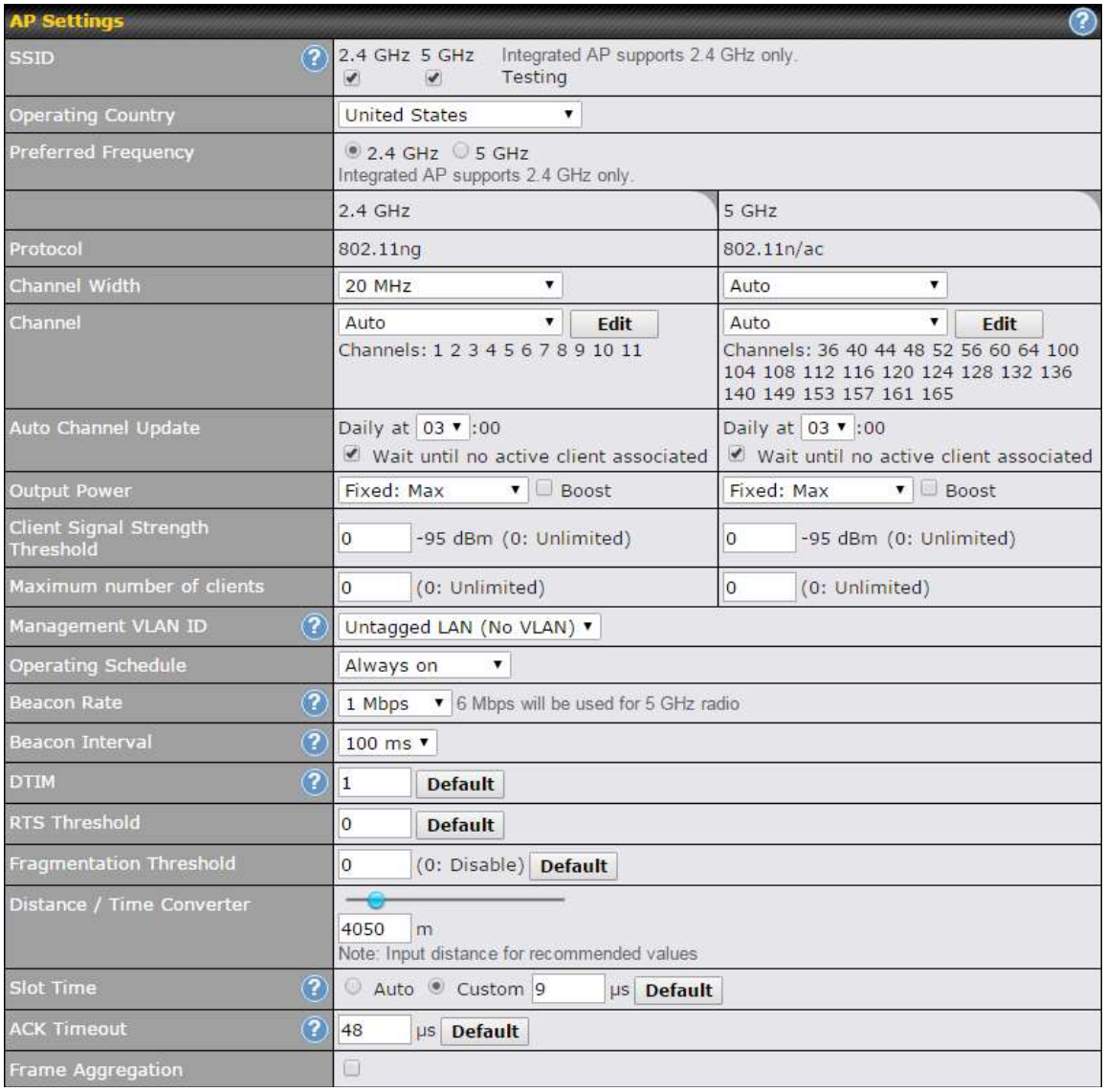
To create a new Wireless Mesh profile, go to **AP** > **Wireless Mesh**, and click **Add**.



Wireless Mesh Settings	
Mesh ID	Enter a name to represent the Mesh profile.
Frequency	Select the 2.4GHz or 5GHz frequency to be used.
Shared Key	Enter the shared key in the text field. Please note that it needs to match the shared keys of the other APs in the Wireless Mesh settings. Click **Hide / Show Characters** to toggle visibility.

25.4 Settings

On many Pepwave models, the AP settings screen (**AP>Settings**) looks similar to the example below:



AP Settings	
SSID	These buttons specify which wireless networks will use this AP profile. You can also select the frequencies at which each network will transmit. Please note that the Pepwave MAX does not detect whether the AP is capable of transmitting at both frequencies. Instructions to transmit at unsupported frequencies will be ignored by the AP.

Operating Country	This drop-down menu specifies the national / regional regulations which the AP should follow. • If a North American region is selected, RF channels 1 to 11 will be available and the maximum transmission power will be 26 dBm (400 mW). • If European region is selected, RF channels 1 to 13 will be available. The maximum transmission power will be 20 dBm (100 mW). Note: Users are required to choose an option suitable to local laws and regulations. Per FCC regulation, the country selection is not available on all models marketed in the US. All US models are fixed to US channels only.
Preferred Frequency	These buttons determine the frequency at which access points will attempt to broadcast. This feature will only work for APs that can transmit at both 5.4GHz and 5GHz frequencies.
Protocol	This section displays the 2.4 GHz protocols your APs are using.
Channel Width	There are three options: 20 MHz, 20/40 MHz, and 40 MHz. With this feature enabled, the Wi-Fi system can use two channels at once. Using two channels improves the performance of the Wi-Fi connection.
Channel	This drop-down menu selects the 802.11 channel to be utilized. Available options are from 1 to 11 and from 1 to 13 for the North America region and Europe region, respectively. (Channel 14 is only available when the country is selected as Japan with protocol 802.11b.) If **Auto** is set, the system will perform channel scanning based on the scheduled time set and choose the most suitable channel automatically.
Auto Channel Update	Indicate the time of day at which update automatic channel selection.
Output Power[A]	This drop-down menu determines the power at which the AP under this profile will broadcast. When fixed settings are selected, the AP will broadcast at the specified power level, regardless of context. When **Dynamic** settings are selected, the AP will adjust its power level based on its surrounding APs in order to maximize performance. The **Dynamic: Auto** setting will set the AP to do this automatically. Otherwise, the **Dynamic: Manual** setting will set the AP to dynamically adjust only if instructed to do so. If you have set **Dynamic:Manual**, you can go to **AP>Toolbox>Auto Power Adj.** to give your AP further instructions. If you click the **Boost** checkbox, the AP under this profile will transmit using additional power. Please note that using this option with several APs in close proximity will lead to increased interference.
Client Signal Strength Threshold[A]	This field determines that maximum signal strength each individual client will receive. The measurement unit is megawatts.

Max number of Clients[A]	This field determines the maximum clients that can be connected to APs under this profile.
Management VLAN ID	This field specifies the VLAN ID to tag to management traffic, such as AP to AP controller communication traffic. The value is **0** by default, meaning that no VLAN tagging will be applied. Note: change this value with caution as alterations may result in loss of connection to the AP controller.
Operating Schedule	Choose from the schedules that you have defined in **System>Schedule**. Select the schedule for the integrated AP to follow from the drop-down menu.
Beacon Rate[A]	This drop-down menu provides the option to send beacons in different transmit bit rates. The bit rates are **1Mbps**, **2Mbps**, **5.5Mbps**, **6Mbps**, and **11Mbps**.
Beacon Interval[A]	This drop-down menu provides the option to set the time between each beacon send. Available options are **100ms**, **250ms**, and **500ms**.
DTIM[A]	This field provides the option to set the frequency for beacon to include delivery traffic indication message (DTIM). The interval unit is measured in milliseconds.
RTS Threshold[A]	This field provides the option to set the minimum packet size for the unit to send an RTS using the RTS/CTS handshake. Setting **0** disables this feature.
Fragmentation Threshold[A]	Determines the maximum size (in bytes) that each packet fragment will be broken down into. Set 0 to disable fragmentation.
Distance/Time Converter[A]	Select the distance you want your Wi-Fi to cover in order to adjust the below parameters. Default values are recommended.
Slot Time[A]	This field provides the option to modify the unit wait time before it transmits. The default value is **9µs.**
ACK Timeout[A]	This field provides the option to set the wait time to receive acknowledgement packet before doing retransmission. The default value is **48µs.**
Frame Aggregation[A]	With this feature enabled, throughput will be increased by sending two or more data frames in a single transmission.
Frame Length	This field is only available when **Frame Aggregation** is enabled. It specifies the frame length for frame aggregation. By default, it is set to **50000**.

[A] - Advanced feature. Click the button on the top right-hand corner to activate.

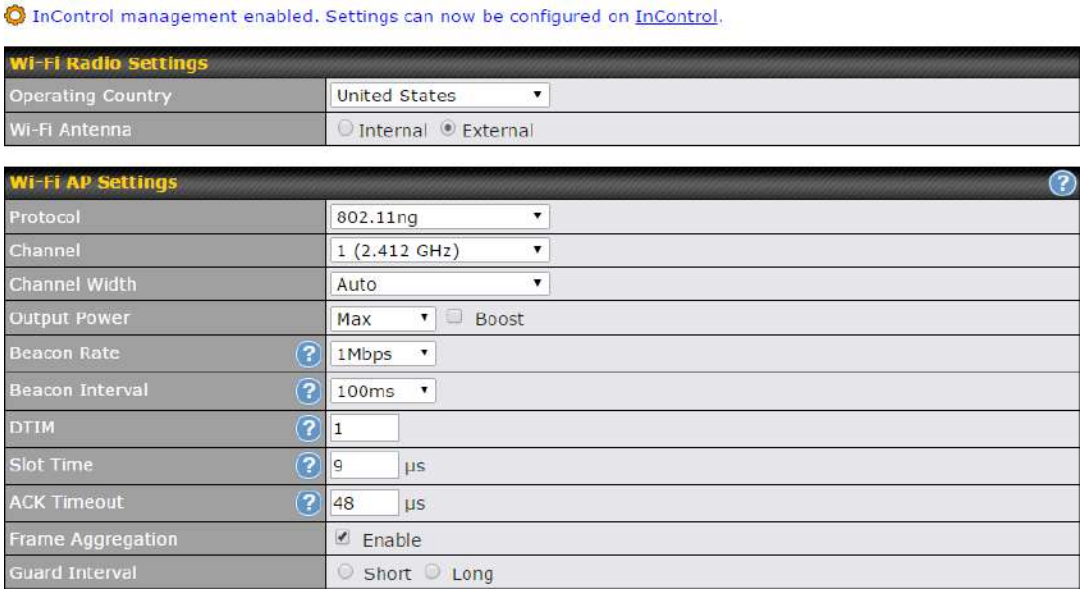
The device with integrated AP can operate under the Wi-Fi Operating Mode, and the default setting is **WAN + AP** mode:

Note: This option is available for selected devices only (HD2/HD4 and HD2/HD4 MBX).

Integrated AP	
	In this mode, all Wi-Fi will operate as Wi-Fi WAN and no integrated Wi-Fi AP will be operated on this device.
WAN	If Wi-Fi Operating mode is choosing **WAN**, The status indicated by the front panel LED is as follows: - Wi-Fi 1 is Green if Wi-Fi WAN 1 is enabled. - Wi-Fi 2 is Green if Wi-Fi WAN 2 is enabled.
	In this mode, some Wi-Fi will operate as Wi-Fi WAN. Some other Wi-Fi WANs will be forced offline and their Wi-Fi resources will be reserved for integrated Wi-Fi AP operations.
WAN + AP	If Wi-Fi Operating mode is choosing **WAN + AP**, The status indicated by the front panel LED is as follows: - Wi-Fi 1 is Green if WI-FI WAN is enabled. - Wi-Fi 2 is Green if Wi-Fi AP is ON.
	In this mode, all Wi-Fi functions as integrated Wi-Fi AP. All Wi-Fi WANs will be forced to go offline.
AP	If Wi-Fi Operating mode is choosing **AP**, The status indicated by the front panel LED is as follows: - W-Fi 1 is Green, if there is any Wireless SSID is selected 2.4GHz. - W-Fi 2 is Green, if there is any Wireless SSID is selected 5GHz.

Web Administration Settings	
Enable	Check the box to allow the Pepwave router to manage the web admin access information of the AP.
Web Access Protocol	These buttons specify the web access protocol used for accessing the web admin of the AP. The two available options are **HTTP** and **HTTPS**.
Management Port	This field specifies the management port used for accessing the device.
HTTP to HTTPS Redirection	This option will be available if you have chosen **HTTPS** as the **Web Access Protocol**. With this enabled, any HTTP access to the web admin will redirect to HTTPS automatically.
Admin User Name	This field specifies the administrator username of the web admin. It is set as *admin* by default.
Admin Password	This field allows you to specify a new administrator password. You may also click the **Generate** button and let the system generate a random password automatically.

Navigating to **AP>Settings** on some Pepwave models displays a screen similar to the one shown below:



Wi-Fi Radio Settings	
Operating Country	This option sets the country whose regulations the Pepwave router follows.
Wi-Fi Antenna	Choose from the router's internal or optional external antennas, if so equipped.

Important Note
Per FCC regulations, the country selection is not available on all models marketed in the US. All US models are fixed to US channels only.

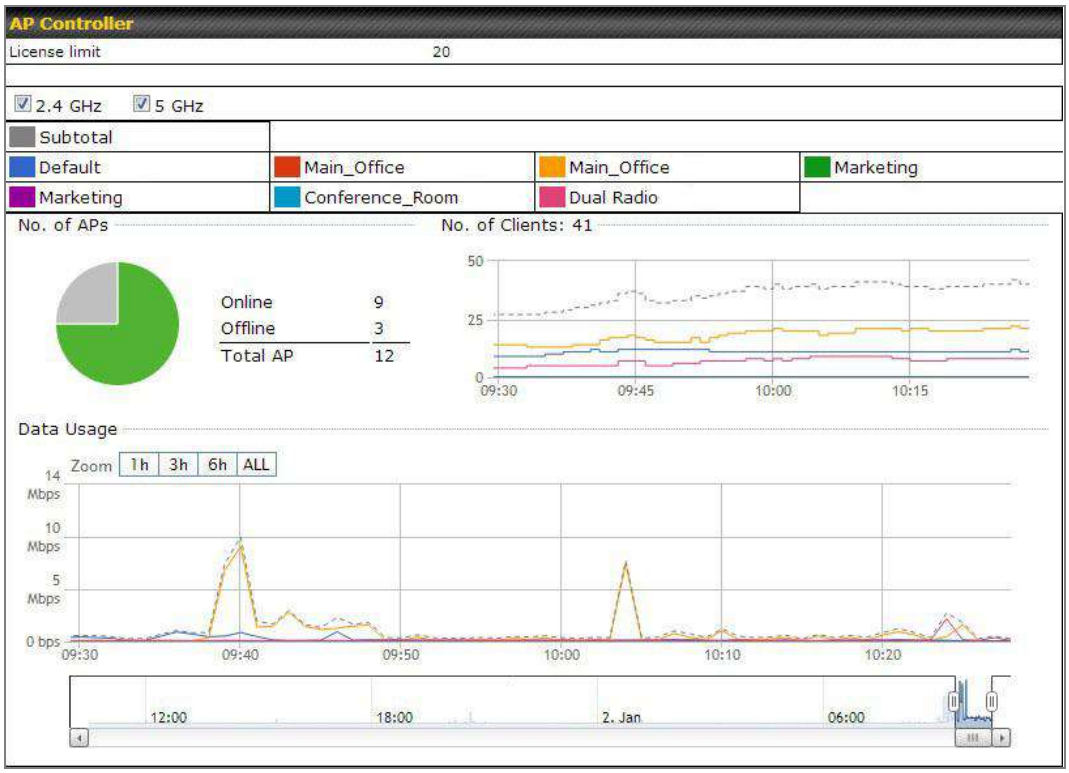
Wi-Fi AP Settings	
Protocol	This option allows you to specify whether 802.11b and/or 802.11g client association requests will be accepted. Available options are **802.11ng** and **802.11na**. By default, **802.11ng** is selected.
Channel	This option allows you to select which 802.11 RF channel will be used. **Channel 1 (2.412 GHz)** is selected by default.
Channel Width	**Auto (20/40 MHz)** and **20 MHz** are available. The default setting is **Auto (20/40 MHz),** which allows both widths to be used simultaneously.
Output Power	This option is for specifying the transmission output power for the Wi-Fi AP. There are 4 relative power levels available – **Max**, **High**, **Mid**, and **Low**. The actual output power will be bound by the regulatory limits of the selected country.
Beacon Rate[A]	This option is for setting the transmit bit rate for sending a beacon. By default, **1Mbps** is selected.
Beacon Interval[A]	This option is for setting the time interval between each beacon. By default, **100ms** is selected.
DTIM[A]	This field allows you to set the frequency for the beacon to include a delivery traffic indication message. The interval is measured in milliseconds. The default value is set to **1 ms**.
Slot Time[A]	This field is for specifying the wait time before the Router transmits a packet. By default, this field is set to **9 µs**.
ACK Timeout[A]	This field is for setting the wait time to receive an acknowledgement packet before performing a retransmission. By default, this field is set to **48 µs**.
Frame Aggregation[A]	This option allows you to enable frame aggregation to increase transmission throughput.
Guard Interval[A]	This setting allows choosing a short or long guard period interval for your transmissions.

[A] - Advanced feature, please click the button on the top right-hand corner to activate.

26 AP Controller Status

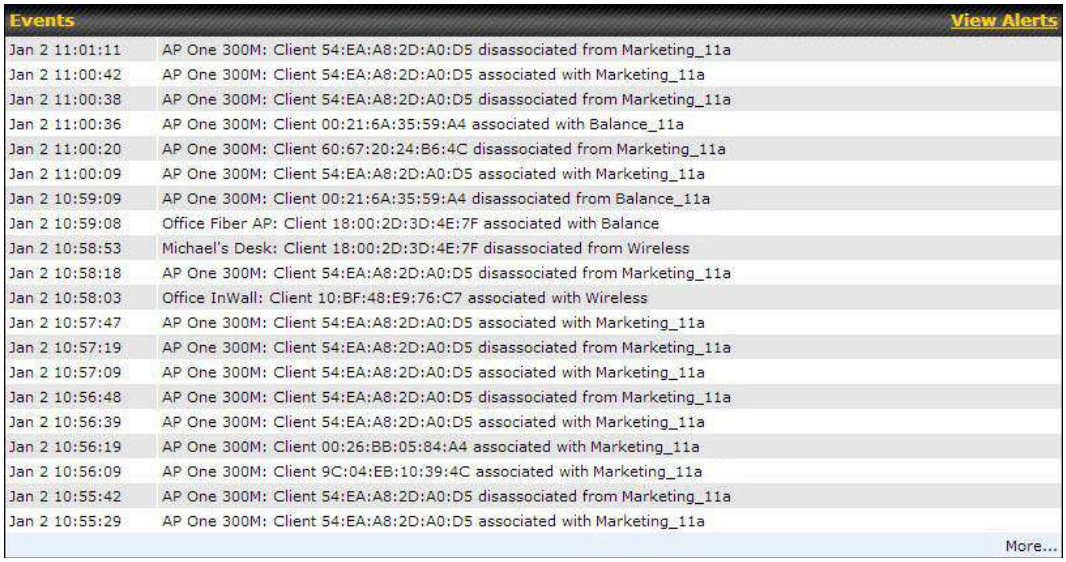
26.1 Info

A comprehensive overview of your AP can be accessed by navigating to **AP > Controller Status > Info**.



AP Controller	
License Limit	This field displays the maximum number of AP your Balance router can control. You can purchase licenses to increase the number of AP you can manage.
Frequency	Underneath, there are two check boxes labeled **2.4 Ghz** and **5 Ghz**. Clicking either box will toggle the display of information for that frequency. By default, the graphs display the number of clients and data usage for both 2.4GHz and 5 GHz frequencies.
SSID	The colored boxes indicate the SSID to display information for. Clicking any colored box will toggle the display of information for that SSID. By default, all the graphs show information for all SSIDs.
No. of APs	This pie chart and table indicates how many APs are online and how many are offline.
No.of Clients	This graph displays the number of clients connected to each network at any

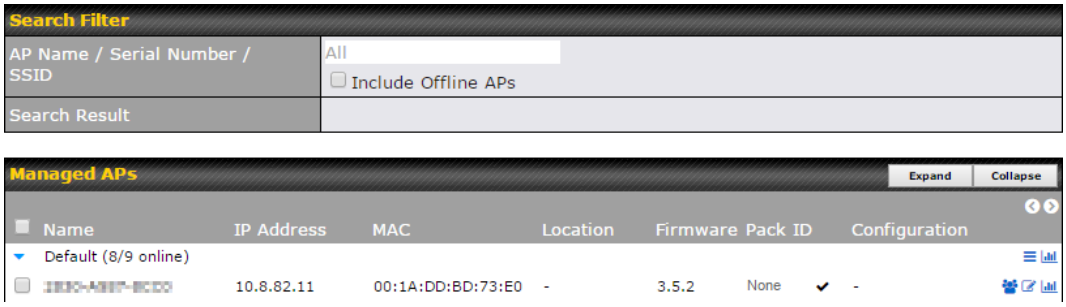
	given time. Mouse over any line on the graph to see how many clients connected to a specific SSID for that point in time.
Data Usage	This graph enables you to see the data usage of any SSID for any given time period. Mouse over any line on the graph to see the data usage by each SSID for that point in time. Use the buttons next to **Zoom** to select the time scale you wish to view. In addition, you could use the sliders at the bottom to further refine your timescale.

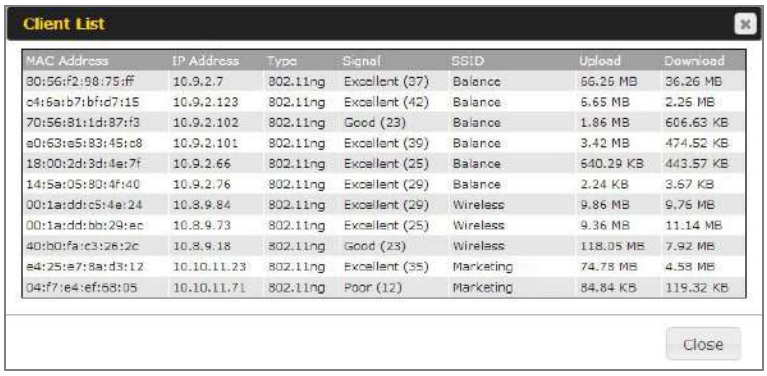


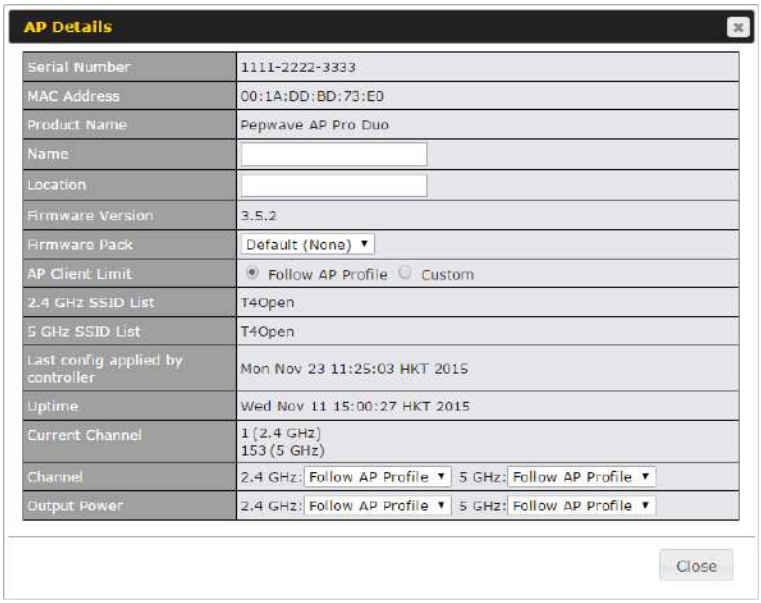
Events
This event log displays all activity on your AP network, down to the client level. Click **View Alerts** to see only alerts, and click the **More…** link for additional records.

26.2 Access Point (Usage)

A detailed breakdown of data usage for each AP is available at **AP > Controller Status > Access Point**.

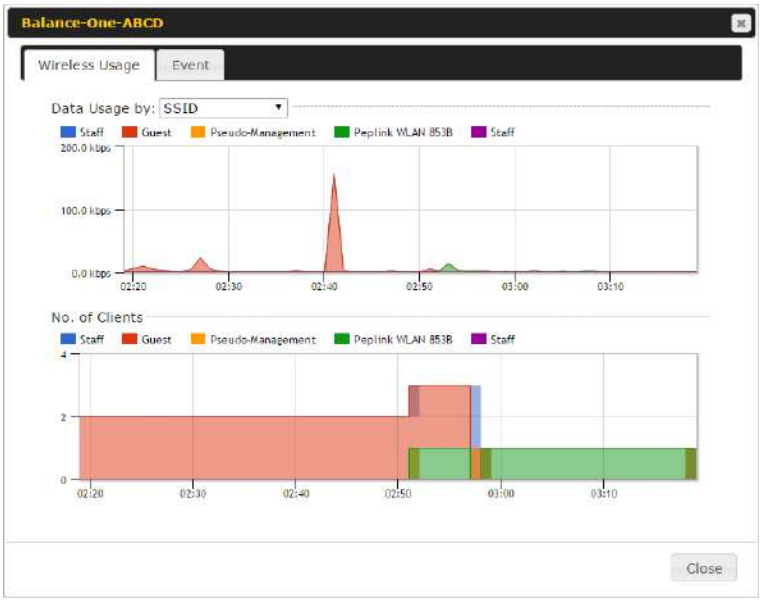


Usage	
AP Name/Serial Number	This field enables you to quickly find your device if you know its name or serial number. Fill in the field to begin searching. Partial names and serial numbers are supported.
Online Status	This button toggles whether your search will include offline devices.
Managed Wireless Devices	This table shows the detailed information on each AP, including channel, number of clients, upload traffic, and download traffic. Click the blue arrows at the left of the table to expand and collapse information on each device group. You could also expand and collapse all groups by using the Expand Collapse buttons. On the right of the table, you will see the following icons: . Click the icon to see a usage table for each client:  Click the icon to configure each client



For easier network management, you can give each client a name and designate its location. You can also designate which firmware pack (if any) this client will follow, as well as the channels on which the client will broadcast.

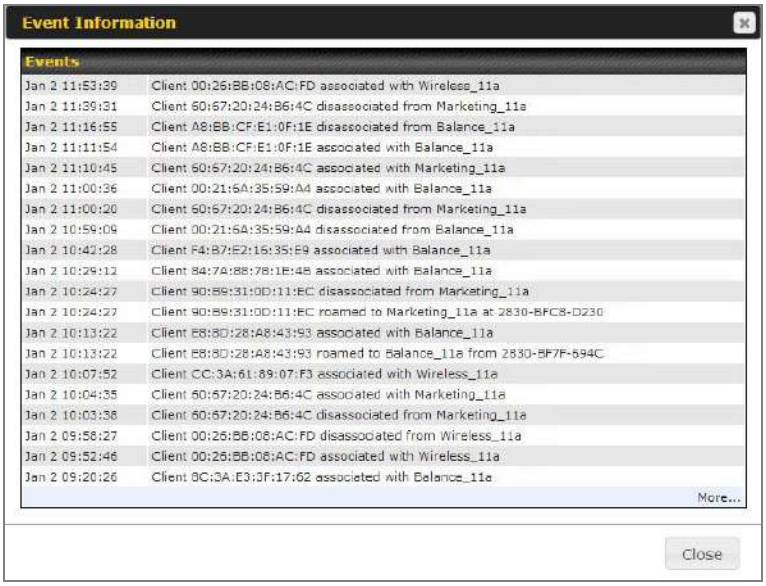
Click the icon to see a graph displaying usage:



Click any point in the graphs to display detailed usage and client information for that device, using that SSID, at that point in time. On the **Data Usage by** menu, you can display the information by SSID or by AP send/receive rate.

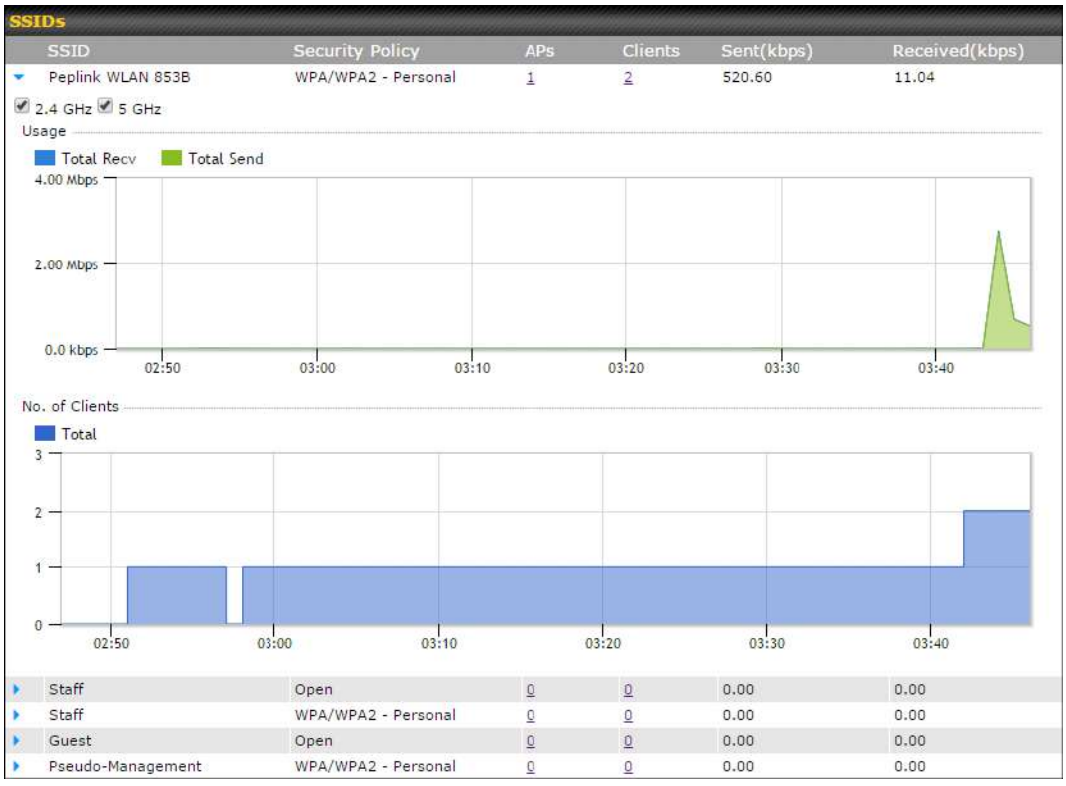
Click the **Event** tab next to **Wireless Usage** to view a detailed event log for that

particular device:



26.3 Wireless SSID

In-depth SSID reports are available under **AP > Controller Status > Wireless SSID**.



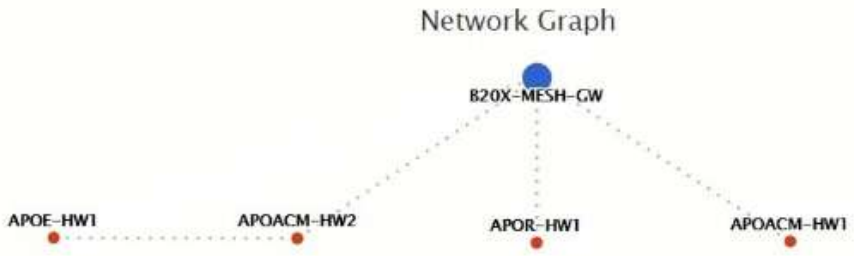
Click the blue arrow on any SSID to obtain more detailed usage information on each SSID.

26.4 Mesh / WDS

Mesh / WDS allows you to monitor the status of your wireless distribution system (WDS) or Mesh, and track activity by MAC address by navigating to **AP > Controller Status > Mesh / WDS**. This table shows the detailed information of each AP, including protocol, transmit rate (sent / received), signal strength, and duration.

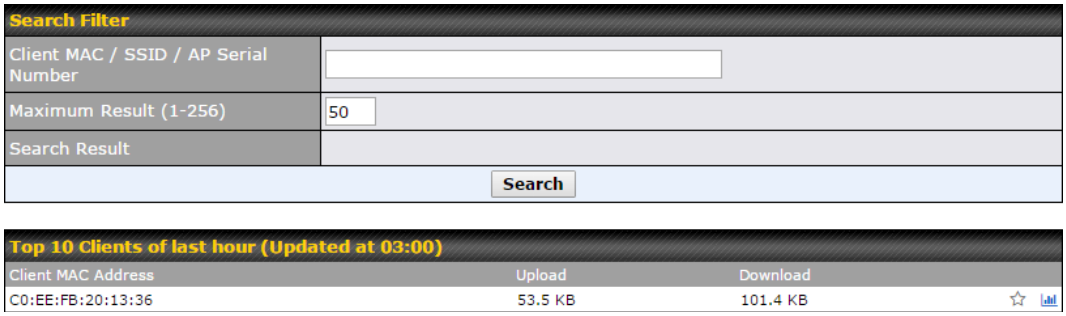
Mesh / WDS

Type	Peer MAC	Protocol	Rate (Send)	Rate (Receive)	Signal (dBm)	Duration
APOACM-HW1						
Mesh ( )		802.11ac	325M	650M	-56	19:13:35
APOACM-HW2/						
Mesh ( )		802.11ac	650M	351M	-63	00:49:20
Mesh ( )		802.11ac	390M	325M	-67	01:35:09
APOE-HW1/						
Mesh ( )		802.11ac	58.5M	130M	-69	00:45:22
APOR-HW1/						
Mesh ( )		802.11ac	325M	866.7M	-53	19:14:44
B20X-MESH-GW/						
Mesh ( )		802.11ac	433M	650M	-69	19:14:44
Mesh ( )		802.11ac	325M	390M	-66	01:35:42
Mesh ( )		802.11ac	351M	650M	-70	19:13:45
Mesh ( )		802.11ac	130M	117M	-88	00:45:52



26.5 Wireless Client

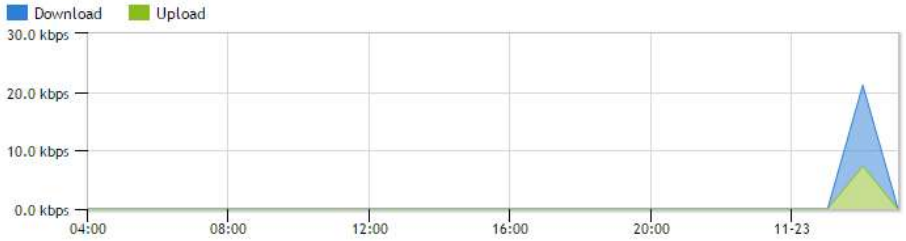
You can search for specific Wi-Fi users by navigating to **AP > Controller Status > Wireless Client**.



Here, you will be able to see your network's heaviest users as well as search for specific users. Click the ☆ icon to bookmark specific users, and click the icon for additional details about each user:

Client C0:EE:FB:20:13:36

Information	
Status	Associated
Access Point	1111-2222-3333
SSID	Peplink WLAN 853B
IP Address	192.168.1.34
Duration	00:27:31
Usage (Upload / Download)	141.28 MB / 4.35 MB
RSSI	-48
Rate (Upload / Download)	150M / 48M
Type	802.11na

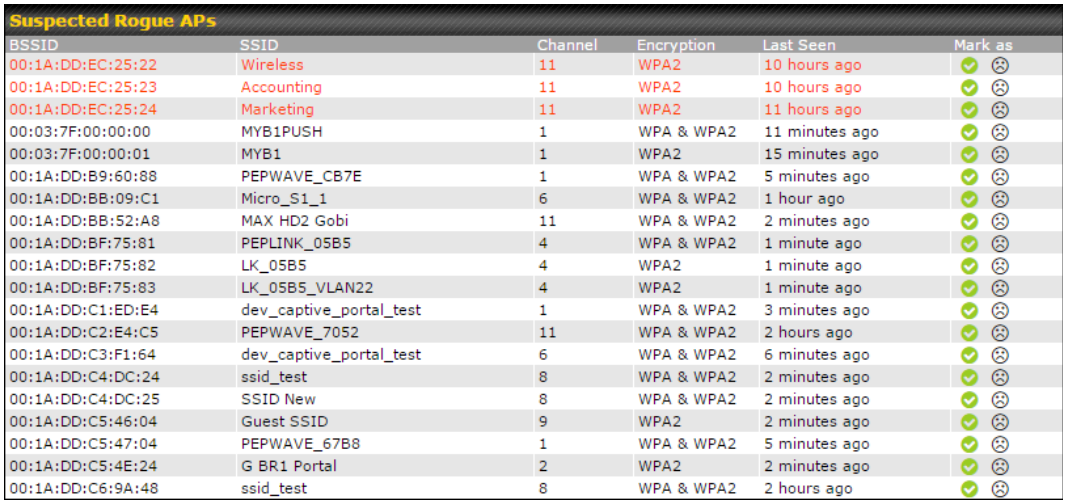


SSID	AP	From	To	Upload	Download
Peplink WLAN 853B	192C-1835-642F	Nov 23 03:43:04	-	141.28 MB	4.35 MB
Peplink WLAN 853B	192C-1835-642F	Nov 23 02:58:36	Nov 23 03:47:52	173.7 KB	94.2 KB
Peplink WLAN 853B	192C-1835-642F	Nov 23 02:52:15	Nov 23 02:58:15	105.9 KB	62.5 KB

Close

26.6 Nearby Device

A listing of near devices can be accessed by navigating to **AP > Controller Status > Nearby Device**.



Suspected Rogue APs

BSSID	SSID	Channel	Encryption	Last Seen	Mark as
00:1A:DD:EC:25:22	Wireless	11	WPA2	10 hours ago	
00:1A:DD:EC:25:23	Accounting	11	WPA2	10 hours ago	
00:1A:DD:EC:25:24	Marketing	11	WPA2	11 hours ago	
00:03:7F:00:00:00	MYB1PUSH	1	WPA & WPA2	11 minutes ago	
00:03:7F:00:00:01	MYB1	1	WPA2	15 minutes ago	
00:1A:DD:B9:60:88	PEPWAVE_CB7E	1	WPA & WPA2	5 minutes ago	
00:1A:DD:BB:09:C1	Micro_S1_1	6	WPA & WPA2	1 hour ago	
00:1A:DD:BB:52:A8	MAX HD2 Gobi	11	WPA & WPA2	2 minutes ago	
00:1A:DD:BF:75:81	PEPLINK_05B5	4	WPA & WPA2	1 minute ago	
00:1A:DD:BF:75:82	LK_05B5	4	WPA2	1 minute ago	
00:1A:DD:BF:75:83	LK_05B5_VLAN22	4	WPA2	1 minute ago	
00:1A:DD:C1:ED:E4	dev_captive_portal_test	1	WPA & WPA2	3 minutes ago	
00:1A:DD:C2:E4:C5	PEPWAVE_7052	11	WPA & WPA2	2 hours ago	
00:1A:DD:C3:F1:64	dev_captive_portal_test	6	WPA & WPA2	6 minutes ago	
00:1A:DD:C4:DC:24	ssid_test	8	WPA & WPA2	2 minutes ago	
00:1A:DD:C4:DC:25	SSID New	8	WPA & WPA2	2 minutes ago	
00:1A:DD:C5:46:04	Guest SSID	9	WPA2	2 minutes ago	
00:1A:DD:C5:47:04	PEPWAVE_67B8	1	WPA & WPA2	5 minutes ago	
00:1A:DD:C5:4E:24	G BR1 Portal	2	WPA2	2 minutes ago	
00:1A:DD:C6:9A:48	ssid_test	8	WPA & WPA2	2 hours ago	

Suspected Rogue Devices

Hovering over the device MAC address will result in a popup with information on how this device was detected. Click the ✔ ☹ icons and the device will be moved to the bottom table of identified devices.

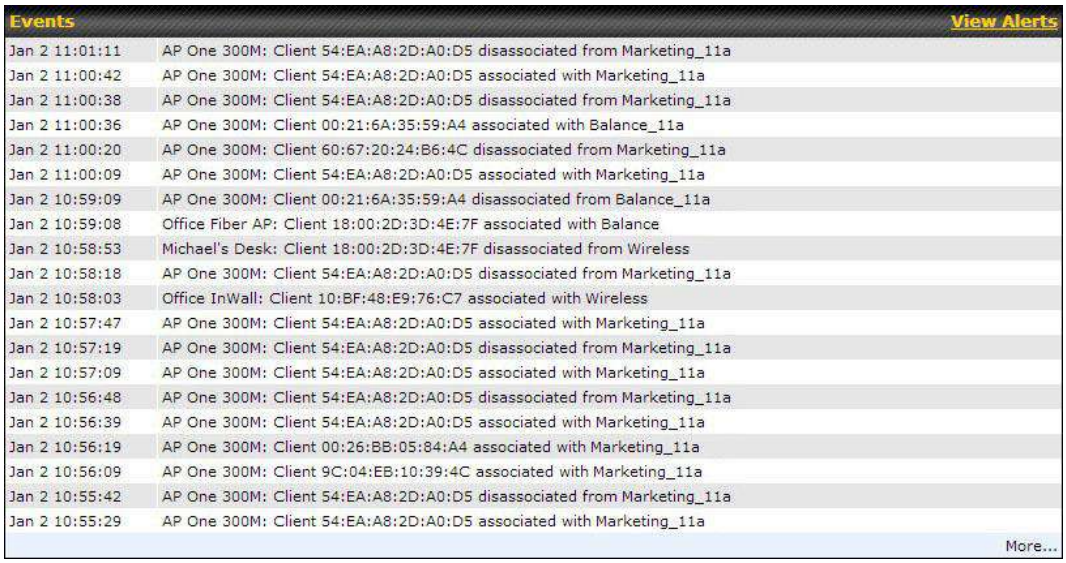
26.7 Event Log

You can access the AP Controller Event log by navigating to **AP > Controller Status > Event Log**.

Filter

Search key	Client MAC Address / Wireless SSID / AP Serial Number / AP Profile Name
Time	From hh:mm to hh:mm
Alerts only	☐

Search



Events
This event log displays all activity on your AP network, down to the client level. Use to filter box to search by MAC address, SSID, AP Serial Number, or AP Profile name. Click **View Alerts** to see only alerts, and click the **More…** link for additional records.

27 Toolbox

Tools for managing firmware packs can be found at **AP>Toolbox**.

Firmware Packs
Here, you can manage the firmware of your AP. Clicking on  will result in information regarding each firmware pack. To receive new firmware packs, you can click **Check for Updates** to download new packs, or you can click **Manual Upload** to manually upload a firmware pack. Click **Default** to define which firmware pack is default.

28 System Settings

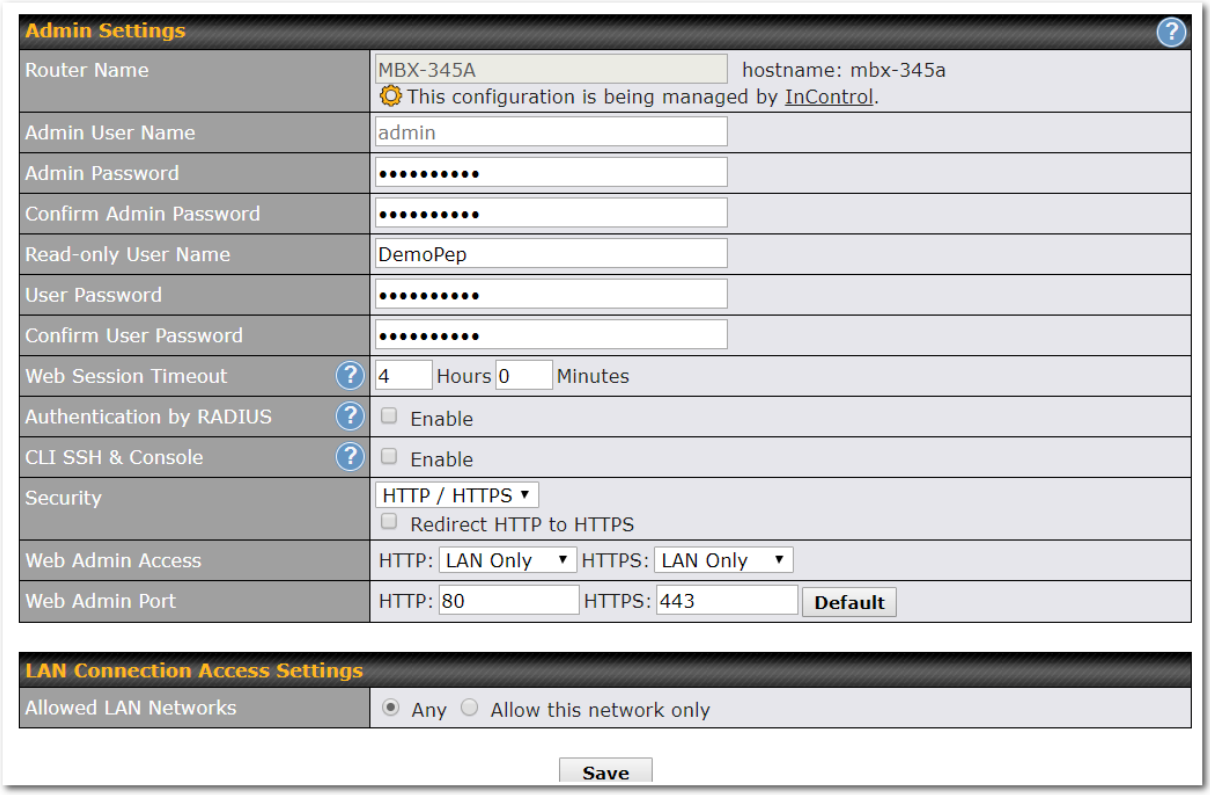
28.1 Admin Security

There are two types of user accounts available for accessing the web admin: *admin* and *user*. They represent two user levels: the admin level has full administrative access, while the user level is read-only. The user level can access only the device's status information; users cannot make any changes on the device.

A web login session will be logged out automatically when it has been idle longer than the **Web Session Timeout**. Before the session expires, you may click the **Logout** button in the web admin to exit the session.

0 hours 0 minutes signifies an unlimited session time. This setting should be used only in special situations, as it will lower the system security level if users do not log out before closing the browser. The **default** is 4 hours, 0 minutes.

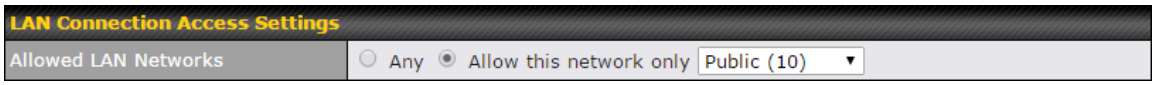
For security reasons, after logging in to the web admin Interface for the first time, it is recommended to change the administrator password. Configuring the administration interface to be accessible only from the LAN can further improve system security. Administrative settings configuration is located at **System>Admin Security**.



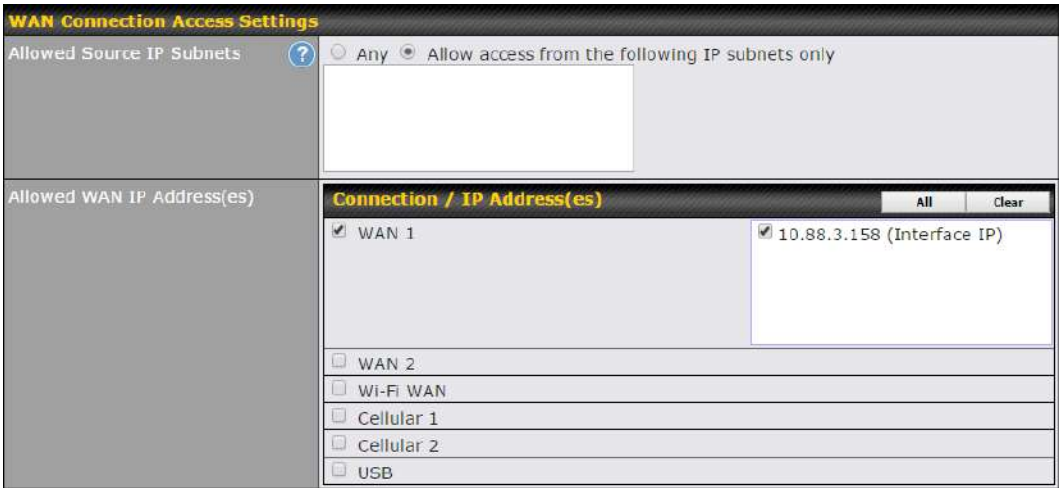
Admin Settings	
Router Name	This field allows you to define a name for this Pepwave router. By default, **Router Name** is set as **MAX_XXXX**, where *XXXX* refers to the last 4 digits of the unit's serial number.
Admin User Name	**Admin User Name** is set as *admin* by default, but can be changed, if desired.
Admin Password	This field allows you to specify a new administrator password.
Confirm Admin Password	This field allows you to verify and confirm the new administrator password.
Read-only User Name	**Read-only User Name** is set as *user* by default, but can be changed, if desired.
User Password	This field allows you to specify a new user password. Once the user password is set, the read-only user feature will be enabled.
Confirm User Password	This field allows you to verify and confirm the new user password.

Web Session Timeout	This field specifies the number of hours and minutes that a web session can remain idle before the Pepwave router terminates its access to the web admin interface. By default, it is set to **4 hours**.
Authentication by RADIUS	With this box is checked, the web admin will authenticate using an external RADIUS server. Authenticated users are treated as either "admin" with full read-write permission or “user” with read-only access. Local admin and user accounts will be disabled. When the device is not able to communicate with the external RADIUS server, local accounts will be enabled again for emergency access. Additional authentication options will be available once this box is checked.
Auth Protocol	This specifies the authentication protocol used. Available options are **MS-CHAP v2** and **PAP**.
Auth Server	This specifies the access address and port of the external RADIUS server.
Auth Server Secret	This field is for entering the secret key for accessing the RADIUS server.
Auth Timeout	This option specifies the time value for authentication timeout.
Accounting Server	This specifies the access address and port of the external accounting server.
Accounting Server Secret	This field is for entering the secret key for accessing the accounting server.
Network Connection	This option is for specifying the network connection to be used for authentication. Users can choose from LAN, WAN, and VPN connections.
CLI SSH	The CLI (command line interface) can be accessed via SSH. This field enables CLI support. For additional information regarding CLI, please refer to **Section 30.5.**
CLI SSH Access	This menu allows you to choose between granting access to LAN and WAN clients, or to LAN clients only.
CLI SSH Port	This field determines the port on which clients can access CLI SSH.
CLI SSH Access Public Key	This field is for entering the Public Key for Admin Users and Read-only Users to access CLI SSH.
Security	This option is for specifying the protocol(s) through which the web admin interface can be accessed: • HTTP • HTTPS • HTTP/HTTPS
Web Admin Port	This field is for specifying the port number on which the web admin interface can

	be accessed.
Web Admin Access	This option is for specifying the network interfaces through which the web admin interface can be accessed: • LAN only • LAN/WAN If LAN/WAN is chosen, the **WAN Connection Access Settings** form will be displayed.



LAN Connection Access Settings	
Allowed LAN Networks	This field allows you to permit only specific networks or VLANs to access the Web UI.



WAN Connection Access Settings	
Allowed Source IP Subnets	This field allows you to restrict web admin access only from defined IP subnets. • **Any** - Allow web admin accesses to be from anywhere, without IP address restriction. • **Allow access from the following IP subnets only** - Restrict web admin access only from the defined IP subnets. When this is chosen, a text input area will be displayed beneath: The allowed IP subnet addresses should be entered into this text area. Each IP subnet must be in form of *w.x.y.z/m*, where *w.x.y.z* is an IP address (e.g., *192.168.0.0*), and *m* is the subnet mask in CIDR format, which is between 0 and

	32 inclusively (For example, *192.168.0.0/24*). To define multiple subnets, separate each IP subnet one in a line. For example: • 192.168.0.0/24 • 10.8.0.0/16
Allowed WAN IP Address(es)	This is to choose which WAN IP address(es) the web server should listen on.

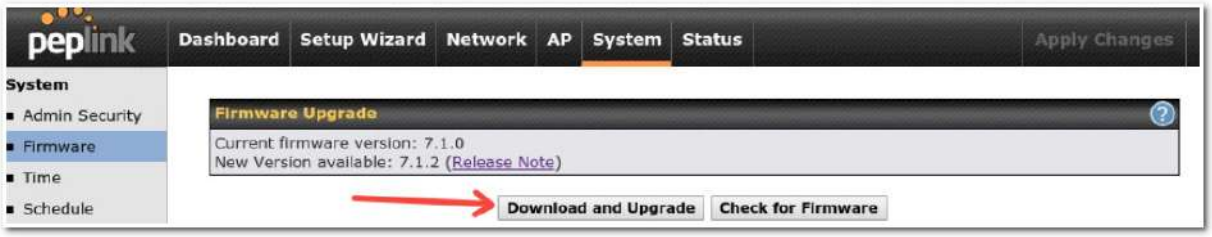
28.2 Firmware

Web admin interface : automatically check for updates

Upgrading firmware can be done in one of three ways.
Using the router's interface to automatically check for an update, using the router's interface to manually upgrade the firmware, or using InControl2 to push an upgrade to a router.

The automatic upgrade can be done from **System** > **Firmware**.

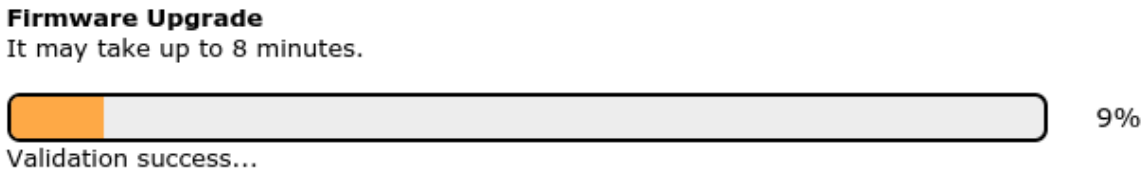
If an update is found the buttons will change to allow you to **Download and Update** the firmware.



Click on the **Download and Upgrade** button. A prompt will be displayed advising to download the Current Active Configuration. Please click on the underlined download text. After downloading the current config click the **Ok** button to start the upgrade process.

The router will download and then apply the firmware. The time that this process takes will depend on your internet connection's speed.

The firmware will now be applied to the router*. The amount of time it takes for the firmware to upgrade will also depend on the router that's being upgraded.

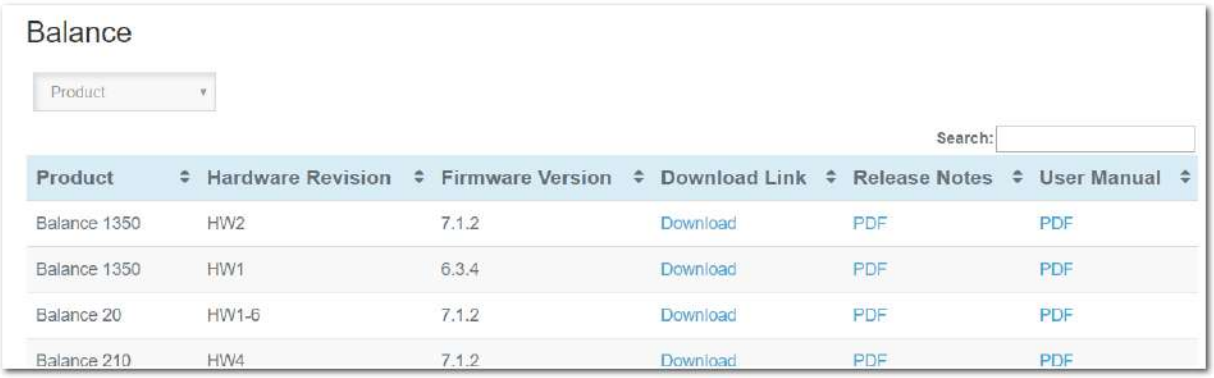


**Upgrading the firmware will cause the router to reboot.*

Web admin interface : install updates manually

In some cases, a special build may be provided via a ticket or it may be found in the forum. Upgrading to the special build can be done using this method, or using IC2 if you are using that to manage your firmware upgrades. A manual upgrade using the GA firmware posted on the site may also be recommended or required for a couple of reasons.

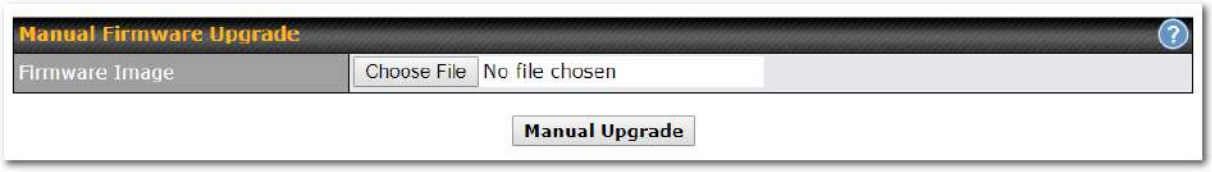
All of the Peplink/Pepwave GA firmware can be found here Navigate to the relevant product line (ie. Balance, Max, FusionHub, SOHO, etc). Some product lines may have a dropdown that lists all of the products in that product line. Here is a screenshot from the Balance line.



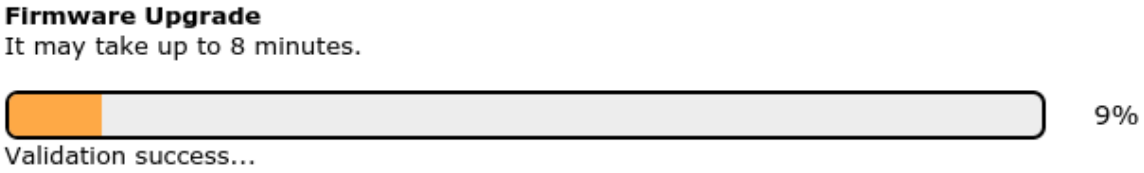
If the device has more than one firmware version the current hardware revision will be required to know what firmware to download.

Navigate to System > Firmware and click the Choose File button under the Manual Firmware Upgrade section. Navigate to the location that the firmware was downloaded to select the ".img" file and click the Open button.

Click on the Manual Upgrade button to start the upgrade process.



A prompt will be displayed advising to download the Current Active Configuration. Please click on the underlined download text. After downloading the current config click the Ok button to start the upgrade process. The firmware will now be applied to the router*. The amount of time it takes for the firmware to upgrade will depend on the router that's being upgraded.



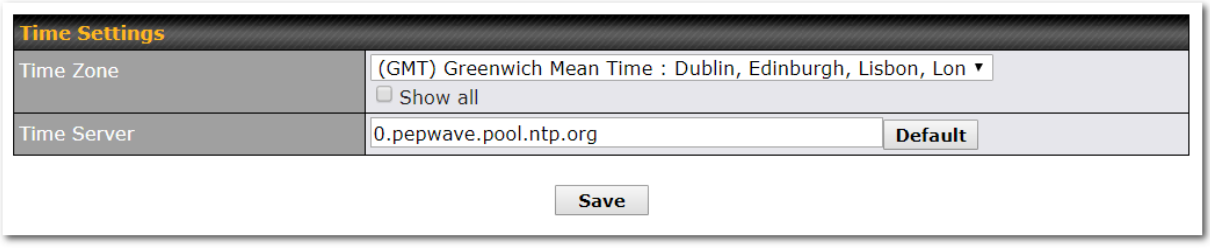
**Upgrading the firmware will cause the router to reboot.*

The InControl method

Described in this knowledgebase article on our forum.

28.3 Time

Time Settings enables the system clock of the Pepwave router to be synchronized with a specified time server. Time settings are located at **System>Time**.

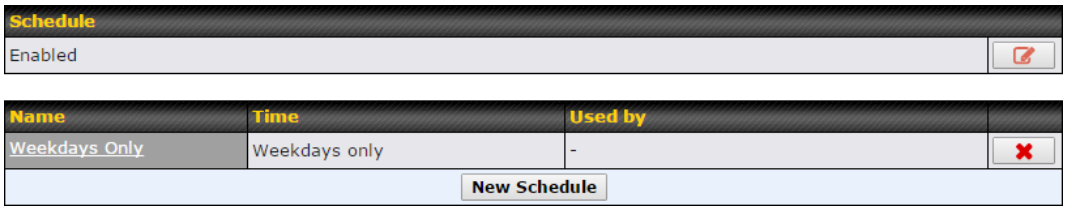


Time Settings	
Time Zone	This specifies the time zone (along with the corresponding Daylight Savings Time scheme). The **Time Zone** value affects the time stamps in the Pepwave router's event log and e-mail notifications. Check **Show all** to show all time zone options.

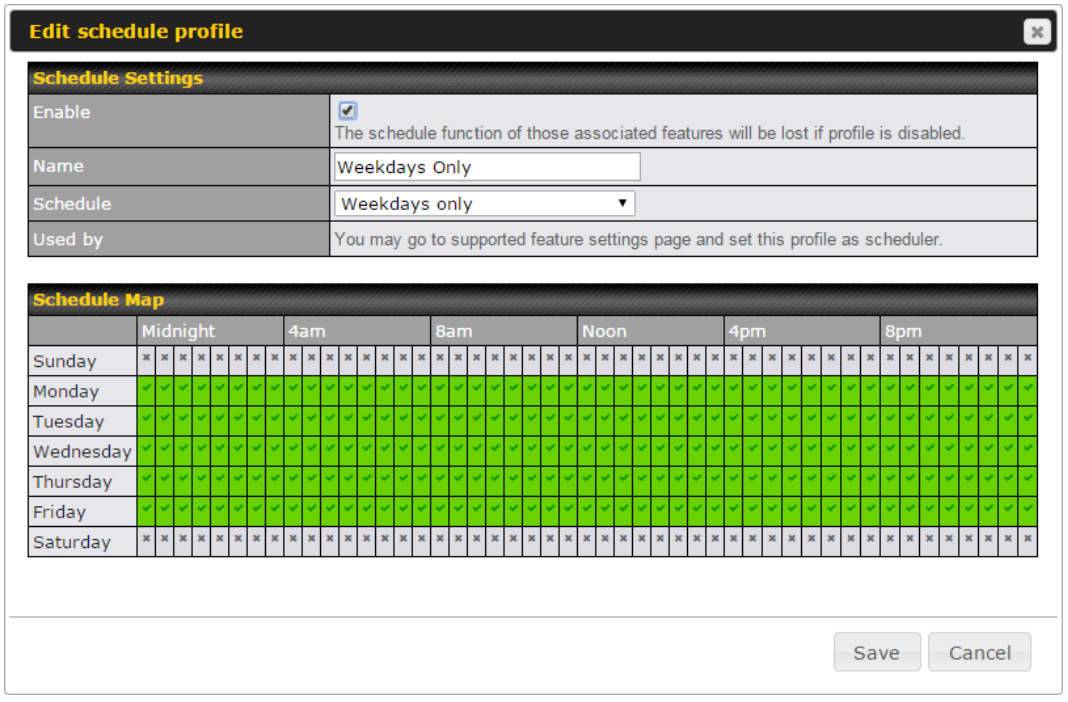
Time Server	This setting specifies the NTP network time server to be utilized by the Pepwave router.

28.4 Schedule

Enable and disable different functions (such as WAN connections, outbound policy, and firewalls at different times, based on a user-scheduled configuration profile. The settings for this are located at **System > Schedule**



Enable scheduling, and then click on your schedule name or on the **New Schedule** button to begin.

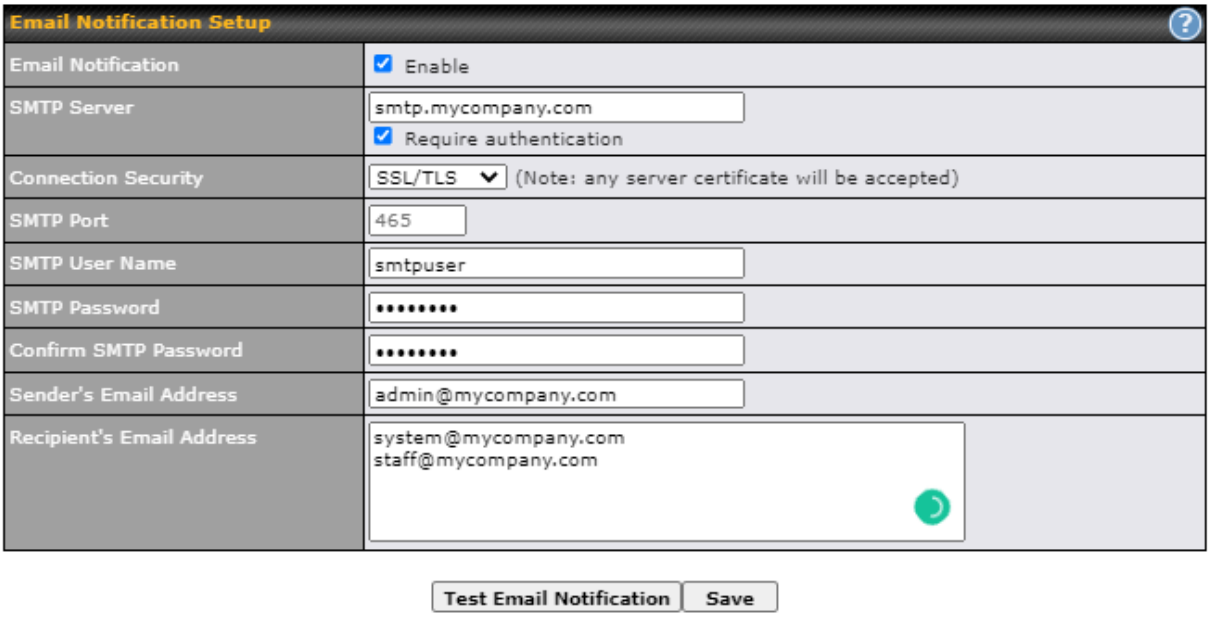


Edit Schedule Profile	
Enabling	Click this checkbox to enable this schedule profile. Note that if this is disabled, then any associated features will also have their scheduling disabled.

Name	Enter your desired name for this particular schedule profile.
Schedule	Click the drop-down menu to choose pre-defined schedules as your starting point. Please note that upon selection, previous changes on the schedule map will be deleted.
Schedule Map	Click on the desired times to enable features at that time period. You can hold your mouse for faster entry.

28.5 Email Notification

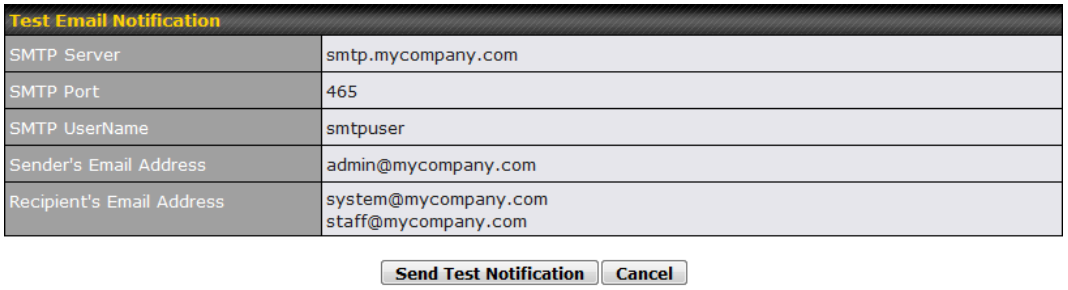
Email notification functionality provides a system administrator with up-to-date information on network status. The settings for configuring email notifications are found at **System>Email Notification**.



Email Notification Settings	
Email Notification	This setting specifies whether or not to enable email notification. If **Enable** is checked, the Pepwave router will send email messages to system administrators when the WAN status changes or when new firmware is available. If **Enable** is not checked, email notification is disabled and the Pepwave router will not send email messages.
SMTP Server	This setting specifies the SMTP server to be used for sending email. If the server requires authentication, check **Require authentication**.
Connection Security	This setting specifies via a drop-down menu one of the following valid Connection Security:

	• None • STARTTLS • SSL/TLS
SMTP Port	This field is for specifying the SMTP port number. By default, this is set to **25**. If Connection Security is selected "**STARTTLS**", the default port number will be set to **587**. If Connection Security is selected "**SSL/TLS**", the default port number will be set to **465**. You may customize the port number by editing this field.
SMTP User Name / Password	This setting specifies the SMTP username and password while sending email. These options are shown only if **Require authentication** is checked in the **SMTP Server** setting.
Confirm SMTP Password	This field allows you to verify and confirm the new administrator password.
Sender's Email Address	This setting specifies the email address the Pepwave router will use to send reports.
Recipient's Email Address	This setting specifies the email address(es) to which the Pepwave router will send email notifications. For multiple recipients, separate each email addresses using the enter key.

After you have finished setting up email notifications, you can click the **Test Email Notification** button to test the settings before saving. After **Test Email Notification** is clicked, you will see this screen to confirm the settings:



Click **Send Test Notification** to confirm. In a few seconds, you will see a message with detailed test results.

Test email sent.
(NOTE: Settings are not saved. To confirm the update, click 'Save' button.)

Email Notification Setup	
Email Notification	☑ Enable
SMTP Server	[redacted] ☑ Require authentication
Connection Security	SSL/TLS (Note: any server certificate will be accepted)
SMTP Port	465
SMTP User Name	[redacted]
SMTP Password	••••••••••••••••
Confirm SMTP Password	••••••••••••••••
Sender's Email Address	[redacted]
Recipient's Email Address	[redacted]

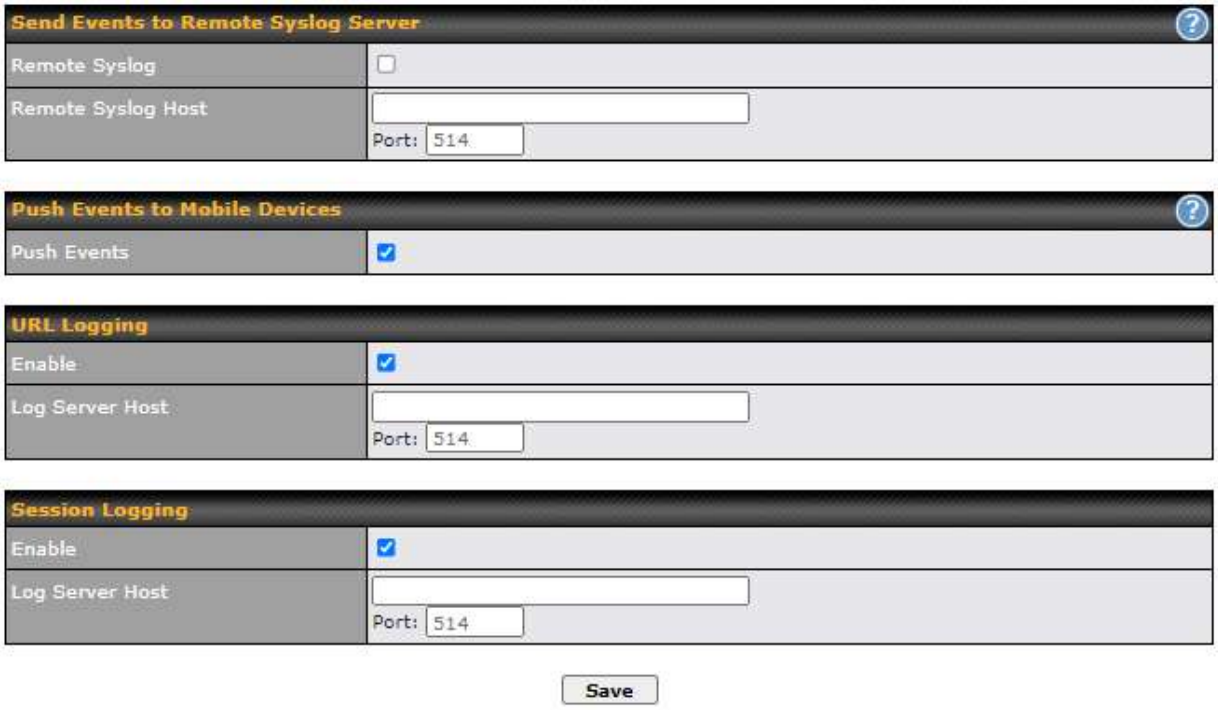
Test Email Notification | Save

Test Result

```
[INFO] Try email through auto detected connection
[INFO] SMTP through SSL connected
[<-] 220 smtp.gmail.com ESMTP h11sm3907691pjg.46 - gsmtp
[->] EHLO balance.peplink.com
[<-] 250-smtp.gmail.com at your service, [14.192.209.255]
[<-] 250-SIZE 35882577
[<-] 250-8BITMIME
[<-] 250-AUTH LOGIN PLAIN XOAUTH2 PLAIN-CLIENTTOKEN OAUTHBEARER XOAUTH
[<-] 250-ENHANCEDSTATUSCODES
[<-] 250-PIPELINING
[<-] 250-CHUNKING
[<-] 250 SMTPUTF8
[->] AUTH PLAIN AGdwc2dhbjk0QGdtYWlsLmNvbQBwdnJ6bWF6cGhtYXJpanpp
```


28.6 Event Log

Event log functionality enables event logging at a specified remote syslog server. The settings for configuring the remote system log can be found at **System>Event Log**.

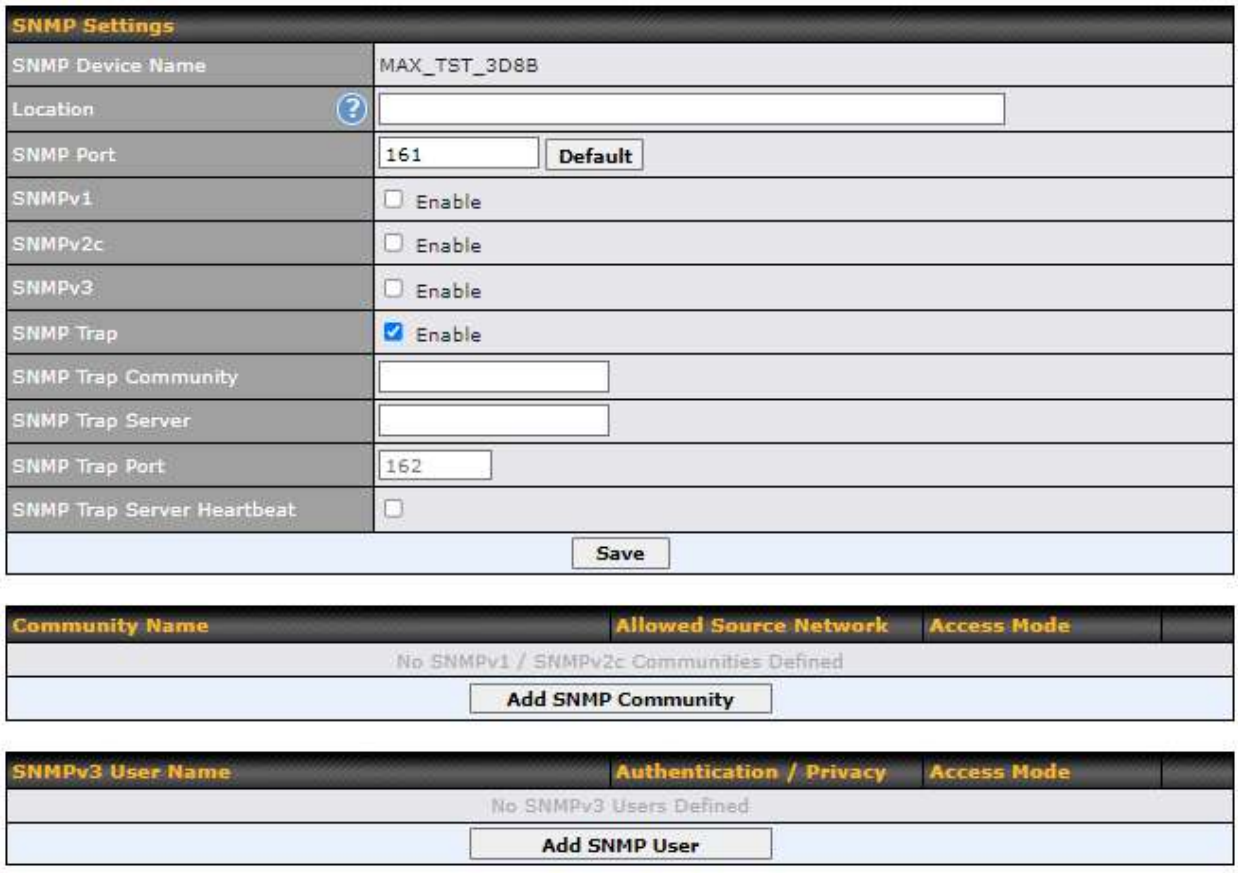


Event Log Settings	
Remote Syslog	This setting specifies whether or not to log events at the specified remote syslog server.
Remote Syslog Host	This setting specifies the IP address or hostname of the remote syslog server.
Push Events	The Pepwave router can also send push notifications to mobile devices that have our Mobile Router Utility installed. Check the box to activate this feature.
URL Logging	This setting is to enable event logging at the specified log server.
URL Logging Host	This setting specifies the IP address or hostname of the URL log server.
Session Logging	This setting is to enable event logging at the specified log server.

Session Logging Host	This setting specifies the IP address or hostname of the Session log server.
	For more information on the Router Utility, go to: www.peplink.com/products/router-utility

28.7 SNMP

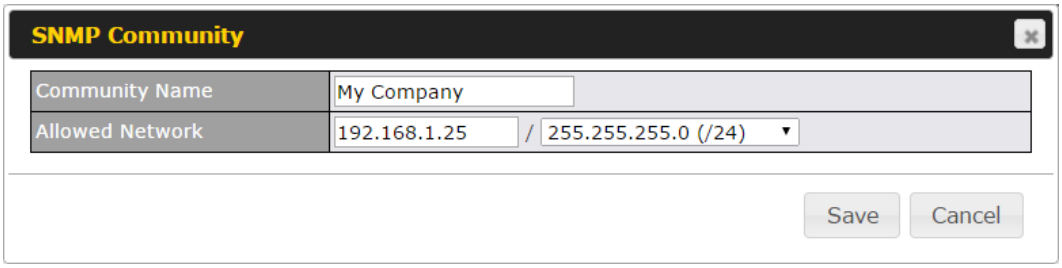
SNMP or simple network management protocol is an open standard that can be used to collect information about the Pepwave router. SNMP configuration is located at **System>SNMP**.

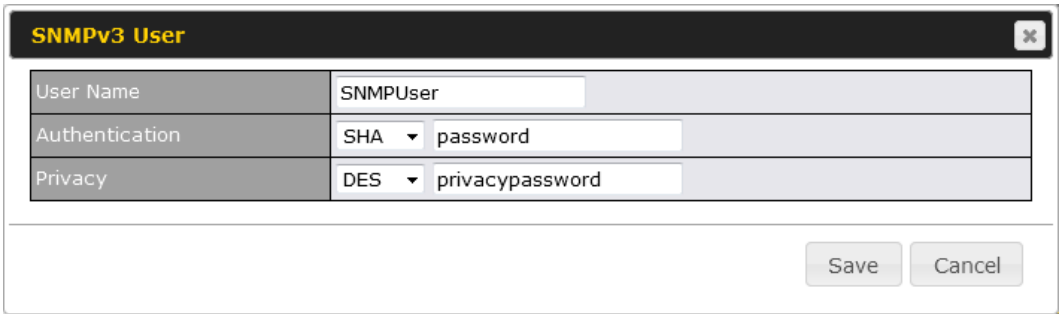


SNMP Settings	
SNMP Device Name	This field shows the router name defined at **System>Admin Security**.
SNMP Port	This option specifies the port which SNMP will use. The default port is **161**.

SNMPv1	This option allows you to enable SNMP version 1.
SNMPv2	This option allows you to enable SNMP version 2.
SNMPv3	This option allows you to enable SNMP version 3.
SNMP Trap	This option allows you to enable SNMP Trap. If enabled, the following entry fields will appear.
SNMP Trap Community	This setting specifies the SNMP Trap community name.
SNMP Trap Server	Enter the IP address of the SNMP Trap server.
SNMP Trap Port	This option specifies the port which the SNMP Trap server will use. The default port is **162**.
SNMP Trap Server Heartbeat	This option allows you to enable and configure the heartbeat interval for the SNMP Trap server.

To add a community for either SNMPv1 or SNMPv2, click the **Add SNMP Community** button in the **Community Name** table, upon which the following screen is displayed:





SNMP Community Settings	
Community Name	This setting specifies the SNMP community name.

Allowed Source Subnet Address	This setting specifies a subnet from which access to the SNMP server is allowed. Enter subnet address here (e.g., *192.168.1.0*) and select the appropriate subnet mask.

To define a user name for SNMPv3, click **Add SNMP User** in the **SNMPv3 User Name** table, upon which the following screen is displayed:

SNMPv3 User Settings	
User Name	This setting specifies a user name to be used in SNMPv3.
Authentication Protocol	This setting specifies via a drop-down menu one of the following valid authentication protocols: • NONE • MD5 • SHA When MD5 or SHA is selected, an entry field will appear for the password.
Privacy Protocol	This setting specifies via a drop-down menu one of the following valid privacy protocols: • NONE • DES When DES is selected, an entry field will appear for the password.

28.8 SMS Control

SMS Control allows the user to control the device using SMS even if the modem does not have a data connection. The settings for configuring the SMS Control can be found at **System>SMS Control**.

Supported Models

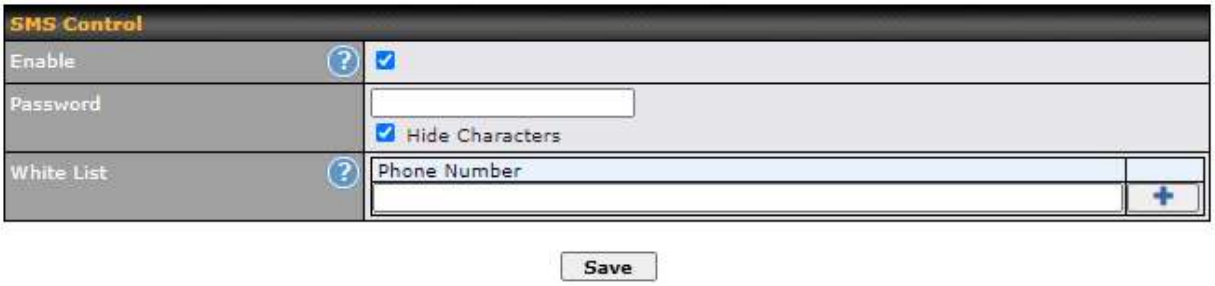
- **Balance/MAX**: *-LTE-E, *-LTEA-W, *-LTEA-P, *-LTE-MX
- **EPX**: *-LW*, *-LP*

When this box is checked, the device will be allowed to take actions according to received commands via SMS.

Make sure your mobile plan supports SMS, and note that some plans may incur additional charges for this.

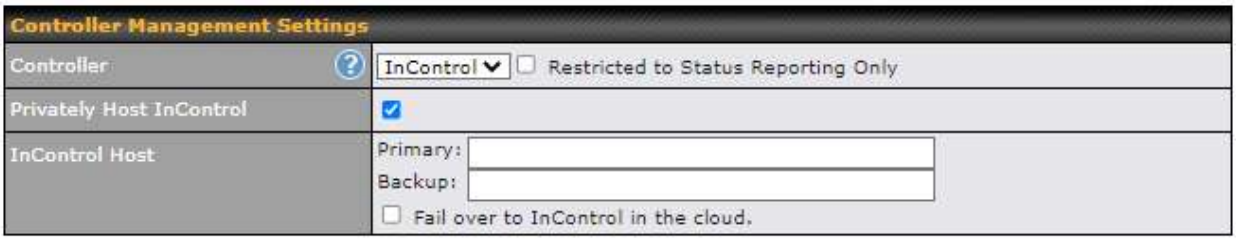
SMS Control can reboot devices and configure cellular settings over signalling channels, even if the modem does not have a data connection.

For details of supported SMS command sets, please refer to our knowledge base.



SMS Control Settings	
Enable	Click the checkbox to enable the SMS Control.
Password	This setting sets the password for authentication - maximum of 32 characters, which cannot include semicolon (;).
White List	Optionally, you can add phone number(s) to the whitelist. Only matching phone numbers are allowed to issue SMS commands. Phone numbers must be in the E.164 International Phone Numbers format.

28.9 InControl



InControl is a cloud-based service which allows you to manage all of your Peplink and Pepwave devices with one unified system. With it, you can generate reports, gather statistics, and configure your devices automatically. All of this is now possible with InControl.

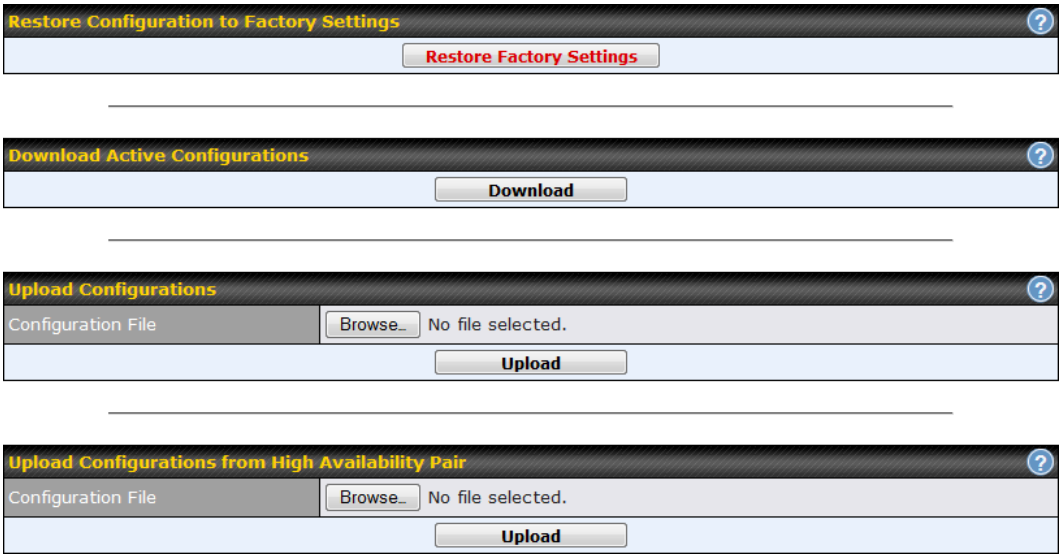
When this check box is checked, the device's status information will be sent to the Peplink InControl system. This device's usage data and configuration will be sent to the system if you enable the features in the system.

Alternatively, you can also privately host InControl. Simply check the “Privately Host InControl” box and enter the IP Address of your InControl Host. If you have multiple hosts, you may enter the primary and backup IP addresses for the InControl Host and tick the “Fail over to InControl in the cloud” box. The device will connect to either the primary InControl Host or the secondary/backup ICA/IC2.

You can sign up for an InControl account at https://incontrol2.peplink.com/. You can register your devices under the account, monitor their status, see their usage reports, and receive offline notifications.

28.10 Configuration

Backing up Pepwave router settings immediately after successful completion of initial setup is strongly recommended. The functionality to download and upload Pepwave router settings is found at **System>Configuration**. Note that available options vary by model.

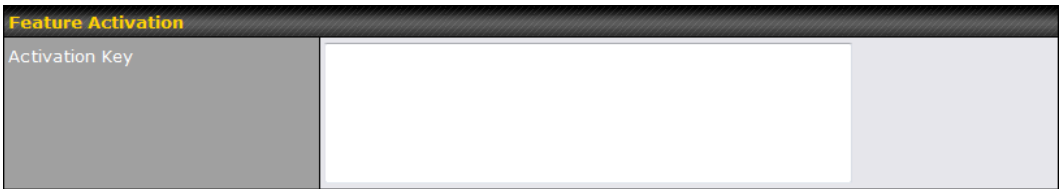


Configuration	
Restore Configuration to Factory Settings	The **Restore Factory Settings** button is to reset the configuration to factory default settings. After clicking the button, you will need to click the **Apply Changes** button on the top right corner to make the settings effective.
Download Active Configurations	Click **Download** to backup the current active settings.
Upload Configurations	To restore or change settings based on a configuration file, click **Choose File** to locate the configuration file on the local computer, and then click **Upload**. The new settings can then be applied by clicking the **Apply Changes** button on the page header, or you can cancel the procedure by pressing **discard** on the main page of the web admin interface.
Upload Configurations	In a high availability (HA) configuration, a Pepwave router can quickly load the configuration of its HA counterpart. To do so, click the **Upload** button. After loading

from High Availability Pair	the settings, configure the LAN IP address of the Pepwave router so that it is different from the HA counterpart.

28.11 Feature Add-ons

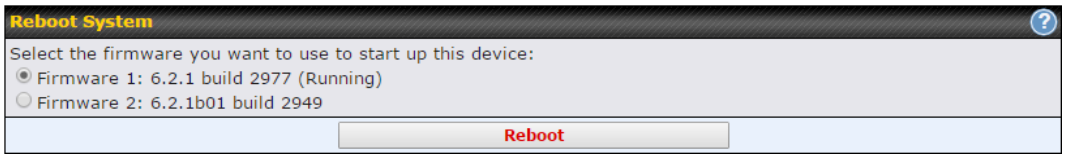
Some Pepwave routers have features that can be activated upon purchase. Once the purchase is complete, you will receive an activation key. Enter the key in the **Activation Key** field, click **Activate**, and then click **Apply Changes**.



28.12 Reboot

This page provides a reboot button for restarting the system. For maximum reliability, the Pepwave router can equip with two copies of firmware. Each copy can be a different version. You can select the firmware version you would like to reboot the device with. The firmware marked with **(Running)** is the current system boot up firmware.

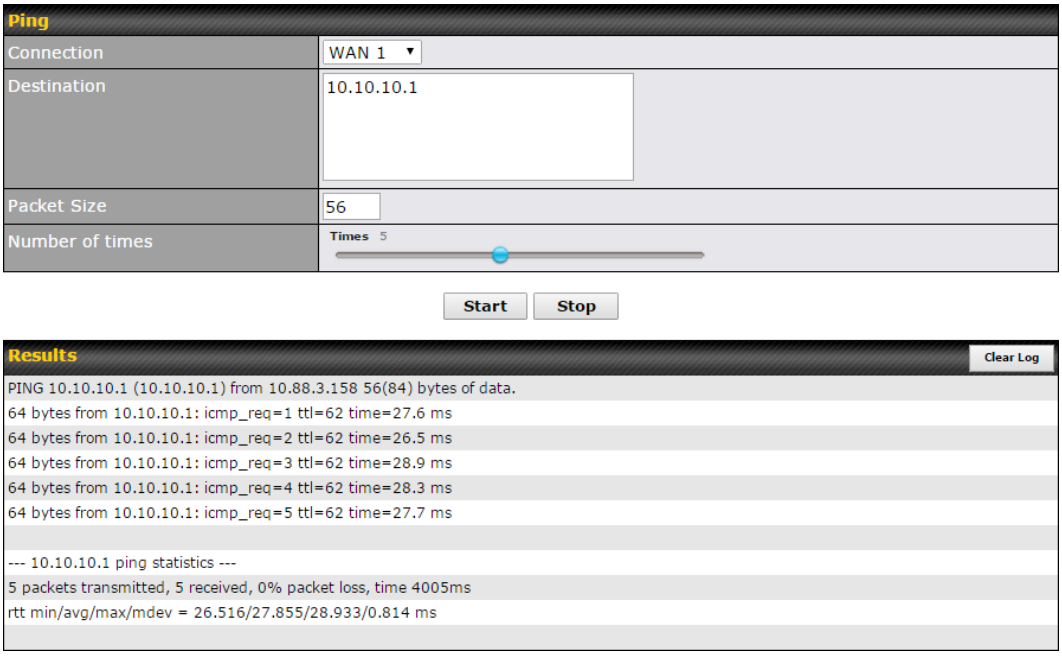
Please note that a firmware upgrade will always replace the inactive firmware partition.



29 Tools

29.1 Ping

The ping test tool sends pings through a specific Ethernet interface or a SpeedFusion™ VPN connection. You can specify the number of pings in the field **Number of times**, to a maximum number of 10 times. **Packet Size** can be set to a maximum of 1472 bytes. The ping utility is located at **System>Tools>Ping,** illustrated below:

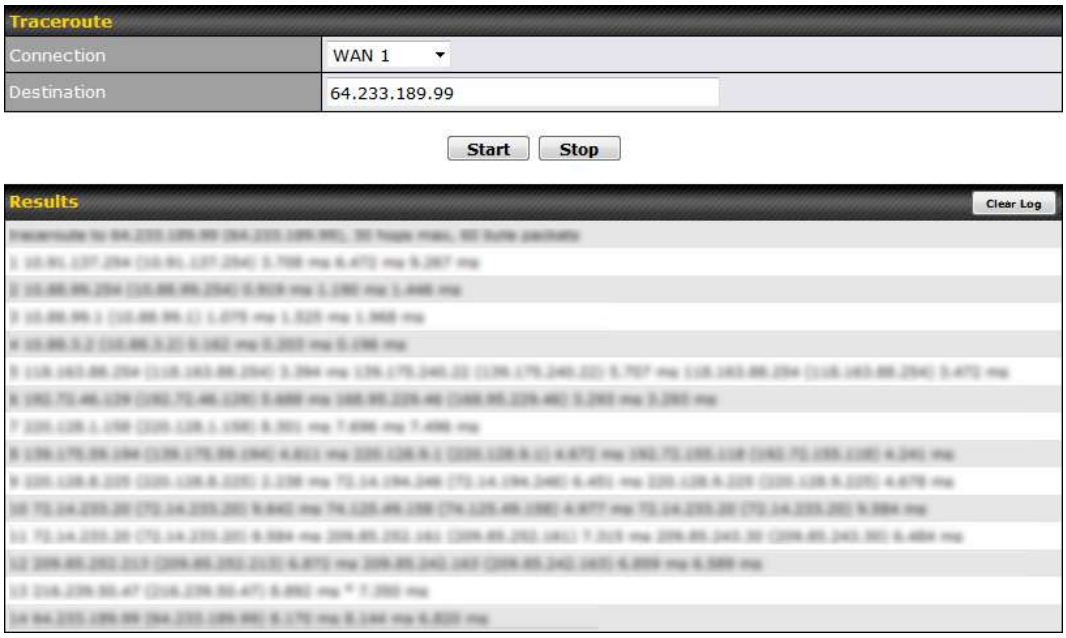


Tip

A system administrator can use the ping utility to manually check the connectivity of a particular LAN/WAN connection.

29.2 Traceroute Test

The traceroute test tool traces the routing path to the destination through a particular Ethernet interface or a SpeedFusion™ connection. The traceroute test utility is located at **System>Tools>Traceroute**.



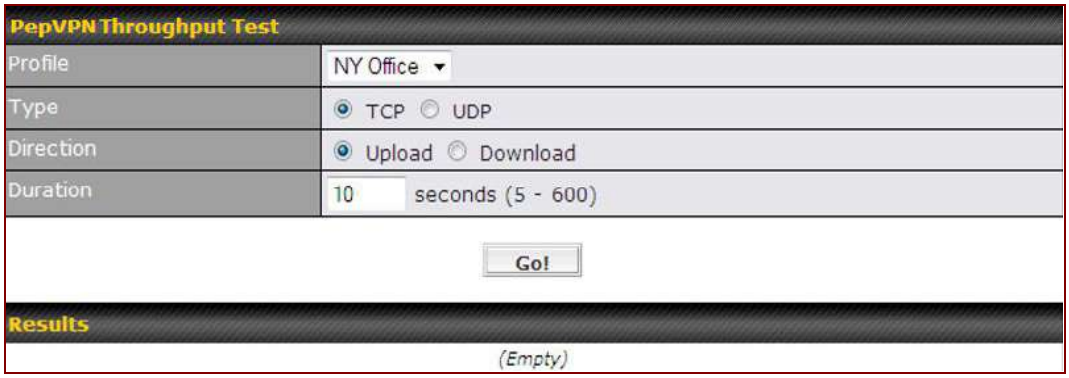
Tip

A system administrator can use the traceroute utility to analyze the connection path of a LAN/WAN connection.

29.3 PepVPN Test

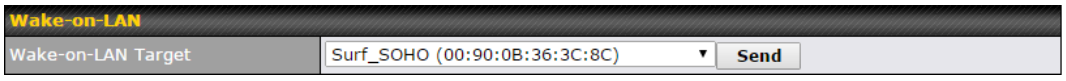
The **PepVPN Test** tool can help to test the throughput between different VPN peers.

You can define the **Test Type**, **Direction**, and **Duration** of the test, and press **Go!** to perform the throughput test. The VPN test utility is located at **System>Tools>PepVPN Test**, illustrated as follows:



29.4 Wake-on-LAN

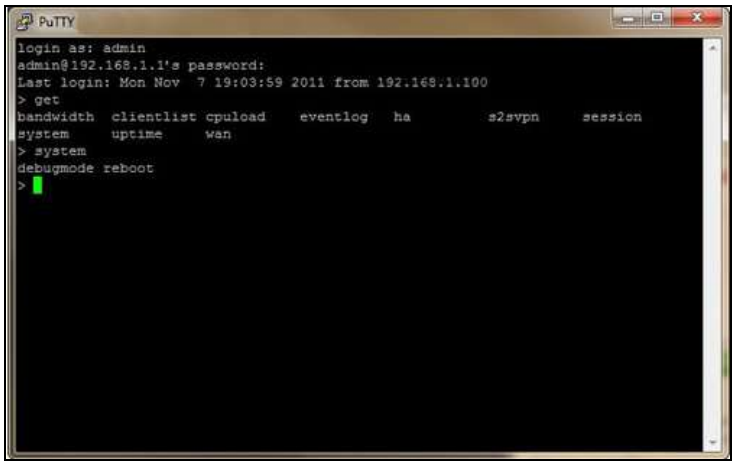
Peplink routers can send special “magic packets” to any client specified from the Web UI. To access this feature, navigate to **System > Tools > Wake-on-LAN**



Select a client from the drop-down list and click **Send** to send a “magic packet”

29.5 CLI (Command Line Interface Support)

The CLI (command line interface) can be accessed via SSH. This field enables CLI support. The below settings specify which TCP port and which interface(s) should accept remote SSH CLI access. The user name and password used for remote SSH CLI access are the same as those used for web admin access.



30 Status

30.1 Device

System information is located at **Status>Device**.

System Information	
Device Name	MAX-HD2-7029
Model	Pepwave MAX HD2 Mini
Product Code	MAX-HD2-MINI-LTEA-P
Hardware Revision	1
Serial Number	
Firmware	8.1.1 build 5033
PepVPN Version	9.1.0
Modem Support Version	1024 (Modem Support List)
InControl Managed Configuration	Outbound Management
Host Name	max-hd2-7029
Uptime	6 hours 36 minutes
System Time	Thu Jan 14 15:11:20 +08 2021
Diagnostic Report	Download

MAC Address	
LAN	
WAN	
LAN 1 as WAN	

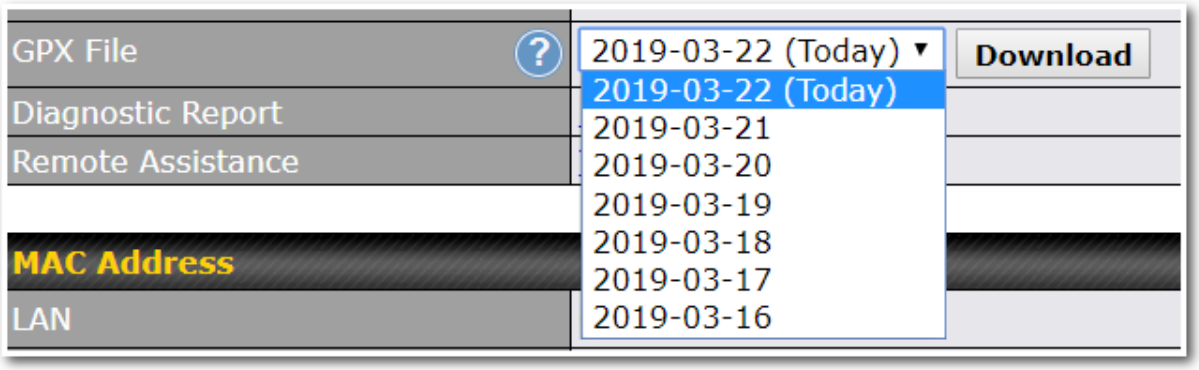
Legal

System Information	
Device Name	This is the name specified in the **Device Name** field located at **System>Admin Security**.
Model	This shows the model name and number of this device.
Product Code	If your model uses a product code, it will appear here.
Hardware Revision	This shows the hardware version of this device.

Serial Number	This shows the serial number of this device.
Firmware	This shows the firmware version this device is currently running.
PepVPN Version	This shows the current PepVPN version.
Modem Support Version	This shows the modem support version. For a list of supported modems, click **Modem Support List**.
InControl Managed Configuration	InControl Managed Configurations (firmware, VLAN, Captive Portal, etcetera)
Host Name	The host name assigned to the Pepwave router appears here.
Uptime	This shows the length of time since the device has been rebooted.
System Time	This shows the current system time.
OpenVPN Client Profile	Link to download OpenVpn Client profile when this is enabled in Remote User Access
Diagnostic Report	The **Download** link is for exporting a diagnostic report file required for system investigation.
Remote Assistance	Click **Turn on** to enable remote assistance.

The second table shows the MAC address of each LAN/WAN interface connected. To view your device's End User License Agreement (EULA), click Legal.

30.2 GPS Data

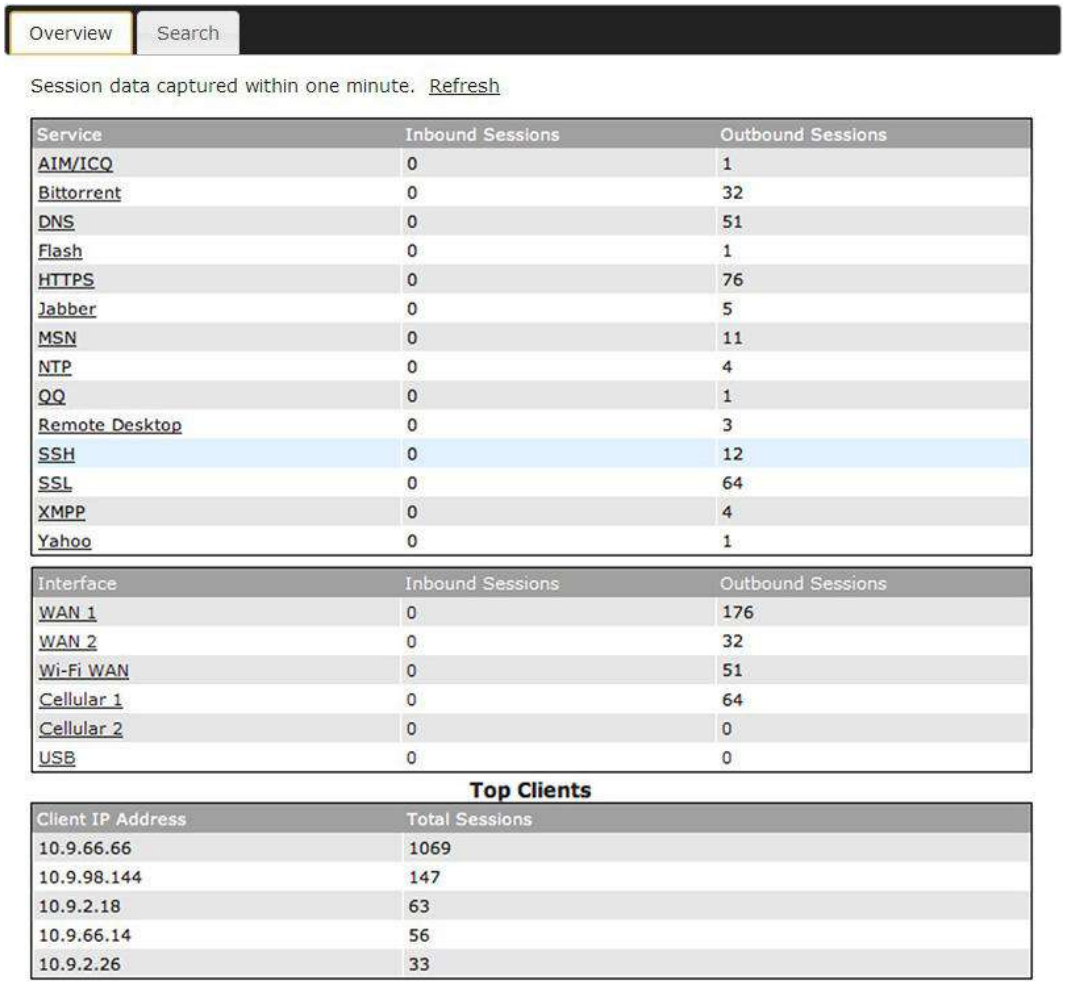


GPS enabled models automatically store up to seven days of GPS location data in GPS eXchange format (GPX). To review this data using third-party applications, click **Status>Device** and then download your GPX file.

The Pepwave GPS enabled devices export real-time location data in NMEA format through the LAN IP address at TCP port 60660. It is accessible from the LAN or over a SpeedFusion connection. To access the data via a virtual serial port, install a virtual serial port driver. Visit http://www.peplink.com/index.php?view=faq&id=294 to download the driver.

30.3 Active Sessions

Information on active sessions can be found at **Status>Active Sessions>Overview.**



Service	Inbound Sessions	Outbound Sessions
AIM/ICQ	0	1
Bittorrent	0	32
DNS	0	51
Flash	0	1
HTTPS	0	76
Jabber	0	5
MSN	0	11
NTP	0	4
QQ	0	1
Remote Desktop	0	3
SSH	0	12
SSL	0	64
XMPP	0	4
Yahoo	0	1

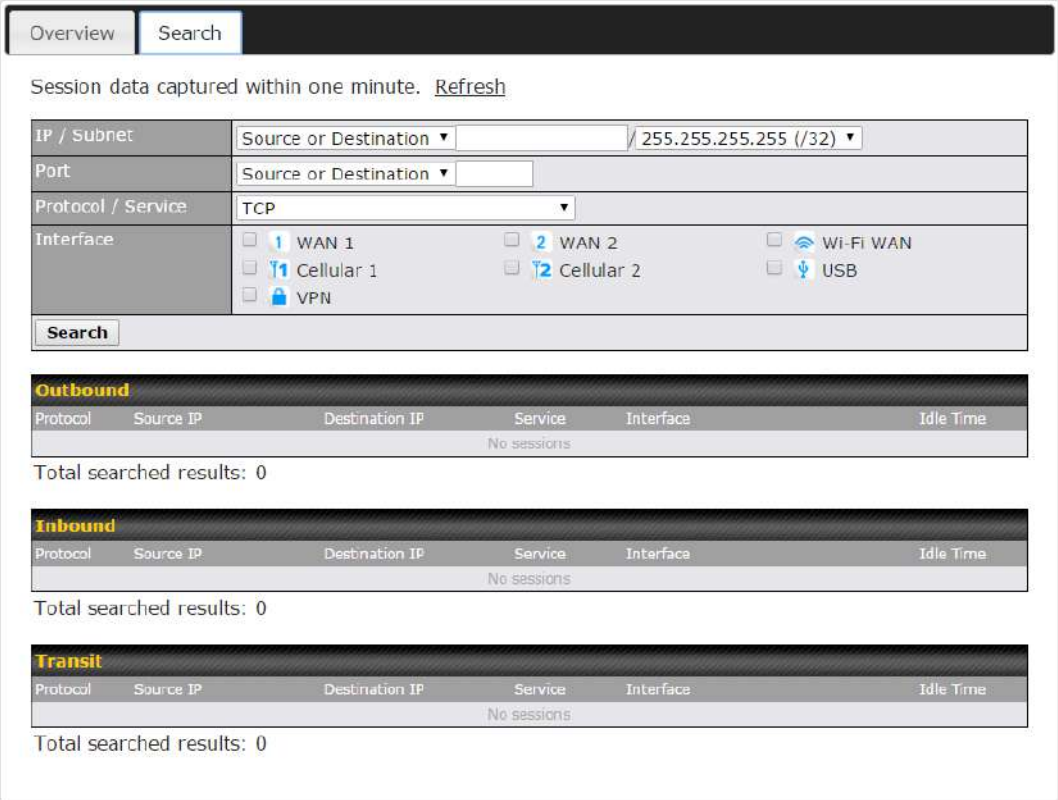
Interface	Inbound Sessions	Outbound Sessions
WAN 1	0	176
WAN 2	0	32
Wi-Fi WAN	0	51
Cellular 1	0	64
Cellular 2	0	0
USB	0	0

Top Clients

Client IP Address	Total Sessions
10.9.66.66	1069
10.9.98.144	147
10.9.2.18	63
10.9.66.14	56
10.9.2.26	33

This screen displays the number of sessions initiated by each application. Click on each service listing for additional information. This screen also indicates the number of sessions initiated by each WAN port. In addition, you can see which clients are initiating the most sessions.

You can also perform a filtered search for specific sessions. You can filter by subnet, port, protocol, and interface. To perform a search, navigate to **Status>Active Sessions>Search**.

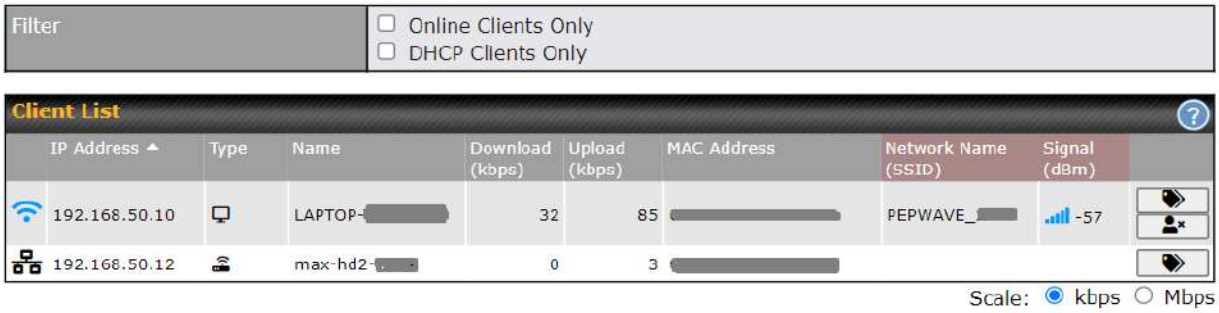


This **Active Sessions** section displays the active inbound/outbound sessions of each WAN connection on the Pepwave router. A filter is available to sort active session information. Enter a keyword in the field or check one of the WAN connection boxes for filtering.

30.4 Client List

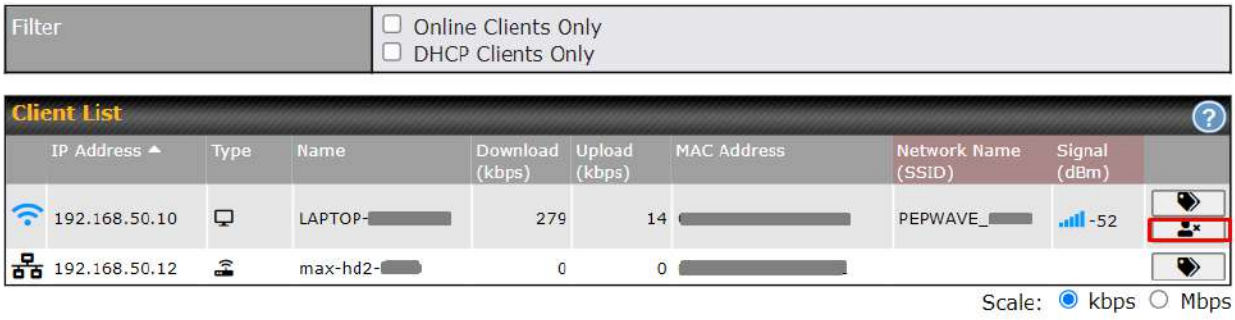
The client list table is located at **Status>Client List**. It lists DHCP and online client IP addresses, names (retrieved from the DHCP reservation table or defined by users), current download and upload rate, and MAC address.

Clients can be imported into the DHCP reservation table by clicking the button on the right. You can update the record after import by going to **Network>LAN**.



If the PPTP server (see **Section 19.2),** SpeedFusion™ (see **Section 12.1**), or AP controller (see **Section 20**) is enabled, you may see the corresponding connection name listed in the **Name** field.

In the client list table, there is a “Ban Client” feature which is used to disconnect the Wi-Fi and Remote User Access clients by clicking the button on the right.

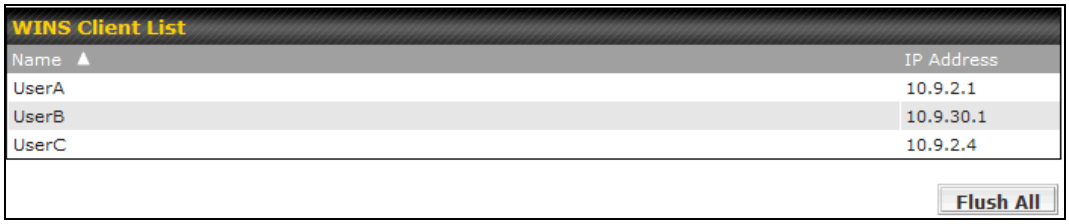


There is a blocklist on the same page after you banned the Wi-Fi or Remote User Access clients.

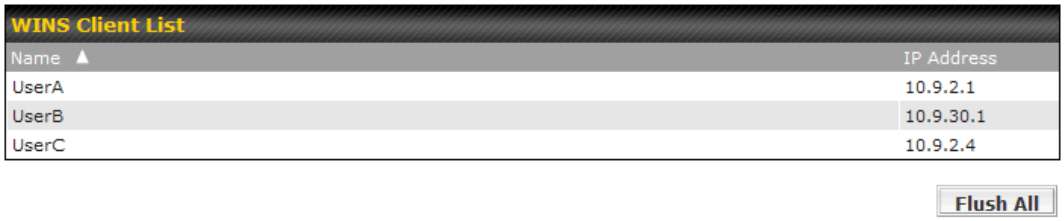
You may also unblock the Wi-Fi or Remote User Access clients when the client devices need to reconnect the network by clicking  the button on the right.

30.5 WINS Client

The WINS client list table is located at **Status>WINS Client**.

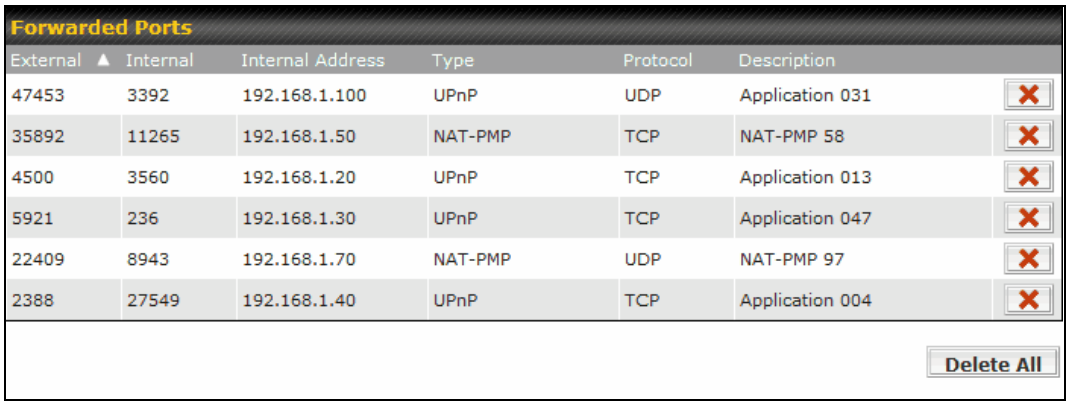


The WINS client table lists the IP addresses and names of WINS clients. This option will only be available when you have enabled the WINS server (navigation: **Network>Interfaces>LAN**). The names of clients retrieved will be automatically matched into the Client List (see previous section). Click **Flush All** to flush all WINS client records.



30.6 UPnP / NAT-PMP

The table that shows the forwarded ports under UPnP and NAT-PMP protocols is located at **Status>UPnP/NAT-PMP**. This section appears only if you have enabled UPnP / NAT-PMP as mentioned in **Section 16.1.1**.



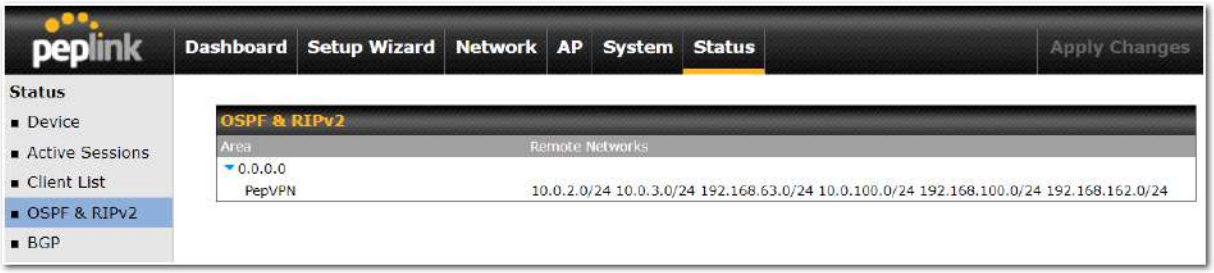
Click  to delete a single UPnP / NAT-PMP record in its corresponding row. To delete all records, click **Delete All** on the right-hand side below the table.

Important Note

UPnP / NAT-PMP records will be deleted immediately after clicking the button  or **Delete All,** without the need to click **Save** or **Confirm**.

30.7 OSPF & RIPv2

Shows status of OSPF and RIPv2



30.8 BGP

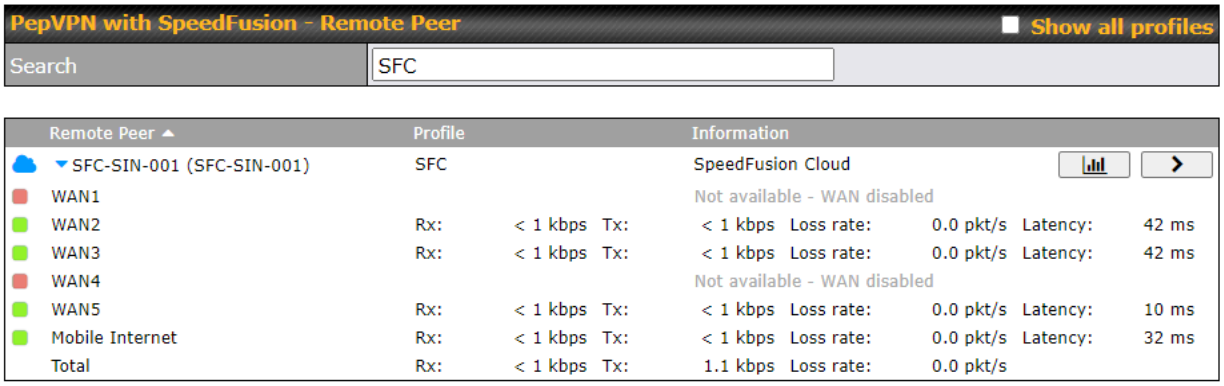
Shows status of BGP

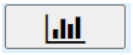
30.9 SpeedFusion Status

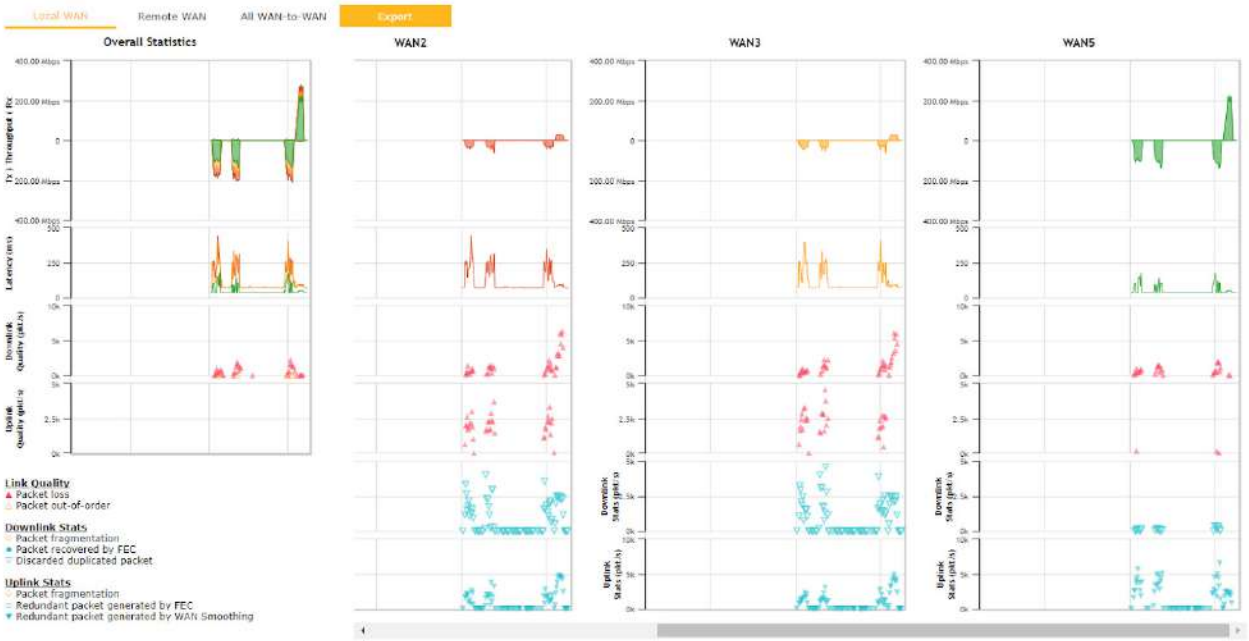
Current SpeedFusion™ status information is located at **Status>SpeedFusion™**.

Details about SpeedFusion™ connection peers appears as below:

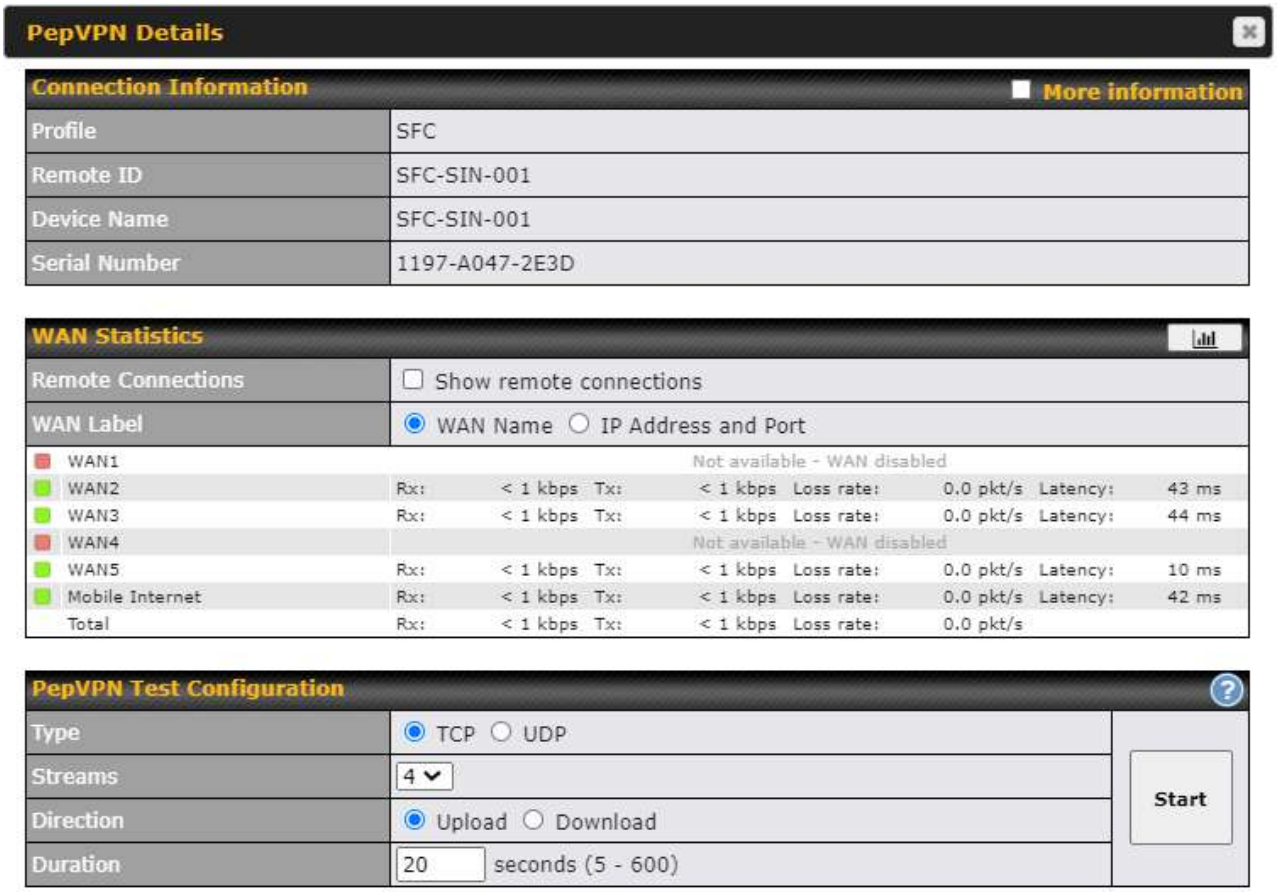
Click on the corresponding peer name to explore the WAN connection(s) status and subnet information of each VPN peer.



Click the  button for a SpeedFusion chart displaying real-time throughput, latency, and drop-rate information for each WAN connection.



When pressing the button, the following menu will appear:

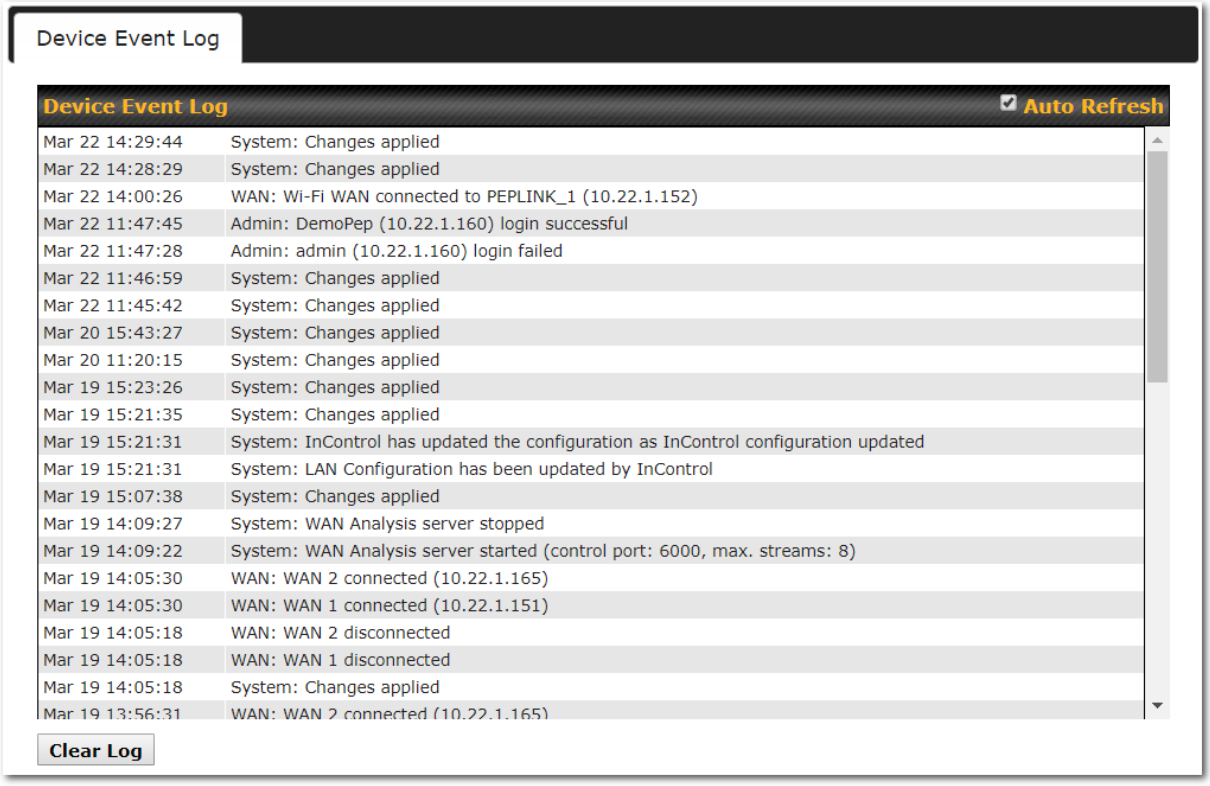


The Speedfusion status page shows all related information about the PepVPN connection. This screen also allows you to run PepVPN Tests allowing throughput tests.

Peplink also published a whitepaper about Speedfusion which can be downloaded from the following url:
http://download.peplink.com/resources/whitepaper-speedfusion-and-best-practices-2019.pdf

30.10 Event Log

Event log information is located at **Status>Event Log**.



The log section displays a list of events that has taken place on the Pepwave router. Check **Auto Refresh** to refresh log entries automatically. Click the **Clear Log** button to clear the log.

31 WAN Quality

The **Status > WAN Quality** allow to show detailed information about each connected WAN connection.

For cellular connections it shows signal strength, quality, throughput and latency for the past hour.

32 Usage Reports

This section shows bandwidth usage statistics and is located at **Status > Usage Reports**
Bandwidth usage at the LAN while the device is switched off (e.g., LAN bypass) is neither recorded nor shown.

32.1 Real-Time

The **Data transferred since installation** table indicates how much network traffic has been processed by the device since the first bootup. The **Data transferred since last reboot** table indicates how much network traffic has been processed by the device since the last bootup.

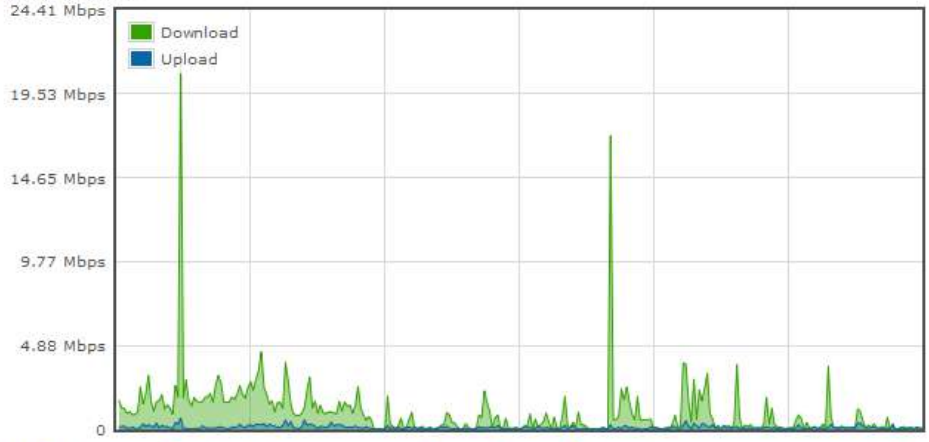
Data transferred since installation (Sun Oct 10 05:56:02 PST 2010)

	Download	Upload	Total
All WAN Connections	216.68 GB	91.70 GB	308.38 GB

Data transferred since last reboot [Hide Details]

	Download	Upload	Total
All WAN Connections	0.74 GB	0.63 GB	1.37 GB
WAN1	0.67 GB	0.61 GB	1.28 GB
WAN2	0.07 GB	0.02 GB	0.09 GB

Aggregated Transfer

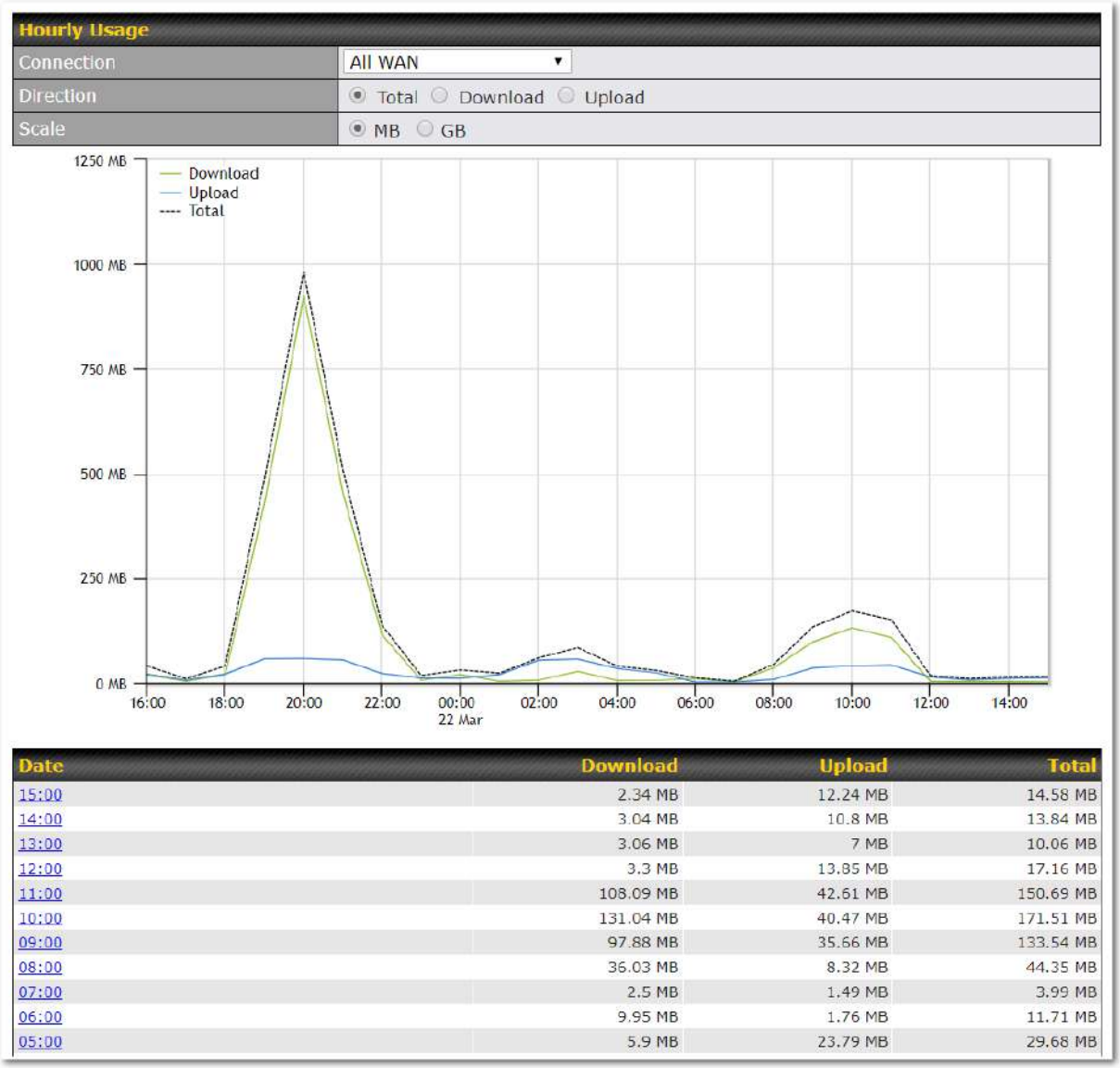


Avg: 0.99 Mbps 0.12 Mbps Peak: 21.78 Mbps 0.67 Mbps Stacked

	Download	Upload	Total
Overall	61 kbps	75 kbps	136 kbps

32.2 Hourly

This page shows the hourly bandwidth usage for all WAN connections, with the option of viewing each individual connection. Select the desired connection to check from the drop-down menu.



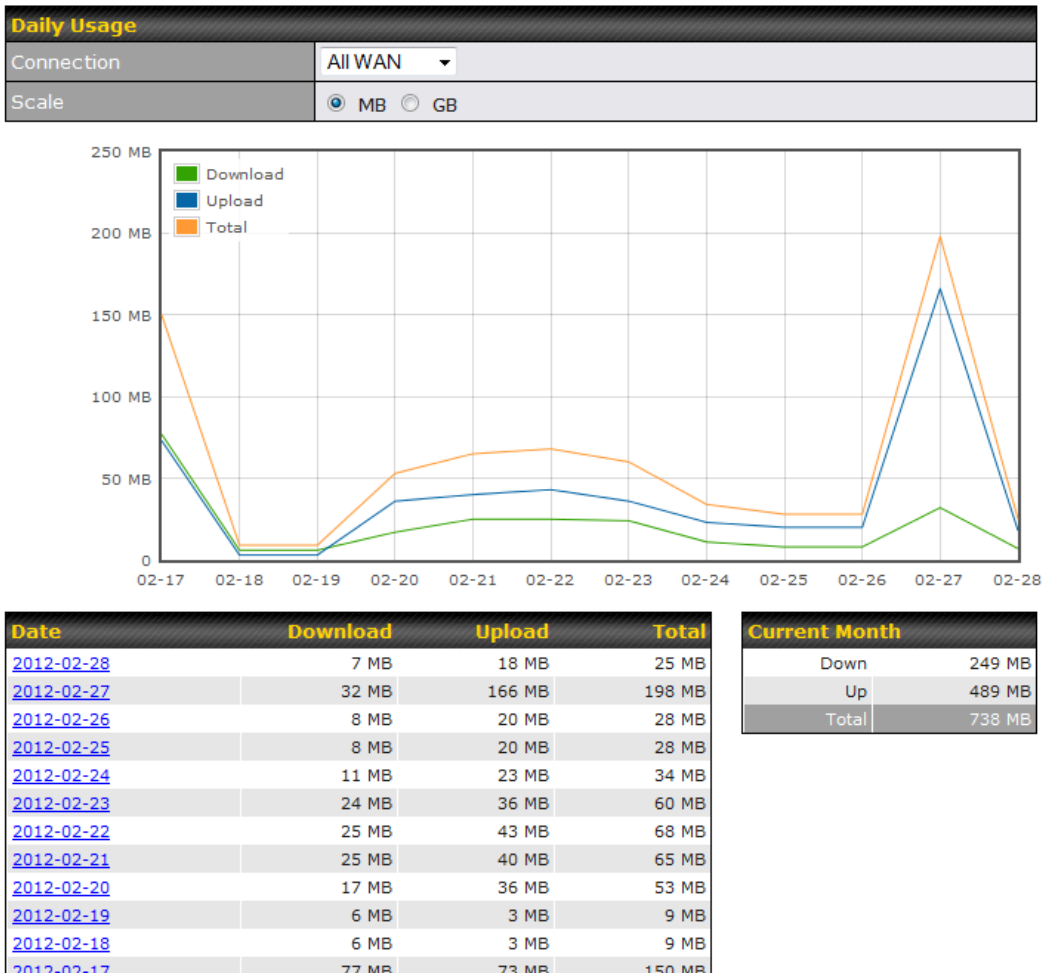
Date	Download	Upload	Total
15:00	2.34 MB	12.24 MB	14.58 MB
14:00	3.04 MB	10.8 MB	13.84 MB
13:00	3.06 MB	7 MB	10.06 MB
12:00	3.3 MB	13.85 MB	17.16 MB
11:00	108.09 MB	42.61 MB	150.69 MB
10:00	131.04 MB	40.47 MB	171.51 MB
09:00	97.88 MB	35.66 MB	133.54 MB
08:00	36.03 MB	8.32 MB	44.35 MB
07:00	2.5 MB	1.49 MB	3.99 MB
06:00	9.95 MB	1.76 MB	11.71 MB
05:00	5.9 MB	23.79 MB	29.68 MB

32.3 Daily

This page shows the daily bandwidth usage for all WAN connections, with the option of viewing each individual connection.

Select the connection to check from the drop-down menu. If you have enabled the **Bandwidth Monitoring** feature**,** the **Current Billing Cycle** table for that WAN connection will be displayed.

Click on a date to view the client bandwidth usage of that specific date. This feature is not available if you have selected to view the bandwidth usage of only a particular WAN connection. The scale of the graph can be set to display megabytes (**MB**) or gigabytes (**GB**).



Date	Download	Upload	Total
2012-02-28	7 MB	18 MB	25 MB
2012-02-27	32 MB	166 MB	198 MB
2012-02-26	8 MB	20 MB	28 MB
2012-02-25	8 MB	20 MB	28 MB
2012-02-24	11 MB	23 MB	34 MB
2012-02-23	24 MB	36 MB	60 MB
2012-02-22	25 MB	43 MB	68 MB
2012-02-21	25 MB	40 MB	65 MB
2012-02-20	17 MB	36 MB	53 MB
2012-02-19	6 MB	3 MB	9 MB
2012-02-18	6 MB	3 MB	9 MB
2012-02-17	77 MB	73 MB	150 MB

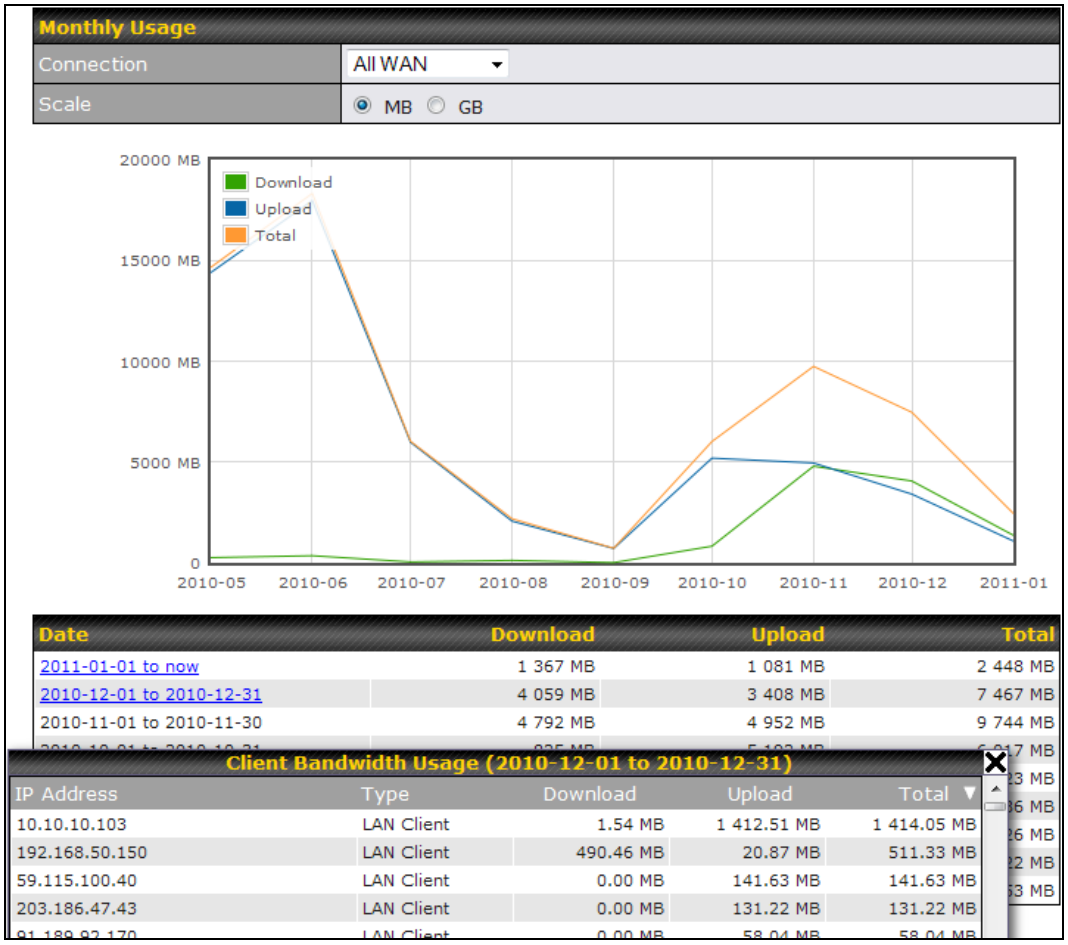
Current Month	
Down	249 MB
Up	489 MB
Total	738 MB

All WAN Daily Bandwidth Usage

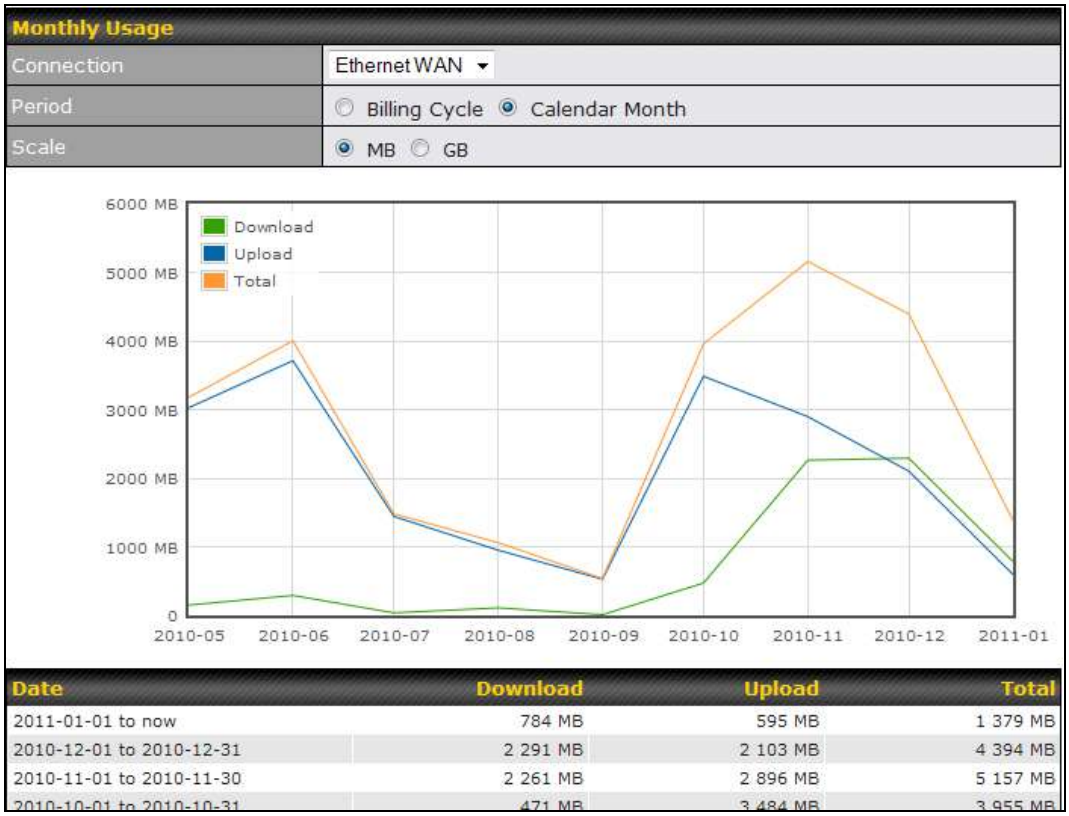
32.4 Monthly

This page shows the monthly bandwidth usage for each WAN connection. If you have enabled the **Bandwidth Monitoring** feature, you can check the usage of each particular connection and view the information by **Billing Cycle** or by **Calendar Month**.

Click the first two rows to view the client bandwidth usage in the last two months. This feature is not available if you have chosen to view the bandwidth of an individual WAN connection. The scale of the graph can be set to display megabytes (**MB**) or gigabytes (**GB**).



All WAN Monthly Bandwidth Usage



Ethernet WAN Monthly Bandwidth Usage

Tip

By default, the scale of data size is in **MB**. 1GB equals 1024MB.

Appendix A: Restoration of Factory Defaults

To restore the factory default settings on a Pepwave router, follow the steps below:

1. Locate the reset button on the front or back panel of the Pepwave router.
2. With a paperclip, press and keep the reset button pressed.

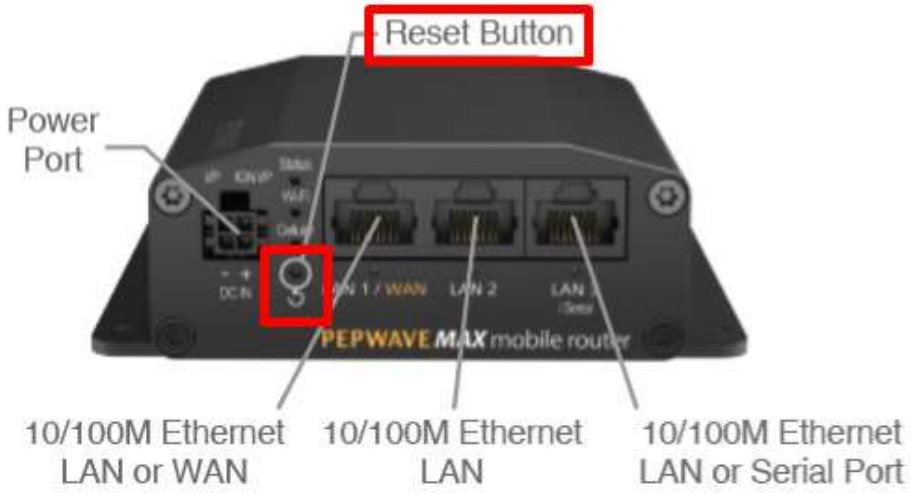
Note: There is a dual function to the reset button.

Hold for 5-10 seconds for admin password reset (Note: The LED status light blinks in RED 2 times and release the button, green status light starts blinking)

Hold for approximately 20 seconds for factory reset (Note: The LED status light blinks in RED 3 times and release the button, all WAN/LAN port lights start blinking)

After the Pepwave router finishes rebooting, the factory default settings will be restored.

Important Note
All previous configurations and bandwidth usage data will be lost after restoring factory default settings. Regular backup of configuration settings is strongly recommended.



Appendix B: FusionSIM Manual

Peplink has developed a unique technology called FusionSIM, which allows SIM cards to remotely link to a cellular router. This can be done via cloud or within the same physical network. There are a few key scenarios to fit certain applications.

The purpose of this manual is to provide an introduction on where to start and how to set up for the most common scenarios and uses.

Requirements

1. A Cellular router that supports FusionSIM technology
2. SIM Injector
3. SIM card

Notes:

- Always check for the latest Firmware version for both the cellular router and the SIM Injector. You can also check for the latest Firmware version on the device's WEB configuration page.
- A list of products that support FusionSIM can be found on the SIM Injector WEB page. Please check under the section **Supported models**.

SIM Injector reset and login details

How to reset a SIM Injector:

- Hold the reset button for 5-10 seconds. Once the LED status light turns RED, the reset button can be released. SIM Injector will reboot and start with the factory default settings.

The default WEB login settings:

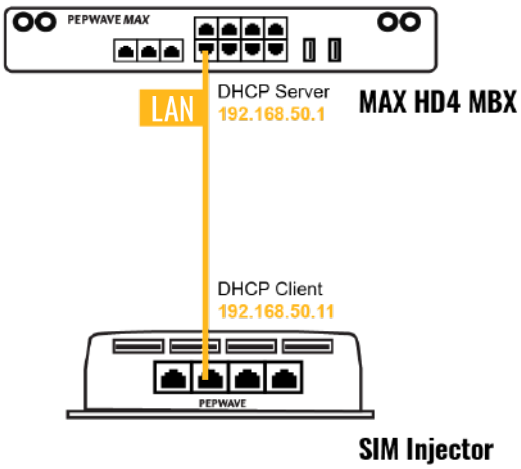
- **User**: admin
- **Password**: admin
- IP address: the device only has a DHCP client and no fallback IP address. Therefore, it is advised to check every time what IP address is assigned to the SIM Injector.

Notes:

- The SIM Injector can be monitored via InControl 2. Configuration is not supported.

Scenario 1: SIM Injector in LAN of Cellular Router

Setup topology



This is the most basic scenario in which the SIM Injector is connected directly to the cellular router's LAN port via an ethernet cable. This allows for the cellular router to be positioned for the best possible signal. Meanwhile, the SIM cards can be conveniently located in other locations such as the office, passenger area, or the bridge of a ship. The SIM Injector allows for easily swapping SIM cards without needing to access a cellular router.

IMPORTANT: Cellular WAN will not fallback to the local SIM if it is configured to use the SIM Injector.

Configuring the SIM Injector

1. Connect the SIM Injector to the LAN port of the cellular router.
2. Insert SIM cards into the SIM Injector. The SIM cards will be automatically detected.

IMPORTANT: SIM cards inserted into SIM Injector must not have a PIN code.

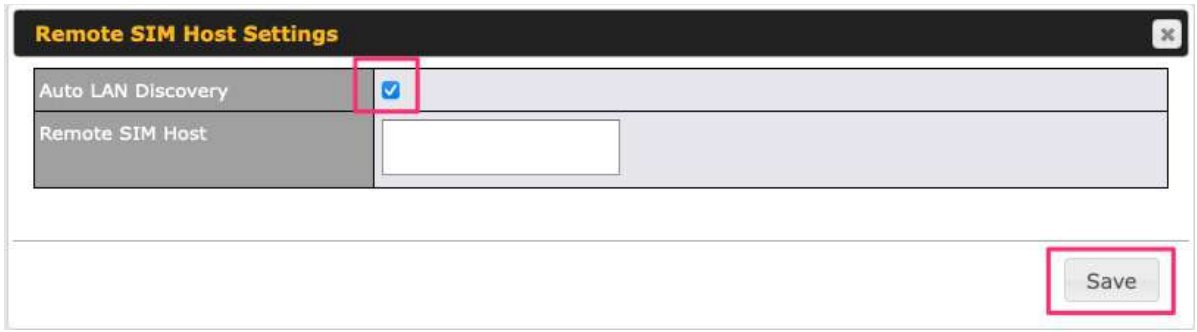
Note 1: The SIM Injector gets its IP address via DHCP and doesn't have a static IP address. To find it's address, please check the DHCP lease on the cellular router.

Configuring the Cellular Router

Step 1. Enable the SIM Injector communication protocol.

1a. If you are using a Balance cellular router, go to the **Network** tab (top navigation bar).
1b. If you are using a MAX cellular router, go to the **Advanced** tab (top navigation bar).
2. Under **Misc. settings** (left navigation bar) find **Remote SIM Management**.
3. In **Remote SIM Management**, click on the edit icon next to **Remote SIM is Disabled**.

4. Check the **Auto LAN discovery** checkbox and click **Save** and **Apply Changes**.



5. Click **Save** and then **Apply Changes**.

Step 2. Enable RemoteSIM for the selected Cellular interface.

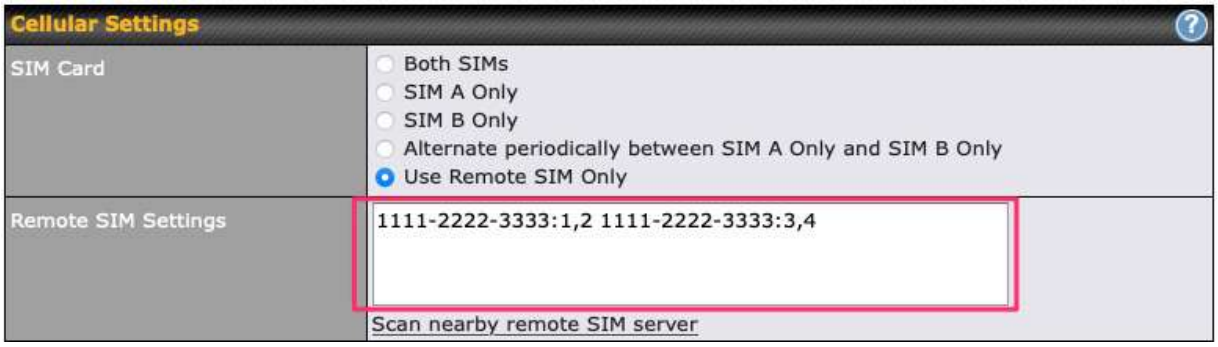
1. Go to **Network** (top navigation bar), then **WAN** (left navigation bar) and click **Details** for a selected cellular WAN. This will open the WAN Connection Settings page.

2. Scroll down to **Cellular settings**.
3. In the **SIM Card** section, select **Use Remote SIM Only**.

4. Enter configuration settings in **Remote SIM Settings** section. Click on **Scan nearby remote SIM server** to show the serial number(s) of the connected SIM Injector(s). Available configuration options for cellular interface are shown below:

A. Defining SIM Injector(s)
   - Format: <S/N>
   - Example 1: 1111-2222-3333
   - Example 2: 1111-2222-3333 4444-5555-6666

B. Defining SIM Injector(s) SIM slot(s):
   - Format: <S/N:slot number>
   - Example 1: 1111-2222-3333:7,5 (the Cellular Interface will use SIM in slot 7, then 5)
   - Example 2: 1111-2222-3333:1,2 1111-2222-3333:3,4 (the cellular Interface will use SIM in slot 1, then in 2 from the first SIM Injector, and then it will use 3 and 4 from the second SIM Injector).



Note: It is recommended to use different SIM slots for each cellular interface.

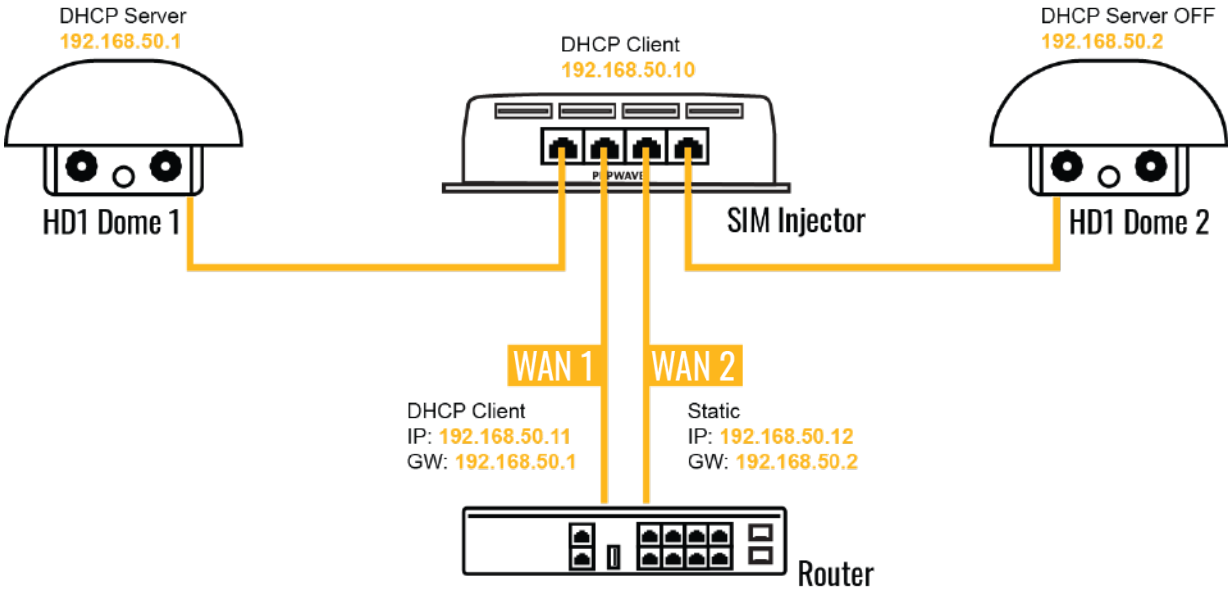
5. Click **Save** and **Apply Changes**.

Step 3. (Optional) Custom SIM cards settings.

1a. For a Balance router, go to the **Network** (Top tab).
1b. For a MAX router, go to the **Advanced** (Top tab).
2. Under **Misc. settings** (Left-side tab) find **Remote SIM Management**.
3. Click on the **Add Remote SIM** button, fill in all the required info and click **Save**. This section allows defining custom requirements for a SIM card located in a certain SIM slot:
   - Enable/Disable roaming (by default roaming is disabled).
   - Add Custom mobile operator settings (APN, user name, password).
4. Repeat configuration for all SIM cards which need custom settings.
5. Click **Apply Changes** to take effect.

Scenario 2: SIM Injector in WAN of main Router and multiple Cellular Routers

Setup topology



In this scenario, each HD Dome creates a WAN connection to the main router. A single SIM Injector is used to provide SIM cards for each HD Dome. The HD Dome can be replaced with any Peplink cellular router supporting RemoteSIM technology.

This scenario requires the completion of the configuration steps shown in Scenario 1 in addition to the configuration steps explained below.

Additional configurations for Cellular Routers

Step 1. Disable the DHCP server.

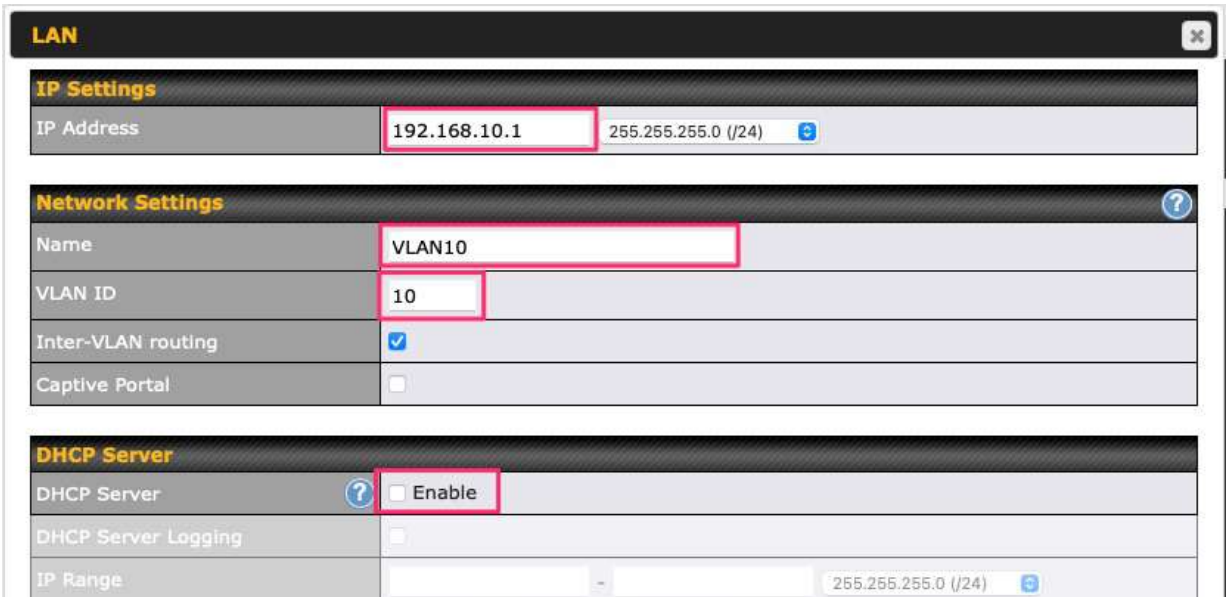
- HD Dome 1 should act as a DHCP server.
- HD Dome 2 should be configured to have a static IP address with DHCP disabled.
- Both routers should be in the same subnet (e.g. 192.168.50.1 and 192.168.50.2).

1. Go to **Network** (Top tab), then **Network Settings** (Left-side tab), and click on **Untagged LAN**. This will open up the LAN settings page.
2. Change the IP address to 192.168.50.2.
3. In the **DHCP Server** section, uncheck the checkbox to disable DHCP Server.
4. Click **Save** and **Apply Changes**.

Step 2. Ethernet port configuration

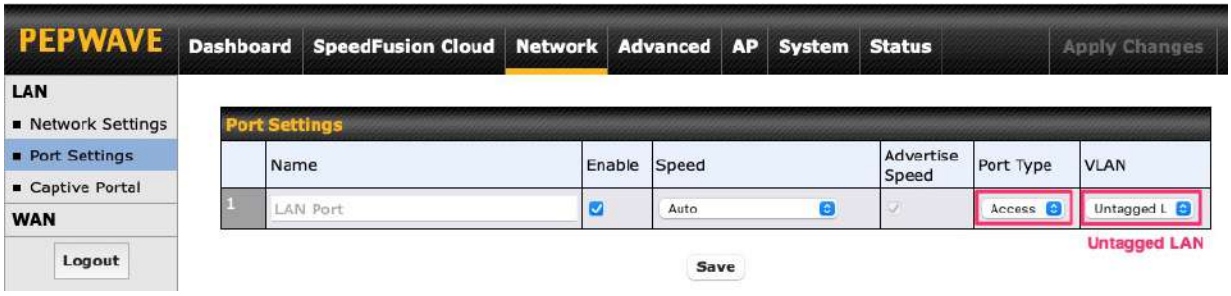
The Ethernet port must be set to **ACCESS** mode for each HD Dome. To do this, dummy VLANs need to be created first.

1. Go to **Network** (Top tab), then **Network Settings** (Left-side tab), and click on **New LAN**. This will open the settings page to create a dummy VLAN.
2. The image below shows the values that need to be changed to create a new VLAN:



Note: set different IP addresses for each HD dome (e.g. 192.168.10.1 and 192.168.10.2).

3. Click Save and **Apply Changes**.
4. Go to **Network** (Top tab), then **Port Settings** (Left-side tab).
5. Set the Port Type to **Access** and set VLAN to **Untagged LAN** (see picture below).



6. Click **Save** and **Apply Changes**.

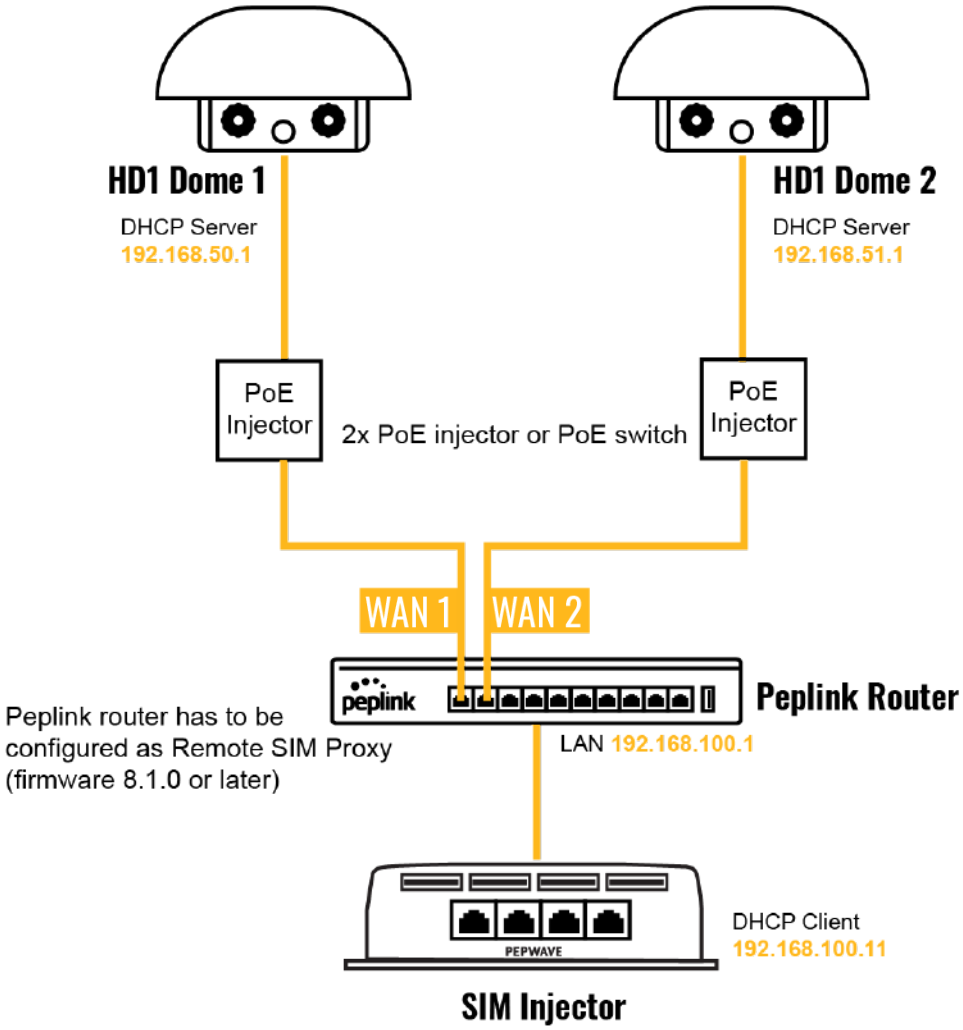
Configuration requirements for the main Router

Requirements for the main router are:

- Configure **WAN 1** as a DHCP client.
- **WAN 1** will automatically get the Gateway IP address from HD Dome 1.
- Configure **WAN 2** as a Static IP and set it to 192.168.50.12.
- Configure **WAN 2** Gateway to 192.168.50.2. Same as the HD Dome 2's IP address.

Scenario 3: SIM Injector in LAN of main Router and multiple Cellular Routers

Setup topology



In this scenario, SIMs are provided to the HD Domes via the main router. In this example, the **Remote SIM Proxy** functionality needs to be enabled on the main router.

Notes:

- HD Dome can be replaced with any other cellular router that supports RemoteSIM.
- It is recommended to use Peplink Balance series or X series routers as the main router.

This scenario requires the completion of the configuration steps for the cellular router and the SIM Injector as in Scenario 1. The configuration for the main router is explained below.

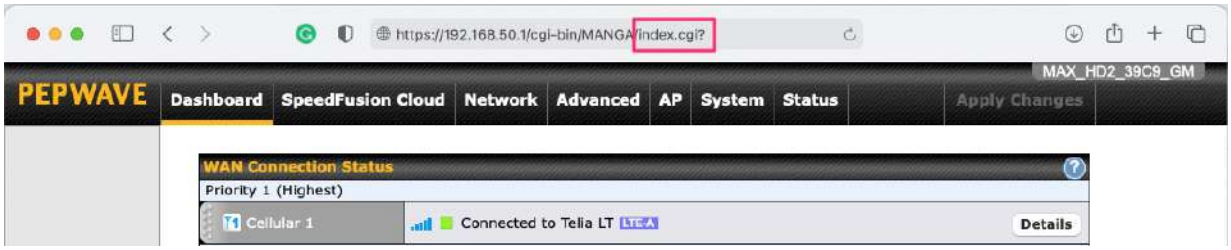
Main Router configuration

IMPORTANT: Main router LAN side and Cellular Routers must be configured using different subnets, e.g. 192.168.**50**.1/24 and 192.168.**100**.1/24.

Note: please make sure the Peplink router is running Firmware 8.1.0 or above.

1. Open the main router WEB interface and change:
From <IP address>/cgi-bin/MANGA/**index.cgi** to <IP address>/cgi-bin/MANGA/**support.cgi**.

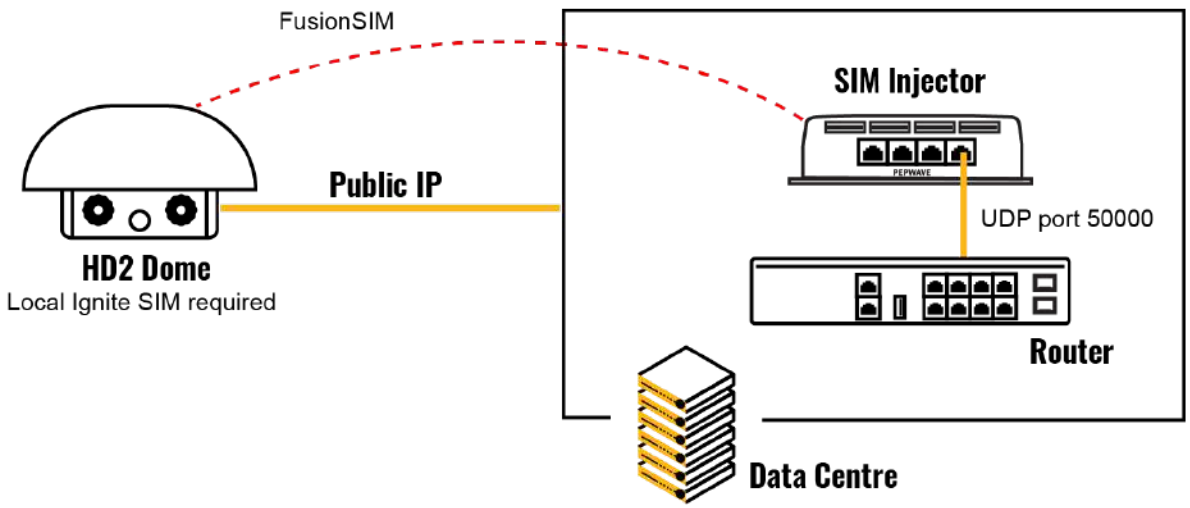
This will open the support.cgi page.



2. Scroll down to find **Remote SIM Proxy** and click on **[click to configure]** that is located next to it.
3. Check the **Enable** checkbox.
4. Click on **Save**.
5. Go back to the index.cgi page and click on **Apply Changes**.

Scenario 4: SIM Injector in a remote location

Setup topology



Requirements for installing a SIM Injector in a remote location:

- Cellular router communicates with the SIM Injector via UDP port 50000. Therefore this port must be reachable via public IP over the Internet.
- The one way latency between the cellular router and the SIM Injector should be **up to 250 ms.** A higher latency may lead to stability issues.
- The cellular router must have Internet connection to connect to the SIM Injector. It can be another Internet connection via Ethernet or Fiber if possible, or a secondary cellular interface with a local SIM (Ignite SIM).
- Due to its high latency, it is not recommended to use satellite WAN for connecting to a SIM Injector in remote locations.

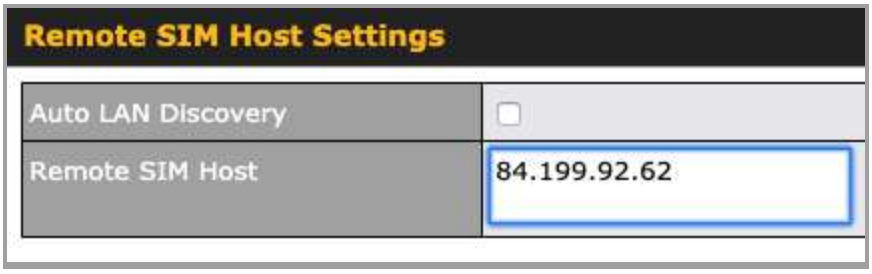
SIM Injector configuration is the same as in Scenario 1.

Cellular Router configuration

Step 1. Enable the SIM Injector communication protocol.

1a. For a Balance cellular router, go to the **Network** (Top tab).
1b. For a MAX cellular router, go to the **Advanced** (Top tab).

2. Under **Misc. settings** (Left-side tab), find **Remote SIM Management**.
3. In **Remote SIM Management**, click on the edit icon next to **Remote SIM is Disabled.**
4. Enter the public IP of the SIM Injector and click **Save** and **Apply Changes**.



Notes:

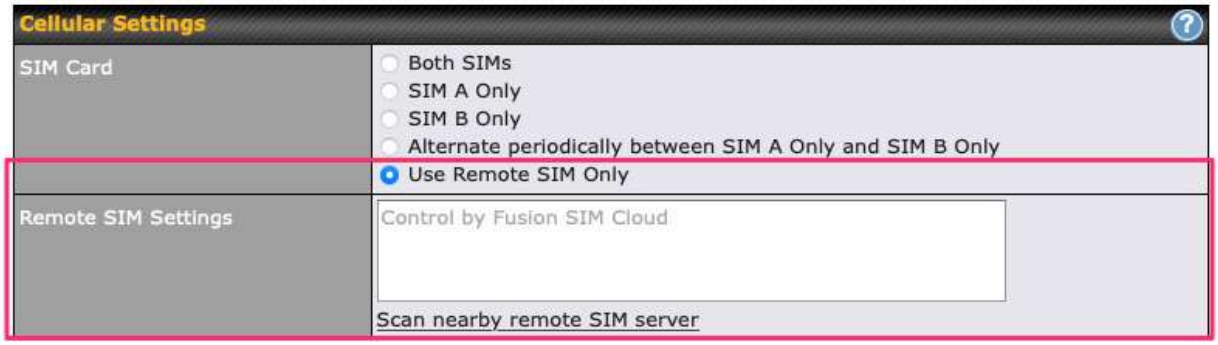
- **Do NOT check Auto LAN Discovery.**
- **Do NOT add a SIM Injector serial number to the Remote SIM Host field.**

Step 2. RemoteSIM and custom SIM card settings configurations are the same as in Scenario 1.

How to check if a Pepwave Cellular Router supports Remote SIM

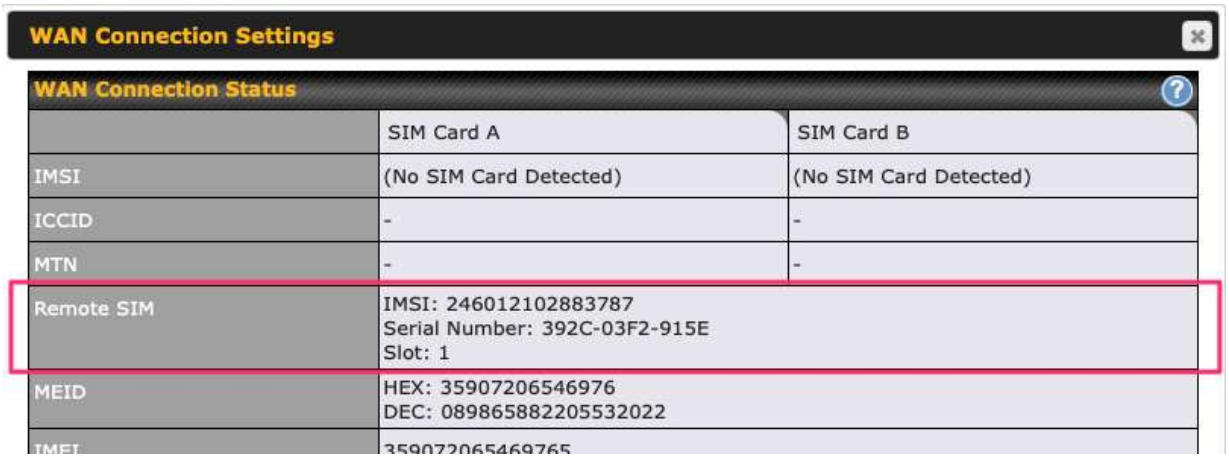
1. Go to **Network** (Top tab), then **WAN** (Left-side tab), and click **Details** on any cellular WAN. This will open the WAN Connection Settings page.
2. Scroll down to **Cellular settings**.

If you can see the **Remote SIM Settings** section, then the cellular router supports Remote SIMs.



Monitor the status of the Remote SIM

1. Go to **Network** (Top tab), then **WAN** (Left-side tab), and click **Details** on the cellular WAN which was configured to use RemoteSIM.
2. Check the **WAN Connection Status** section. Within the cell WAN details, there is a section for **Remote SIM** (SIM card IMSI, SIM Injector serial number and SIM slot).



Appendix C: Overview of ports used by Peplink SD-WAN routers and other Peplink services

Default Port Number	Usage	Service	Inbound/Outbound	Default Status
UDP 5246	Data flow	InControl	Outbound	Enabled
TCP 443	HTTPS service	InControl	Outbound	Enabled
TCP 5246	Optional, used when TCP 443 is not responding	InControl	Outbound	Enabled
TCP 5246	Remote Web Admin	InControl Virtual Appliance	Outbound	Enabled
TCP 4500	VPN Data (TCP Mode)	PepVPN / SpeedFusion	Inbound / Outbound*	Disabled
TCP 32015	VPN handshake	PepVPN / SpeedFusion	Inbound / Outbound*	Disabled
UDP 4500	VPN Data	PepVPN / SpeedFusion	Inbound / Outbound*	Disabled
UDP 32015º	VPN Data (alternative)	PepVPN / SpeedFusion	Inbound / Outbound*	Disabled
TCP/UDP 4500+N-1^	VPN Sub-Tunnels Data	PepVPN / SpeedFusion	Inbound / Outbound*	Disabled
UDP 32015+N-1^	VPN Sub-Tunnels Data (alternative)	PepVPN / SpeedFusion	Inbound / Outbound*	Disabled
UDP 4500	VPN Data	IPsec	Inbound / Outbound*	Disabled
UDP 500	VPN initiation	IPsec	Inbound / Outbound*	Disabled
UDP 500	L2TP	Remote User Access	Inbound	Disabled
UDP 1701	L2TP	Remote User Access	Inbound	Disabled
UDP 4500	L2TP	Remote User Access	Inbound	Disabled
UDP 1194	OpenVPN	Remote User Access	Inbound	Disabled
IP 47	PPTP (GRE)	Remote User Access	Inbound	Disabled
TCP 2222	Remote Assistance Direct connection	Peplink Troubleshooting Assistance	Outbound	Enabled
TCP 80	HTTP traffic	Web Admin	Inbound	Enabled

		Interface access		
TCP 443	HTTPS traffic	Web Admin Interface access (secure)	Inbound	Enabled
TCP 8822	SSH	SSH	Inbound	Disabled
UDP 161	SNMP Get	SNMP monitoring	Inbound	Disabled
UDP 162	SNMP Trap	SNMP monitoring	Outbound	Disabled
TCP, UDP 1812	Radius Authentication	Radius	Outbound	Disabled
TCP, UDP 1813	Radius Accounting	Radius	Outbound	Disabled
UDP 123	Network Time Protocol	NTP	Inbound Outbound	Disabled Enabled
TCP 60660	Real-time location data in NMEA format	GPS	Outbound	Disabled

Disclaimer:

- By default, only TCP 32015 and UDP 4500 are needed for PepVPN / SpeedFusion.
- Inbound / Outbound* - Inbound = For Server mode; Outbound = For Client mode
- UDP 32015º - If IPsec VPN or L2TP/IPsec RUA is enabled, the UDP 4500 is occupied, so PepVPN / SpeedFusion will automatically switch to UPD 32015 as VPN data port .
- UDP 32015+N-1^ / TCP/UDP 4500+N-1^ - When using Sub-Tunnels, multiple ports are in use (1 for each Sub-Tunnel profile).
- The default UDP data ports used when using (N number of Sub-Tunnel profiles) are: 4500…4500+N-1, or (when port 4500 is in use by IPsec or L2TP/IPsec) 32015… 32015+N-1".

Appendix D: Declaration

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX BR1 Mini

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. IEEE 802.11b or 802.11g operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

FCC Radiation Exposure Statement (for MAX BR1 mini)

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

CE Statement for Pepwave Routers (MAX BR1 Mini for EC25-E)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX BR1 Mini MAX BR1 Mini LTE Pismo930 Lite
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1
EN 300 328 V2.2.2
EN 303 413 V1.1.1
EN 50385 : 2017
EN 301 489-1 V2.2.3
EN 301 489-17 V3.1.1
EN 301 489-19 V2.1.1
Draft EN 301 489-52 V1.1.0
EN 55032: 2015 + AC:2016
EN 55035: 2017
EN IEC 61000-3-2: 2019
EN 61000-3-3:2013 + A1:2019
EN 62368-1:2014 + A11:2017 (Second Edition)

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 16.38 dBm
WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Output Power	Class 3 (23dBm±2dB) for LTE FDD Class 3 (23dBm±2dB) for LTE TDD Class 3 (24dBm +1/-3dB) for TD-SCDMA Class 3 (24dBm +1/-3dB) for UMTS Class E2 (27dBm ±3dB) for EDGE 850/900MHz Class E2 (26dBm +3/-4dB) for EDGE 1800/1900MHz Class 4 (33dBm ±2dB) for GSM 850/900MHz Class 1 (30dBm ±2dB) for GSM 1800/1900MHz

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX BR1 Mini for MC7455)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX BR1 Mini MAX BR1 Mini LTEA Pepwave MAX BR1 Mini Pepwave MAX BR1 Mini LTEA Peplink MAX BR1 Mini Peplink MAX BR1 Mini LTEA MAX-BR1-MINI-LTEA-W-T Pismo930 Lite
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V11.1.1
EN 300 328 V2.2.2
EN 303 413 V1.1.1
EN 62311 : 2008
EN 301 489-1 V2.2.3
EN 301 489-17 V3.1.1
EN 301 489-19 V2.1.1
Draft EN 301 489-52 V1.1.0
EN 55032: 2015 + AC:2016
EN 55035: 2017
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 62368-1:2014 + A11:2017 (Second Edition)

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 16.38 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	
UMTS		
Band 1 (IMT 2100 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

Industry Canada Statement (for MAX BR1 Mini)

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme avec l'exposition aux radiations ISED définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm entre le radiateur et votre corps.

FCC & IC Requirements for Operation in the United States and Canada (for MAX BR1 Mini)

FCC ID : U8G-P1930LITER6

FCC 15.21: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF exposure warning: This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

IC Warning:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisee aux deux conditions suivantes

1. l'appareil ne doit pas produire de brouillage, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioelect rique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

Informations concernant l'exposition aux frequences radio (RF)

Cet equipement est conforme avec l'exposition aux radiations IC definies pour un environnement noncontrole.

Cet equipement doit etre installe et utilise a une distance minimum de 20 cm entre le radiateuret votre corps.

Cet emetteur ne doit pas etre co-localisees ou operant en conjonction avec une autreantenne ou transmetteur.

Les utilisateurs finaux et les installateurs doivent etre informes des instructions d'installation de l'antenne et des conditions de fonctionnement de l'emetteur afin de satisfaire a la conformite d'exposition RF.

This radio transmitter IC 20682-P1930LITER6 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Le present emetteur radio 20682-P1930LITER6 a ete approuve par Innovation, Sciences et Developpement economique Canada pour fonctionner avec les types d'antenne enumeres ci dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est superieur au gain maximal indique pour tout type figurant sur la liste, sont strictement interdits pour l'exploitation de l'emetteur.

antenna type Omni-directional

antenna gain 5.33

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX BR1 MK2

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 24cm between the radiator & your body.

Industry Canada Statement (For MAX BR1 MK2)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio

exempts de licence. L'exploitation est autorisee aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en

(i) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

The high-power radars are allocated as primary users (i.e. priority users) of the band 5725-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

(i) Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.

En outre, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bande 5725-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme avec l'exposition aux radiations ISED définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm entre le radiateur et votre corps.

CE Statement for Pepwave Routers (MAX BR1 MK2)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	Pismo Labs Technology Limited
Contact information of the manufacturer	A8, 5/F, HK Spinners Ind. Bldg., Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	Pepwave / Peplink / Pismo Wireless Product
Model name of the appliance	MAX BR1 MK2
Trade name of the appliance	Pepwave / Peplink / Pismo

The construction of the appliance is in accordance with the following standards:

EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 303 413 V1.1.1
EN 301 908-1 V13.1.1
EN 301 489-1 V2.2.3
EN 301 489-17 V3.1.1
EN 301 489-19 V2.1.1
Draft EN 301 489-52 V1.1.0
EN 55032:2015 +A11:2020
EN 61000-3-2: 2019
EN 61000-3-3: 2019
EN 62311:2008
EN 62368-1:2014+A11:2017 (Second Edition)
EN 55035:2017

Yours sincerely,

Keith Chau
General Manager
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 19.95 dBm

5GHz (5150 - 5250 MHz) : 22.73 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	
UMTS		
Band 1 (IMT 2100 12.2 kbps) Band 3 (UMTS 1800 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX BR1 Classic

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Caution Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

FCC Radiation Exposure Statement (for MAX BR1 Classic)

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Industry Canada Statement (for MAX BR1 Classic)

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions (1) This device may not cause interference; and(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme avec l'exposition aux radiations ISED définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm entre le radiateur et votre corps.

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

CE Statement for Pepwave Routers (MAX BR1 Classic for MC7455)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX BR1 ESN MAX BR1 ESN LTEA Pepwave MAX BR1 ESN Pepwave MAX BR1 ESN LTEA Peplink MAX BR1 ESN Peplink MAX BR1 ESN LTEA Pismo930 Lite MAX-BR1-ESN-LTEA-W-T MAX BR1 Classic MAX BR1 Classic LTEA Pepwave MAX BR1 Classic Pepwave MAX BR1 Classic LTEA Peplink MAX BR1 Classic Peplink MAX BR1 Classic LTEA MAX-BR1-LTEA-W-T MAX BR1 MAX BR1 LTEA Pepwave MAX BR1 Pepwave MAX BR1 LTEA
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1
EN 300 328 V2.2.2
EN 303 413 V1.1.1
EN 62311 : 2008
EN 301 489-1 V2.2.3
Draft EN 301 489-17 V3.2.0
EN 301 489-19 V2.1.1
Draft EN 301 489-52 V1.1.0
EN 55032: 2015 + AC:2016-07
EN 55035: 2017
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 62368-1:2014 + A11:2017

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 19.78 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX BR1 Classic for EC25-E)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX BR1 Classic Pismo930 Lite MAX BR1 MAX BR1 LTE MAX-BR1-LTE-E-T MAX BR1 Classic LTE MAX BR1 ESN MAX BR1 ESN LTE MAX-BR1-ESN-LTE-E-T Pepwave MAX BR1 Pepwave MAX BR1 LTE Pepwave MAX BR1 Classic Pepwave MAX BR1 Classic LTE Pepwave MAX BR1 ESN Pepwave MAX BR1 ESN LTE Peplink MAX BR1 Peplink MAX BR1 LTE Peplink MAX BR1 Classic Peplink MAX BR1 Classic LTE Peplink MAX BR1 ESN Peplink MAX BR1 ESN LTE
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V11.1.1
EN 300 328 V2.2.2
EN 303 413 V1.1.1
EN 62311 : 2008
EN 301 489-1 V2.2.3
Draft EN 301 489-17 V3.2.0
EN 301 489-19 V2.1.1
Draft EN 301 489-52 V1.1.0
EN 55032: 2015 + AC:2016-07
EN 55035: 2017
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 62368-1:2014 + A11:2017

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 19.78 dBm
WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Output Power	Class 3 (23dBm±2dB) for LTE FDD Class 3 (23dBm±2dB) for LTE TDD Class 3 (24dBm +1/-3dB) for TD-SCDMA Class 3 (24dBm +1/-3dB) for UMTS Class E2 (27dBm ±3dB) for EDGE 850/900MHz Class E2 (26dBm +3/-4dB) for EDGE 1800/1900MHz Class 4 (33dBm ±2dB) for GSM 850/900MHz Class 1 (30dBm ±2dB) for GSM 1800/1900MHz

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX HD4 MBX, MAX HD2 MBX, MAX HD4 MBX 5G, MAX HD2 MBX 5G

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

IMPORTANT NOTE

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

ISED Warning Statement For MAX HD4 MBX

Industry Canada Statement

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions (1) This device may not cause interference; and(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

(i) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

The high-power radars are allocated as primary users (i.e. priority users) of the band 5725-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

(i) Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.

En outre, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bande 5725-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

IC Radiation Exposure Statement

This equipment complies with Innovation, Science and Economic Development Canada RF exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated to ensure a minimum of 20 cm spacing to any person at all times.

Declaration d'exposition aux radiations Cet equipement est conforme aux limites d'exposition aux rayonnements IC etablies pour un environnement non controle. Cet equipement doit etre installe et utilise avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

This radio transmitter 20682-P1MBX has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

WIFI Antenna type Replacement Antenna

WIFI Antenna gain 2.4GHz / 2.44 dBi , 5GH / 4.73 dBi

LTE Antenna type Replacement Antenna

LTE Antenna gain 4.38 dBi

Battery Caution Statement (MAX HD4 MBX, MAX HD2 MBX, MAX HD4 MBX 5G, MAX HD2 MBX 5G)

Risk of explosion if the battery replaced by an incorrect type, place the battery into fire, a hot oven, extremely high temperature or low air pressure surrounding environment, the leakage of flammable liquid or gas, and mechanically crushing or cutting of the battery.

CE Statement for Pepwave Routers (MAX HD4 MBX For EM7565)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial Building Phase 6, 481 Castle Peak Road Cheung Sha Wan Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX HD4 MBX MAX-HD4-MBX-LTEA-K-T HD4 MBX MBX MAX HD4 MBX LTEA EXM-T4-LTEA-R Peplink Balance 310X Balance 310X BPL-310X-LTE-E-T
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 300 328 V2.2.2
EN 303 413 V1.1.1
EN 301908-1 V13.1.1
Draft EN 301 489-1 V2.2.1
Draft EN 301 489-17 V3.2.0
Draft EN 301 489-52 V1.1.0
EN 55032: 2015 + AC:2016-07
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 55035 : 2017
EN 62311 : 2008
EN 62368-1:2014 + A11:2017
EN 301 489-19 V2.1.1
EN 301 893 V2.1.1

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 19.6 dBm
5GHz (5150 - 5250 MHz) : 19.4 dBm
WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 3-6: Conducted Tx (Transmit) Power Tolerances

Bands	Conducted Tx power	Notes
LTE		
LTE bands 1,3,8,20	+23 dBm ± 1 dB	
LTE bands 7	Single cell: +22 dBm ± 1 dB UL CA: +22.8 dBm ± 1 dB	0.8 dB offset for UL CA hardcoded by chipset manufacturer
UMTS		
Band 1 (IMT 2100 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX HD2 MBX / MAX HD4 MBX For LM960A18)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX HD4 MBX MAX HD4 MBX LTEA MAX HD2 MBX MAX HD2 MBX LTEA MBX MAX-HD4-MBX-GLTE-G MAX-HD2-MBX-GLTE-G EXM-MBX-T4-GLTE-G EXM-MBX-T2-GLTE-G Pepwave MAX HD4 MBX Pepwave MAX HD2 MBX Pepwave MAX HD4 MBX LTEA Pepwave MAX HD2 MBX LTEA Peplink MAX HD4 MBX Peplink MAX HD2 MBX Peplink MAX HD4 MBX LTEA Peplink MAX HD2 MBX LTEA
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1
EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 303 413 V1.1.1
EN 62311 : 2008
EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.4
EN 301 489-19 V2.1.1
Draft EN 301 489-52 V1.1.0
EN 55032: 2015 + AC:2016-07
EN 55035: 2017
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 62368-1:2014 + A11:2017

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 19.6 dBm
5GHz (5150 - 5250 MHz) : 19.4 dBm
WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Band	Power class
3G WCDMA	Class 3 (0.2W)
LTE All Bands	Class 3 (0.2W)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX HD2 MBX 5G / MAX HD4 MBX 5G For MV31-W)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX HD2 MBX 5G MAX-HD2-MBX-5GD-T MAX HD4 MBX 5G MAX-HD4-MBX-5GD-T Balance 310X Balance 310X 5G BPL-310X-5GD-T MBX Expansion Module Expansion Module with 1x 5G modems EXM-310X-5GD Expansion Module with 4x 5G modems EXM-MBX-T4-5GD Expansion Module with 2x 5G modules EXM-MBX-T2-5GD
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1
EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 303 413 V1.1.1
EN 62311: 2020
EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.4
Draft EN 301 489-19 V2.2.0
Draft EN 301 489-52 V1.1.2
EN 55032: 2015 / A11: 2020
EN 55035: 2017 / A11: 2020
EN 61000-3-2: 2014
EN 61000-3-3: 2013 / A1:2019
EN 62368-1:2020 + A11:2020

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 19.6 dBm

5GHz (5150 - 5250 MHz) : 19.4 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

5G	Bands	FR1 (Sub 6G): FDD: n28 TDD: n78
	Band combinations	For supported E-UTRAN New Radio Dual Connectivity (EN-DC) see Section 6.2
	4x4 MIMO	n78
	DSS	n28
	Category	3GPP Rel 15
	Output Power	FR1 (Sub 6G): n78: 26dBm +2/-3dB all other bands: 23dBm ±2dB
4G	Bands	FDD: B1, B3, B7, B8, B20, B28 TDD: B38, B40
	Band combinations	For supported carrier aggregations (CA) see Section 6.1
	4x4 MIMO	B1, B3, B7, B40, B38
	RX Diversity	all LTE bands
	Category	UE Cat. 13 (UL: 150Mbps) + UE Cat. 20 (DL: 2Gbps); 7xDL CA, 3xUL CA (Intra-band), 5xDL CA+4X4 MIMO (Up to UE Cat20)
	Output Power	23dBm ±2dB
3G	Bands	Bd.I, Bd.VIII
	RX Diversity	all 3G bands
	Category	DC-HSPA+ – DL Cat. 24 (42Mbps) / UL Cat. 6 (11Mbps) HSUPA – UL 5.76Mbps Compressed mode (CM) supported according to 3GPP TS25.212
	Output Power	all bands: 24dBm +1.7/-3.7dB

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX HD2

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 50 centimeters between the radiator and your body.

Industry Canada Statement (MAX HD2)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes:

(1) l’appareil ne doit pas produire de brouillage, et

(2) l’utilisateur de l’appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d’en

(i) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

The high-power radars are allocated as primary users (i.e. priority users) of the band 5725-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

(i) Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.

En outre, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bande 5725-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 37cm between the radiator & your body. 70 cm minimum distance for the device operate with plug-in USB cellular device which has maximum of 7W(ERP) output power.

Cet équipement est conforme avec l'exposition aux radiations ISED définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 37 cm entre le radiateur et votre corps. Distance minimale de 70 cm pour que l'appareil fonctionne avec un appareil cellulaire USB enfichable qui a une puissance de sortie maximale de 7 W (ERP).

Battery Caution Statement

Risk of explosion if the battery replaced by an incorrect type, place the battery into fire, a hot oven, extremely high temperature or low air pressure surrounding environment, the leakage of flammable liquid or gas, and mechanically crushing or cutting of the battery.

For WLAN							
Antenna No.	Brand	Model	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connecter Type	Cable Length (mm)
WAN(2.4G)-1	SmartAnt	SAA06-220690	3	2400 ~ 2500 MHz	Dipole	R-SMA	150
WAN(2.4G)-2	SmartAnt	SAA06-220690	3	2400 ~ 2500 MHz	Dipole	R-SMA	150
AP(5G)-1	SmartAnt	SAA06-220690	5.5	5150 ~ 5350 MHz	Dipole	R-SMA	260
			6	5350 ~ 5875 MHz			260
AP(5G)-2	SmartAnt	SAA06-220690	5.5	5150 ~ 5350 MHz	Dipole	R-SMA	260
			6	5350 ~ 5875 MHz			260

For GPS						
Antenna No.	Brand	Model	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connecter Type
1	MASTER WAVE TECHNOLOGY CO., LTD.	98335KSAF000	4.5 ±0.5	1575.42 MHz	Magnetic	SMA

For WWAN(LTE)						
Antenna No.	Brand	Model	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connecter Type
Cellular 1 Main	MASTER WAVE TECHNOLOGY CO., LTD.	98619ZSAX025	1.99	699~960 MHz	Dipole	SMA
Cellular 1 Diversity/Aux			4	1575~2170 MHz		
Cellular 2 Main			1	2300~2320 MHz		
Cellular 1 Diversity/Aux			2.8	2325~2690 MHz		

CE Statement for Pepwave Routers (MAX HD2 For MC7455)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial Building, Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX HD2, MAX HD2 LTE, MAX HD2 LTEA Pismo 811AC
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 301 908-1 V11.1.1
Draft EN 301 489-1 V2.2.0
Draft EN 301 489-19 V2.1.0
Draft EN 301 489-52 V1.1.0
Draft EN 301 489-17 V3.2.0
EN 55032:2015 +AC: 2016
EN 61000-3-2: 2014,
EN 61000-3-3: 2013,
EN 55024:2010+A1:2015
EN 62311:2008
EN 60950-1:2006+A11: 2009+A1:2010+A12:2011+A2:2013
EN 303 413 V1.1.1

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 19.90 dBm

5GHz (5150 - 5250 MHz) : 22.88 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	
UMTS		
Band 1 (IMT 2100 12.2 kbps) Band 3 (UMTS 1800 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX HD2 For MC7565)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX HD2 MAX HD1 MAX HD2 LTEA MAX HD1 LTEA MAX-HD2-LTEA-K-T MAX-HD1-LTEA-K-T Pepwave MAX HD2 Pepwave MAX HD1 Pepwave MAX HD2 LTEA Pepwave MAX HD1 LTEA Peplink MAX HD2 Peplink MAX HD1 Peplink MAX HD2 LTEA Peplink MAX HD1 LTEA Pismo 811AC Pismo 811ac with 4SIMs piggy
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V11.1.1
EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 303 413 V1.1.1
EN 62311 : 2008
EN 301 489-1 V2.2.3
EN 301 489-17 V3.1.1
EN 301 489-19 V2.1.1
Draft EN 301 489-52 V1.1.0
EN 55032: 2015 + AC:2016
EN 55035: 2017
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 62368-1:2014 + A11:2017 (Second Edition)

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 19.86 dBm
5GHz (5150 - 5250 MHz) : 22.68 dBm
WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 3-6: Conducted Tx (Transmit) Power Tolerances

Bands	Conducted Tx power	Notes
LTE		
LTE bands 1,3,8,20	+23 dBm ± 1 dB	
LTE bands 7	Single cell: +22 dBm ± 1 dB UL CA: +22.8 dBm ± 1 dB	0.8 dB offset for UL CA hardcoded by chipset manufacturer

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

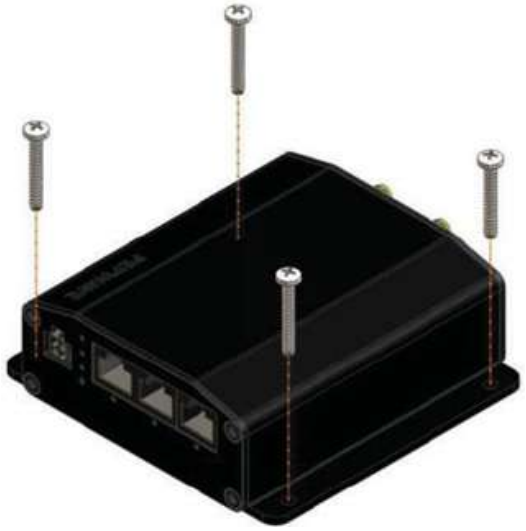
contact as: https://www.peplink.com/

Mounting the Unit

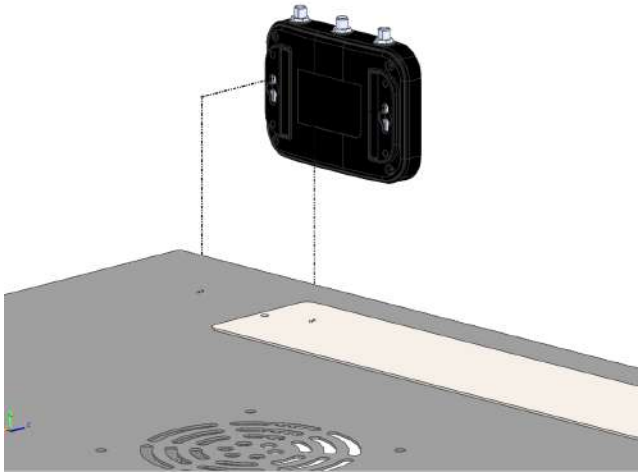
Wall Mount

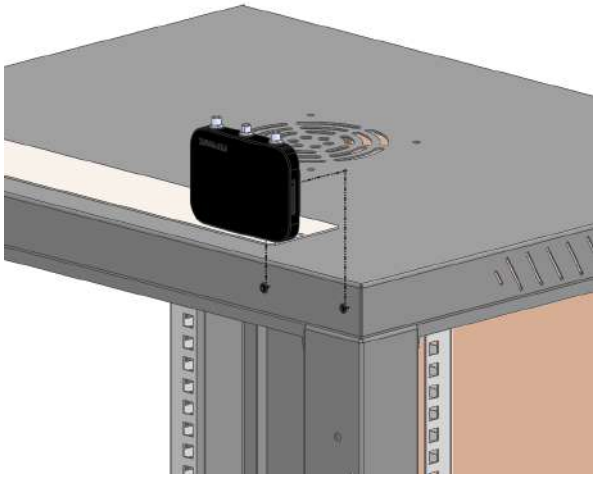
Some devices can be wall mounted using screws. After adding the screw on the wall, slide in the screw hole socket as indicated below. Recommended screw specification M3.5 x 20mm, head diameter 6mm, head thickness 2.4mm.

For type 1, the device requires four screws for wall mounting.



For type 2, the device requires two screws for wall mounting.





(For MAX BR1 Classic CB IEC 62368-1)

Output of the external power source shall complied with ES1 and ES2 requirements, output rating 10-30 Vdc, minimum 12W (DC Jack or POE injector), with minimum ambient temperature 65 ℃, altitude = 5000m , and evaluated in accordance to UL/EN/IEC 60950-1 and / or UL/EN/IEC 62368-1

Ensure to connect the power cord of power adapter to a socket-outlet with earthing.

(For MAX BR1 Mini HW3 CB IEC 62368-1)

Output of the external power source shall complied with ES1 and PS2 requirements, input rating 10-30 Vdc, maximum 18W (DC Power Port) or 802.3at PoE, with minimum ambient temperature 65 ℃, altitude = 5000m , and evaluated in accordance to UL/EN/IEC 60950-1 and / or UL/EN/IEC 62368-1.

Ensure to connect the power cord of power adapter to a socket-outlet with earthing.

The MAX BR1 Mini is investigated to IEC TR 62102 as SELV (ES1) circuits and only connected to PoE without routing to the outside plant, including campus environment.

FCC Requirements for Operation in the United States

Federal Communications Commission (FCC) Compliance Notice:

For MAX BR1 Pro 5G

FCC 15.21

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF exposure warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 23 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Industry Canada Statement (MAX BR1 Pro 5G)

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions

1. This device may not cause interference.

2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes

1. l'appareil ne doit pas produire de brouillage, et

2. l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en

compromettre le fonctionnement.Informations concernant l'exposition aux frequences radio (RF)

Cet equipement est conforme avec l'exposition aux radiations IC definies pour un environnement noncontrole.

Cet equipement doit etre installe et utilise a une distance minimum de 23 cm entre le radiateuret votre corps.

Cet emetteur ne doit pas etre co-localisees ou operant en conjonction avec une autreantenne ou transmetteur.

Les utilisateurs finaux et les installateurs doivent etre informes des instructions d'installation de l'antenne et des

conditions de fonctionnement de l'emetteur afin de satisfaire a la conformite d'exposition RF.

This radio transmitter IC 20682-P1AX02 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

antenna type Omni-directional

antenna gain for 2.4GHz 2.44 dBi

antenna gain for 5GHz (5150 ~ 5250 MHz) 4.10 dBi

antenna gain for 5GHz (5725 ~ 5850 MHz) 4.73 dBi

Battery Caution Statement

Risk of explosion if the battery replaced by an incorrect type, place the battery into fire, a hot oven, extremely high temperature or low air pressure surrounding environment, the leakage of flammable liquid or gas, and mechanically crushing or cutting of the battery.

CE Statement for Pepwave Routers (MAX BR1 Pro 5G)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX BR1 5G MAX-BR1-5GD-T MAX BR1 Pro 5G MAX-BR1-PRO-5GD-T-PRM
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1
EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 303 413 V1.1.1
EN 62311 : 2020
EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.4
Draft EN 301 489-19 V2.2.0
Draft EN 301 489-52 V1.1.2
EN 55032: 2015 / A11:2020
EN 55035: 2017
EN 61000-3-2: 2014
EN 61000-3-3: 2013 / A1:2019
EN 62368-1:2020+A11:2020

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 19.74 dBm

5GHz (5150 - 5250 MHz) : 22.66 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

5G	Bands	FR1 (Sub 6G): FDD: n28 TDD: n78
	Band combinations	For supported E-UTRAN New Radio Dual Connectivity (EN-DC) see Section 6.2
	4x4 MIMO	n78
	DSS	n28
	Category	3GPP Rel 15
	Output Power	FR1 (Sub 6G): n78: 26dBm +2/-3dB all other bands: 23dBm ±2dB
4G	Bands	FDD: B1, B3, B7, B8, B20, B28 TDD: B38, B40
	Band combinations	For supported carrier aggregations (CA) see Section 6.1
	4x4 MIMO	B1, B3, B7, B38
	RX Diversity	all LTE bands
	Category	UE Cat. 13 (UL: 150Mbps) + UE Cat. 20 (DL: 2Gbps); 7xDL CA, 3xUL CA (Intra-band), 5xDL CA+4X4 MIMO (Up to UE Cat20)
	Output Power	all bands: 23dBm ±2dB

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX BR1 Pro LTEA for EM7690)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPLINK PEPWAVE Wireless Product
Model name of the appliance	MAX BR1 Pro LTEA MAX-BR1-PRO-GLTE-S-T-PRM
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V15.1.1
EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 303 413 V1.1.1
EN 62311 : 2020
EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.4
Draft EN 301 489-19 V2.2.0
EN 301 489-52 V1.2.1
EN 55032: 2015 + A11:2020
EN 55035: 2017
EN 55035: 2017 + A11:2020
EN 61000-3-2: 2014
EN 61000-3-2: 2019+A1:2021
EN 61000-3-3: 2013
EN 61000-3-3: 2013 + A1:2019
EN 62368-1:2020+A11:2020

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 – 2472 MHz) : 19.74 dBm
5GHz (5150 - 5250 MHz) : 22.66 dBm
WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 3-6: Conducted Tx (Transmit) Power Tolerances

Bands	Conducted Tx power	Notes
LTE		
LTE bands 1, 3	22.5 dBm ± 1 dB	
LTE bands 7, 38, 40	22 dBm ± 1 dB	
LTE bands 8, 20, 28	23 dBm ± 1 dB	

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States

Federal Communications Commission (FCC) Compliance Notice:

For MAX BR1 Mini Core

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Industry Canada Statement (MAX BR1 Mini Core)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le present produit est conforme aux specifications techniques applicables a l'innovation, Science et Developpement economique Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes:

(1) l’appareil ne doit pas produire de brouillage, et
(2) l’utilisateur de l’appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d’en

Radiation Exposure Statement

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme avec l'exposition aux radiations ISED définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm entre le radiateur et votre corps.

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX BR1 Mini HW3 (FCC ID: U8G-P1MT01)

Federal Communication Commission Interference Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

CE Statement for Pepwave Routers (MAX BR1 Mini HW3 for EC25-E & LN920A6-WW)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	Peplink Pepwave Wireless Product
Model name of the appliance	MAX BR1 Mini MAX-BR1-MINI-LTE-E-T-PRM MAX-BR1-MINI-LTEA-B-T-PRM MAX-BR1-MINI-LTE-E-DC-T-PRM MAX-BR1-MINI-LTEA-B-DC-T-PRM
Trade name of the appliance	peplink PEPWAVE

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V15.1.1
EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 303 413 V1.2.1
EN 62311: 2020
EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.4
EN 301 489-52 V1.2.1
Draft EN 301 489-19 V2.2.0
EN 55032: 2015 + A11:2020
EN 55035: 2017 + A11:2020
EN 61000-3-2: 2019 + A1:2021
EN 61000-3-3: 2013 + A1:2019
EN 62368-1:2020 + A11:2020

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 19.95 dBm
5GHz (5150 - 5250 MHz) : 22.65 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

EC25-E module:

Output Power	Class 3 (23dBm±2dB) for LTE FDD Class 3 (23dBm±2dB) for LTE TDD Class 3 (24dBm +1/-3dB) for TD-SCDMA Class 3 (24dBm +1/-3dB) for UMTS Class E2 (27dBm ±3dB) for EDGE 850/900MHz Class E2 (26dBm +3/-4dB) for EDGE 1800/1900MHz Class 4 (33dBm ±2dB) for GSM 850/900MHz Class 1 (30dBm ±2dB) for GSM 1800/1900MHz

LN920A6-WW module:

Band	Power class
3G WCDMA	Class 3 (0.2W)
LTE All Bands (except B41)	Class 3 (0.2W)
LTE Band41 (HPUE support)	Class 2 (0.4W)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States

Federal Communications Commission (FCC) Compliance Notice:

For MAX 700

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 22 centimeters between the radiator and your body.

For MAX HD2 IP67, MAX HD2 Mini, MAX HD2 Dome, MAX HD4 IP67, MAX

BR1 ENT, MAX BR1 M2M, SpeedFusion Engine

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Industry Canada Statement (MAX HD2 IP67, MAX HD2 Mini, MAX HD2 Dome, MAX HD4 IP67, MAX BR1 ENT, MAX BR1 M2M, SpeedFusion Engine)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le present produit est conforme aux specifications techniques applicables d'Innovation, Sciences et Developpement economique Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes:

(1) l’appareil ne doit pas produire de brouillage, et
(2) l’utilisateur de l’appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d’en

Radiation Exposure Statement

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme avec l'exposition aux radiations ISED définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm entre le radiateur et votre corps.

Battery Caution Statement (MAX HD2 IP67, MAX HD2 Mini, MAX HD1 Dome, MAX HD2 Dome, MAX HD4 IP67, MAX BR1 ENT)

Risk of explosion if the battery replaced by an incorrect type, place the battery into fire, a hot oven, extremely high temperature or low air pressure surrounding environment, the leakage of flammable liquid or gas, and mechanically crushing or cutting of the battery.

CE Statement for Pepwave Routers (MAX HD2 IP67)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial Building, Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX HD2 IP67 HD2 IP67 MAX HD2 LTEA IP67 OM2 Pismo 807 MAX-HD2-M-LTEA-W-RM-IP67 MAX HD2 LTE IP67 Pepwave MAX HD2 IP67
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V11.1.1
EN 303 413 V1.1.1
Draft ETSI EN 301 489-1 V2.2.0
Draft ETSI EN 301 489-52 V1.1.0
ETSI EN 301 489-19 V2.1.1
EN 55032: 2015 + AC:2016
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 55035 : 2017
EN 62311 : 2008
EN 62368-1:2014+A11:2017

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	
UMTS		
Band 1 (IMT 2100 12.2 kbps) Band 3 (UMTS 1800 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX HD1 Dome)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	Pepwave MAX HD1 Dome MAX HD1 Dome MAX HD1 Dome LTEA Pepwave MAX HD1 Dome LTEA MAX-HD1-DOM-M-GLTE-G
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1
EN 303 413 V1.1.1
EN 62311 : 2008
EN 301 489-1 V2.2.3
EN 301 489-19 V2.1.1
Draft EN 301 489-52 V1.1.0
EN 55032: 2015 + A11:2020
EN 55035: 2017
EN 61000-3-2: 2019
EN 61000-3-3:2013 +A1:2019
EN 62368-1:2014 + A11:2017 (Second Edition)
IEC 60950-22(ed.2)

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Band	Power class
3G WCDMA	Class 3 (0.2W)
LTE All Bands	Class 3 (0.2W)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX HD2 Dome)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	Pepwave MAX HD1 Dome MAX HD1 Dome Peplink MAX HD1 Dome MAX HD1 Dome LTEA Pepwave MAX HD1 Dome LTEA Peplink MAX HD1 Dome LTEA MAX HD2 Dome Pepwave MAX HD2 Dome Peplink MAX HD2 Dome MAX HD2 Dome LTEA MAX-HD2-DOM-M-LTEA-K Peplink MAX HD2 Dome LTEA Pepwave MAX HD2 Dome LTEA Pismo825
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1
EN 303 413 V1.1.1
EN 62311 : 2008
EN 301 489-1 V2.2.3
EN 301 489-19 V2.1.1
Draft EN 301 489-52 V1.1.0
EN 55032: 2015 + AC:2016-07
EN 55035: 2017
EN 61000-3-2: 2019
EN 61000-3-3: 2019
EN 62368-1:2014 + A11:2017
IEC 60950-22(ed.2)

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 3-6: Conducted Tx (Transmit) Power Tolerances

Bands	Conducted Tx power	Notes
LTE		
LTE bands 1,3,8,20,28	+23 dBm ± 1 dB	
LTE bands 7	Single cell: +22 dBm ± 1 dB UL CA: +22.8 dBm ± 1 dB	0.8 dB offset for UL CA hardcoded by chipset manufacturer

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX BR1 ESN)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX BR1 ESN MAX BR1 ESN LTEA Pepwave MAX BR1 ESN Pepwave MAX BR1 ESN LTEA Peplink MAX BR1 ESN Peplink MAX BR1 ESN LTEA MAX-BR1-ESN-LTEA-K-T
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V11.1.1
EN 300 328 V2.2.2
EN 303 413 V1.1.1
EN 62311 : 2008
EN 301 489-1 V2.2.3
Draft EN 301 489-17 V3.2.0
EN 301 489-19 V2.1.1
Draft EN 301 489-52 V1.1.0
EN 55032: 2015 + AC:2016-07
EN 55035: 2017
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 62368-1:2014 + A11:2017

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 19.78 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 3-6: Conducted Tx (Transmit) Power Tolerances

Bands	Conducted Tx power	Notes
LTE		
LTE bands 1,3,20	+23 dBm ± 1 dB	
LTE bands 7	Single cell: +22 dBm ± 1 dB UL CA: +22.8 dBm ± 1 dB	0.8 dB offset for UL CA hardcoded by chipset manufacturer

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States

Federal Communications Commission (FCC) Compliance Notice:

For MAX HD4

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 40 centimeters between the radiator and your body.

Industry Canada Statement (MAX HD4)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le present produit est conforme aux specifications techniques applicables d'Innovation, Sciences et Developpement economique Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired opera- tion of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio ex- empts de licence. L'exploitation est autorisee aux deux conditions suivantes

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en

(i) The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

The high-power radars are allocated as primary users (i.e. priority users) of the band 5725-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

(i) Le dispositif fonctionnant dans la bande 5150-5250 MHz est reserve uniquement pour une utilisation a l'interieur afin de reduire les risques de brouillage prejudiciable aux systemes de satellites mobiles utilisant les memes canaux;

(ii) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer a la limitation P.I.R.E specifiee pour l'exploitation point a point et non point a point, selon le cas.

En outre, les utilisateurs devraient aussi etre avises que les utilisateurs de radars de haute puissance sont designes utilisateurs principaux (c.-a-d., qu'ils ont la priorite) pour les bande 5725-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 40cm between the radiator & your body.

Cet equipement est conforme avec l'exposition aux radiations ISED definies pour un environnement non controle. Cet equipement doit etre installe et utilise a une distance minimum de 40 cm entre le radiateur et votre corps.

Battery Caution Statement (MAX HD4)

Risk of explosion if the battery replaced by an incorrect type, place the battery into fire, a hot oven, extremely high temperature or low air pressure surrounding environment, the leakage of flammable liquid or gas, and mechanically crushing or cutting of the battery.

CE Statement for Pepwave Routers (MAX HD4)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Ind. Bldg., Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	Pepwave / Peplink / Pismo Wireless Product
Model name of the appliance	MAX HD4, MAX HD4 LTE, MAX HD4 LTEA PISMO803AC
Trade name of the appliance	Pepwave / Peplink / Pismo

The construction of the appliance is in accordance with the following standards:

EN 300 328 V2.1.1
EN 301 893 V2.1.1
EN 301908-1 V11.1.1
EN 300 440 V2.1.1
EN 303 413 V1.1.1
EN 301 489-1 V2.1.1
Final Draft EN 301 489-3 V2.1.1
EN 301 489-17 V3.1.1
Draft EN 301 489-52 V1.1.0
EN 55032:2015
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 55024:2010+A1:2015
EN 50385:2017
EN 60950-1:2006+A11: 2009+A1:2010+A12:2011+A2:2013

Yours sincerely,

Keith Chau
General Manager
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 18.87 dBm
5GHz (5150 - 5250 MHz & 5725 - 5850 MHz) : 19.13 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	
UMTS		
Band 1 (IMT 2100 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX HD4 IP67)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	Pismo Labs Technology Limited
Contact information of the manufacturer	Unit A5, 5/F, HK Spinners Ind. Bldg., Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	Pepwave / Peplink / Pismo Wireless Product
Model name of the appliance	MAX HD4 IP67, MAX HD4 LTE IP67, MAX HD4 LTEA IP67
Trade name of the appliance	Pepwave / Peplink / Pismo

The construction of the appliance is in accordance with the following standards:

EN 301908-1 V11.1.1
EN 303 413 V1.1.1
EN 301 489-1 V2.1.1
EN 301 489-19 V2.1.0
EN 301 489-52 V1.1.0
EN 55032:2015
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 55024:2010+A1:2015
EN 50385:2017
EN 60950-1:2006+A11: 2009+A1:2010+A12:2011+A2:2013

Yours sincerely,

Keith Chau
General Manager
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	
UMTS		
Band 1 (IMT 2100 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (SpeedFusion Engine)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Ind. Bldg., Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	Pepwave / Peplink / Pismo Labs Wireless Product
Model name of the appliance	SpeedFusion Engine, SpeedFusion Engine ET, SpeedFusion Engine ST
Trade name of the appliance	Pepwave / Peplink / Pismo

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V11.1.1
EN 303 413 V1.1.1
Draft EN 301 489-1 V2.2.0
Draft EN 301 489-19 V2.1.0
Draft EN 301 489-52 V1.1.0
EN 62311:2008
EN 60950-1:2006 +A11: 2009+A1:2010+A12:2011+A2:2013

Yours sincerely,

Keith Chau
General Manager
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

MC7455 module:

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	
UMTS		
Band 1 (IMT 2100 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

EC25-E module:

Output Power	Class 3 (23dBm±2dB) for LTE FDD Class 3 (23dBm±2dB) for LTE TDD Class 3 (24dBm +1/-3dB) for TD-SCDMA Class 3 (24dBm +1/-3dB) for UMTS Class E2 (27dBm ±3dB) for EDGE 850/900MHz Class E2 (26dBm +3/-4dB) for EDGE 1800/1900MHz Class 4 (33dBm ±2dB) for GSM 850/900MHz Class 1 (30dBm ±2dB) for GSM 1800/1900MHz

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States

Federal Communications Commission (FCC) Compliance Notice:

For MAX Transit, MAX Transit Duo

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 24 centimeters between the radiator and your body.

Industry Canada Statement (MAX Transit, MAX Transit Duo)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le present produit est conforme aux specifications techniques applicables d'Innovation, Sciences et

Développement économique Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired opera- tion of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio ex- empts de licence. L'exploitation est autorisee aux deux conditions suivantes:

(1) l’appareil ne doit pas produire de brouillage, et

(2) l’utilisateur de l’appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d’en

(i) The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

The high-power radars are allocated as primary users (i.e. priority users) of the band 5725-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

(i) Le dispositif fonctionnant dans la bande 5150-5250 MHz est reserve uniquement pour une utilisation a l'interieur afin de reduire les risques de brouillage prejudiciable aux systemes de satellites mobiles utilisant les memes canaux;

(ii) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer a la limitation P.I.R.E specifiee pour l'exploitation point a point et non point a point, selon le cas.

En outre, les utilisateurs devraient aussi etre avises que les utilisateurs de radars de haute puissance sont designes utilisateurs principaux (c.-a-d., qu'ils ont la priorite) pour les bande 5725-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 30cm between the radiator & your body.

Cet equipement est conforme avec l'exposition aux radiations ISED definies pour un environnement non controle. Cet equipement doit etre installe et utilise a une distance minimum de 30 cm entre le radiateur et votre corps.

Battery Caution Statement

Risk of explosion if the battery replaced by an incorrect type, place the battery into fire, a hot oven, extremely high temperature or low air pressure surrounding environment, the leakage of flammable liquid or gas, and mechanically crushing or cutting of the battery.

CE Statement for Pepwave Routers (MAX Transit / MAX Transit Duo For EM7565)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX Transit MAX-TST-LTEA-K-T MAX-TST-LTEA-K-T-PRM MAX Transit LTEA Pepwave MAX Transit Pepwave MAX Transit LTEA MAX Transit Duo MAX Transit Duo LTEA MAX-TST-DUO-LTEA-K-T MAX-TST-DUO-LTEA-K-T-PRM Pepwave MAX Transit Duo Pepwave MAX Transit Duo LTEA
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 301 908-1 V13.1.1
EN 301 489-1 V2.2.3
EN 301 489-19 V2.1.1
EN 301 489-17 V3.1.1
Draft EN 301 489-52 V1.1.0
EN 55032 : 2015 / AC : 2016
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 55035 : 2017
EN 62311 : 2008
EN 62368-1:2014+A11:2017 (Second Edition)
EN 303 413 V1.1.1

Yours sincerely,

PISMO LABS TECHNOLOGY LIMITED

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 18.68 dBm
5GHz (5150 - 5250 MHz) : 18.19 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 3-6: Conducted Tx (Transmit) Power Tolerances

Bands	Conducted Tx power	Notes
LTE		
LTE bands 1,3,8,20,28	+23 dBm ± 1 dB	
LTE bands 7	Single cell: +22 dBm ± 1 dB UL CA: +22.8 dBm ± 1 dB	0.8 dB offset for UL CA hardcoded by chipset manufacturer

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX Transit For LM960A18)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX Transit Pepwave MAX Transit MAX-TST-GLTE-G-T-PRM
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 301 908-1 V13.1.1
EN 301 489-1 V2.2.3
EN 301 489-19 V2.1.1
EN 301 489-17 V3.1.1
Draft EN 301 489-52 V1.1.0
EN 55032 : 2015 + AC : 2016
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 55035 : 2017
EN 62311 : 2008
EN 62368-1:2014+A11:2017 (Second Edition)
EN 303 413 V1.1.1

Yours sincerely,

PISMO LABS TECHNOLOGY LIMITED

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 18.68 dBm
5GHz (5150 - 5250 MHz) : 18.19 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Band	Power class
3G WCDMA	Class 3 (0.2W)
LTE All Bands	Class 3 (0.2W)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX Transit Mini

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Industry Canada Statement (MAX Transit Mini)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Ce produit répond aux spécifications techniques applicables à l'innovation, Science et Développement économique Canada.

Radiation Exposure Statement

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme avec l'exposition aux radiations ISED définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm entre le radiateur et votre corps.

This radio transmitter has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Antenna types Replacement Antenna
Antenna gain (in dBi) 5.33 dBi

Innovation, Sciences et Developpement economique Canada a approuve l'utilisation de ce transmetteur radio avec les types d'antenne enumeres ci-dessous, le gain maximal admissible etant indique. Les types d'antennes non inclus dans cette liste qui ont un gain superieur au gain maximal indique pour tout type liste sont strictement interdits pour une utilisation avec cet appareil.

Types d'antennes Replacement Antenna
Gain d'antenne (en dBi) 5.33 dBi

CE Statement for Pepwave Routers (MAX Transit Mini)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial Building Phase 6, 481 Castle Peak Road Cheung Sha Wan Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX Transit Mini MAX TST Mini MAX-TST-MINI-LTE-E-T MAX TST MINI LTE MAX Transit Mini LTE Pismo930 Lite MAX Transit Mini Lte MAX-Transit-Mini Max Transit Mini LTE Pismo930LITER5 Pismo 930LITER5 Max transit mini MAX Transit Mini LTEA MAX-TST-MINI-LTEA-W-T
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 300 328 V2.2.2
EN 303 413 V1.1.1
EN 301908-1 V11.1.1
Draft EN 301 489-1 V2.2.1
Draft EN 301 489-17 V3.2.0
Draft EN 301 489-52 V1.1.0
EN 55032: 2015 + AC:2016-07
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 55035 : 2017
EN 62311 : 2008
EN 62368-1:2014/A11:2017
EN 301 489-19 V2.1.1

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 19.78 dBm
WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Output Power	Class 3 (23dBm±2dB) for LTE FDD Class 3 (23dBm±2dB) for LTE TDD Class 3 (24dBm +1/-3dB) for TD-SCDMA Class 3 (24dBm +1/-3dB) for UMTS Class E2 (27dBm ±3dB) for EDGE 850/900MHz Class E2 (26dBm +3/-4dB) for EDGE 1800/1900MHz Class 4 (33dBm ±2dB) for GSM 850/900MHz Class 1 (30dBm ±2dB) for GSM 1800/1900MHz

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX BR1 PRO, UBR LTE

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 23 centimeters between the radiator and your body.

Industry Canada Statement (MAX BR1 PRO, UBR LTE)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired opera- tion of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio ex- empts de licence. L'exploitation est autorisee aux deux conditions suivantes:

(1) l’appareil ne doit pas produire de brouillage, et

(2) l’utilisateur de l’appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d’en

For licence exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:

This radio transmitter 20682-P1941 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

WIFI Antenna type: Replacement Antenna
WIFI Antenna gain: 2.4GHz I 2.44 dBi , 5GHz I 4.73 dBi
LTE Antenna type: Replacement Antenna (04-410055-00)
LTE Antenna gain: 4 dBi
LTE Antenna type: Replacement Antenna (04-410093-01)
LTE Antenna gain: 4.38 dBi

(i) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potent for harmful interference to co-channel mobile satellite systems;

(ii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate; (detachable antenna only) ; and
The high-power radars are allocated as primary users (i.e. priority users) of the band 5725-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

(iii) where applicable, antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 shall be clearly indicated.

(i) Le dispositif fonctionnant dans la bande 5150-5250 MHz est reserve uniquement pour utilisation a l'interieur afin de reduire les risques de brouillage prejudiciable aux systemes de satellites mobiles utilisant les memes canaux;

(ii) Le gain maximal d’antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l’exploitation point à point et non point à point, selon le cas. (antenne détachable uniquement)

En outre, les utilisateurs devraient aussi etre avises que les utilisateurs de radars de haute puissance sont designes utilisateurs principaux (c.-a-d., qu'ils ont la priorite) pour les bande 5725-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

(iii) En outre, les utilisateurs devraient aussi etre avises que les utilisateurs de radars de haute puissance sont designes utilisateurs principaux (c.-a-d., qu'ils ont la priorite) pour les bande 5725-5850 MHz et

Radiation Exposure Statement

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 23 cm between the radiator & your body.

Cet equipement est conforme avec l'exposition aux radiations ISED definies pour un environnement non controle. Cet equipement doit etre installe et utilise a une distance minimum de 23 cm entre le radiateur et votre corps.

CE Statement for Pepwave Routers (MAX BR1 PRO / UBR LTE)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial Building Phase 6, 481 Castle Peak Road Cheung Sha Wan Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	UBR UBR LTE UBR-LTE UBR-LTE-E-T-PRM UBR-LTE-E-T MAX UBR LTE MAX UBR MAX BR1 Pro MAX BR2 Pro BR2 PRO MAX BR2 Pro LTE Pismo 941 MAX-CX2-Mini MAX CX2 Mini MAX-BR2-PRO-LTE-E-T MAX-BR1-PRO-LTE-E-T CX2 Mini MAX BR1 Pro LTE
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 300 328 V2.1.1
EN 301 893 V2.1.1
EN 303 413 V1.1.1
EN 301 908-1 V11.1.1
EN 301 489-1 V2.1.1
EN 301 489-19 V2.1.1
EN 301 489-17 V3.1.1
Draft EN 301 489-52 V1.1.0
EN 55032: 2015 + AC:2016
EN 61000-3-3: 2013
EN 61000-3-2: 2014
EN 55035 : 2017
EN 62311 : 2008
EN 62368-1:2014/A11:2017

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 19.94 dBm
5GHz (5150 - 5250 MHz) : 20.34 dBm
WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Output Power	Class 3 (23dBm±2dB) for LTE FDD Class 3 (23dBm±2dB) for LTE TDD Class 3 (24dBm +1/-3dB) for TD-SCDMA Class 3 (24dBm +1/-3dB) for UMTS Class E2 (27dBm ±3dB) for EDGE 850/900MHz Class E2 (26dBm +3/-4dB) for EDGE 1800/1900MHz Class 4 (33dBm ±2dB) for GSM 850/900MHz Class 1 (30dBm ±2dB) for GSM 1800/1900MHz

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX BR1 IP55, MAX BR2 IP55

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

CE Statement for Pepwave Routers (MAX BR1 IP55)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Ind. Bldg., Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX BR1 IP55 MAX BR1 LTE IP55 MAX BR1 LTEA IP55
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 55032:2015
EN 55024:2010+A1:2015
EN 61000-3-2: 2014
EN 61000-3-3: 2013
Draft EN 301 489-1 V2.2.0
Draft EN 301 489-17 V3.2.0
Draft EN 301 489-52 V1.1.0
EN 300 328 V2.1.1
EN 301 893 V2.1.1
EN 301 908-1 V11.1.1
EN 300 440 V2.1.1
EN 62311: 2008
EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013

Yours sincerely,

Keith Chau
General Manager
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 18.16 dBm
5GHz (5150 - 5250 MHz) : 20.32 dBm
5GHz (5725 - 5850 MHz) : 13.00 dBm
WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	
UMTS		
Band 1 (IMT 2100 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 50cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX BR2 IP55)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	Pismo Labs Technology Limited
Contact information of the manufacturer	Unit A5, 5/F, HK Spinners Ind. Bldg., Phase 6, 481 Castle Peak Road, Cheung Sha Wan, Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	Pepwave / Peplink / Pismo Wireless Product
Model name of the appliance	MAX BR2 IP55, MAX BR2 LTE IP55
Trade name of the appliance	Pepwave / Peplink / Pismo

The construction of the appliance is in accordance with the following standards:

EN 55032:2015
EN 55024:2010+A1:2015
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 301 489-1 V2.2.0
EN 301 489-17 V3.2.0
EN 301 489-52 V1.1.0
EN 300 328 V2.1.1
EN 301 893 V2.1.1
EN 301 908-1 V11.1.1
EN 300 440 V2.1.1
EN 62311: 2008
EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013

Yours sincerely,

Keith Chau
General Manager
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 18.99 dBm
5GHz (5150 - 5250 MHz) : 22.95 dBm
5GHz (5725 - 5850 MHz) : 12.80 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 4-6: Conducted Tx (Transmit) Power Tolerances

Parameter	Conducted transmit power	Notes
LTE		
LTE Band 1,3,8,20	+23 dBm ± 1 dB	
LTE Band 7	+22 dBm ± 1 dB	
UMTS		
Band 1 (IMT 2100 12.2 kbps) Band 8 (UMTS 900 12.2 kbps)	+23 dBm ± 1 dB	Connectorized (Class 3)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 50cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX Transit Pro E / MAX Transit LTEA (FCC ID: U8G-P1835)

FCC 15.21:

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

FCC 15.105

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

RF exposure warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

ICES Statement

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.

2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisee aux deux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage, et

2. l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en

RF exposure warning

This device complies with the ISED radiation exposure limit set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme avec l'exposition aux radiations ISED définies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm entre le radiateur et votre corps. Cet émetteur ne doit pas être colocalisées ou opérant en conjonction avec une autre antenne ou transmetteur.

This radio transmitter IC: 20682-P1835 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Antenna Type	WLAN: Omni-directional Antenna	
Antenna information		
2400 MHz ~ 2483.5 MHz	Peak Gain (dBi)	<Ant. 0>: 2.44 <Ant. 1>: 2.44

Antenna Type	WLAN: Omni-directional Antenna	
Antenna information		
5150 MHz ~ 5250 MHz	Peak Gain (dBi)	<Ant. 0>: 4.10 <Ant. 1>: 4.10
5250 MHz ~ 5350 MHz	Peak Gain (dBi)	<Ant. 0>: 4.41 <Ant. 1>: 4.41
5470 MHz ~ 5725 MHz	Peak Gain (dBi)	<Ant. 0>: 4.41 <Ant. 1>: 4.41

Antenna Type	WLAN: Omni-directional Antenna	
Antenna information		
5725 MHz ~ 5850 MHz	Peak Gain (dBi)	<Ant. 0>: 4.73 <Ant. 1>: 4.73

Cet émetteur radio IC : 20682-P1835 a été approuvé par Innovation, Sciences et Développement économique Canada doit fonctionner avec les types d'antennes énumérés ci-dessous, avec le gain maximal admissible indiqué. Les types d'antenne non inclus dans cette liste qui ont un gain supérieur au gain maximum indiqué pour tout type répertorié sont strictement interdits pour une utilisation avec cet appareil.

Type d'antenne	WLAN: Omni-directionnelle Antenne	
Informations sur l'antenne		
2400 MHz ~ 2483.5 MHz	Gain de crête(dBi)	<Ant. 0>: 2.44 <Ant. 1>: 2.44

Type d'antenne	WLAN: Omni-directionnelle Antenne	
Informations sur l'antenne		
5150 MHz ~ 5250 MHz	Gain de crête(dBi)	<Ant. 0>: 4.10 <Ant. 1>: 4.10
5250 MHz ~ 5350 MHz	Gain de crête(dBi)	<Ant. 0>: 4.41 <Ant. 1>: 4.41
5470 MHz ~ 5725 MHz	Gain de crête(dBi)	<Ant. 0>: 4.41 <Ant. 1>: 4.41

Type d'antenne	WLAN: Omni-directionnelle Antenne	
Informations sur l'antenne		
5725 MHz ~ 5850 MHz	Gain de crête(dBi)	<Ant. 0>: 4.73 <Ant. 1>: 4.73

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX Transit Pro E (FCC ID: U8G-P1AX09)

Federal Communication Commission Interference Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Industry Canada Statement (MAX Transit Pro E, IC: 20682-P1AX09)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio ex-empts de licence. L'exploitation est autorisee aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en

(i) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potent for harmful interference to co-channel mobile satellite systems;

(ii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate; (detachable antenna only) ; and

The high-power radars are allocated as primary users (i.e. priority users) of the band 5725-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

(iii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate.

(i) Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.

En outre, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5725-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

(iii) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation

point à point et non point à point.

Radiation Exposure Statement

This equipment complies with ISED RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Cet appareil doit être installé et utilisé avec une distance minimale de 20cm entre l'émetteuret votre corps. Cet appareil et sa ou ses antennes ne doivent pas être co-localisés ou fonctionner en conjonction avec tout autre antenne ou transmetteur.

This radio transmitter IC: 20682-P1AX09 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

WIFI Antenna type: Omni-directional
WIFI Antenna gain: 2.4GHz / 2.44 dBi
5150 ~ 5250 MHz / 4.10 dBi
5725 ~ 5850 MHz / 4.73 dBi

Cet émetteur radio IC : 20682-P1AX09 a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antennes répertoriés ci-dessous, avec le gain maximal autorisé indiqué. Les types d'antenne non inclus dans cette liste qui ont un gain supérieur au gain maximum indiqué pour tout type répertorié sont strictement interdits pour une utilisation avec cet appareil.

Type d'antenne WIFI : omnidirectionnelle
Gain de l'antenne Wi-Fi : 2.4 GHz / 2.44 dBi
5150 ~ 5250 MHz / 4.10 dBi
5725 ~ 5850 MHz / 4.73 dBi

CE Statement for Pepwave Routers (MAX Transit Pro E for LN920A12-WW)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPLINK PEPWAVE Wireless Product
Model name of the appliance	MAX Transit Pro E MAX-TST-PROE-DUO-LTEA-Q-T-PRM
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V15.1.1
EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 303 413 V1.2.1
EN 62311: 2020
EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.4
EN 301 489-52 V1.2.1
Draft EN 301 489-19 V2.2.0
EN 55032: 2015 + A1:2020
EN 55035: 2017 + A11:2020
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 62368-1:2020 + A11:2020

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 19.97 dBm
5GHz (5150 - 5250 MHz) : 22.99 dBm

LN920A12-WW: WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Band	Power class
3G WCDMA	Class 3 (0.2W)
LTE All Bands (except B41)	Class 3 (0.2W)
LTE Band41 (HPUE support)	Class 2 (0.4W)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX Transit Pro

Federal Communication Commission Interference Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

CE Statement for Pepwave Routers (MAX Transit Pro for EM7421 & EM12-G)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX Transit Pro MAX-TST-PRO-DUO-LTEA-E-T-PRM MAX-TST-PRO-DUO-LTEA-D-T-PRM
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V13.1.1
EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 303 413 V1.1.1
EN 62311: 2020
EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.4
EN 301 489-52 V1.2.1
Draft EN 301 489-19 V2.2.0
EN 55032: 2015 + A11:2020
EN 55035: 2017 + A11:2020
EN 61000-3-2: 2019 + A1:2021
EN 61000-3-3: 2013 + A1:2019
EN 62368-1:2020 + A11:2020

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 19.74 dBm
5GHz (5150 - 5250 MHz) : 22.88 dBm

EM7421: WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Table 3-6: Conducted Tx (Transmit) Power Tolerances

Bands	Conducted Tx power	Notes
LTE		
LTE bands 1, 3	22.5 dBm ± 1 dB	
LTE bands 7, 38, 40, 42, 43	22 dBm ± 1 dB	
LTE bands 8, 20, 28	23 dBm ± 1 dB	
UMTS		
Band 1 (IMT 2100 12.2 kbps)	23 dBm ± 1 dB	Connectorized (Class 3)
Band 8 (UMTS 900 12.2 kbps)	23 dBm ± 1 dB	

EM12-G: WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Class 3 (23 dBm ±2 dB) for LTE FDD Bands

Class 3 (23 dBm ±2 dB) for LTE TDD Bands

Class 3 (24 dBm +1/-3 dB) for WCDMA Bands

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (MAX BR2 Pro)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPWAVE / PEPLINK Wireless Product
Model name of the appliance	MAX BR2 Pro MAX-BR2-PRO-5GD-T-PRM
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V15.1.1
EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 303 413 V1.2.1
EN 62311: 2020
EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.4
EN 301 489-52 V1.2.1
Draft EN 301 489-19 V2.2.0
EN 55032: 2015 + A11:2020
EN 55035: 2017 + A11:2020
EN 61000-3-2: 2014
EN 61000-3-3: 2013
EN 62368-1:2020 + A11:2020

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 19.94 dBm
5GHz (5150 - 5250 MHz) : 22.96 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

5G	Bands	FR1 (Sub 6G): TDD: n78
	Band combinations	For supported E-UTRAN New Radio Dual Connectivity (EN-DC) see [2]
	4x4 MIMO	n78
	Category	3GPP Rel 15 256 QAM UL/DL
	Output Power	FR1 (Sub 6G): n78: 25.5dBm +1.5/-1dB (HPUE)
4G	Bands	FDD: B1, B3, B7, B8, B20, B28 TDD: B38, B40
	Band combinations	For supported carrier aggregations (CA) see [2]
	4x4 MIMO	B1, B3, B7, B38, B40
	RX Diversity	All LTE bands
	Category	UE Cat. 13 (UL: 150Mbps) + UE Cat. 20 (DL: 2Gbps); 7xDL CA, 3xUL CA (Intra-band), 5xDL CA+4X4 MIMO (Up to UE Cat20) 256 QAM UL/DL
	Output Power	B1, B3, B7, B38, B40: 23dBm ±1dBm B8, B20, B28: 23.5dBm ±1dBm

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

CE Statement for Pepwave Routers (UBR Plus)

DECLARATION OF CONFORMITY

We affirm the electrical equipment manufactured by us fulfils the requirements of the Radio Equipment Directive 2014/53/EU.

Name of manufacturer	PISMO LABS TECHNOLOGY LIMITED
Contact information of the manufacturer	A8, 5/F, HK Spinners Industrial. Building., Phase 6, 481 Castle Peak Road, Cheung Sha Wan,Kowloon, Hong Kong tel. (852) 2990 7600, fax. (852) 3007 0588 e-mail: cs@peplink.com
Description of the appliance	PEPLINK PEPWAVE Wireless Product
Model name of the appliance	UBR Plus UBR-PLUS-LTEA-B-T-PRM
Trade name of the appliance	PEPWAVE / PEPLINK

The construction of the appliance is in accordance with the following standards:

EN 301 908-1 V15.1.1
EN 300 328 V2.2.2
EN 301 893 V2.1.1
EN 303 413 V1.2.1
EN 62311: 2020
EN 301 489-1 V2.2.3
EN 301 489-17 V3.2.4
EN 301 489-52 V1.2.1
EN 301 489-19 V2.2.1
EN 55032: 2015 + A11:2020
EN 55035: 2017 + A11:2020
EN 61000-3-2: 2019 + A1:2021
EN 61000-3-3: 2013 + A1:2019
EN 62368-1:2020 + A11:2020

Yours sincerely,

Antony Chong
Director of Hardware Engineering
Peplink International Limited

AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK(NI)

2.4GHz (2412 - 2472 MHz) : 19.84 dBm
5GHz (5150 - 5250 MHz) : 22.76 dBm

WWAN : Refer 3GPP TS 36.521 -1 (UE Power class)

Band	Power class
3G WCDMA	Class 3 (0.2W)
LTE All Bands (except B41)	Class 3 (0.2W)
LTE Band41 (HPUE support)	Class 2 (0.4W)

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

contact as: https://www.peplink.com/

FCC Requirements for Operation in the United States
Federal Communications Commission (FCC) Compliance Notice:

For MAX BR2 Pro (FCC ID: U8G-P1AX203)

Federal Communication Commission Interference Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Industry Canada Statement (MAX BR2 Pro, IC: 20682-P1AX203)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio ex-empts de licence. L'exploitation est autorisee aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en

(i) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potent for harmful interference to co-channel mobile satellite systems;

(ii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate; (detachable antenna only) ; and
The high-power radars are allocated as primary users (i.e. priority users) of the band 5725-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

(iii) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate.

(i) Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.
En outre, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5725-5850 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

(iii) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point.

Radiation Exposure Statement

This equipment complies with ISED RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Cet appareil doit être installé et utilisé avec une distance minimale de 20cm entre l'émetteuret votre corps. Cet appareil et sa ou ses antennes ne doivent pas être co-localisés ou fonctionner en conjonction avec tout autre antenne ou transmetteur.

This radio transmitter IC: 20682-P1AX203 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

WIFI Antenna type: Omni-directional
WIFI Antenna gain: 2.4GHz / 2.44 dBi
5150 ~ 5250 MHz / 4.1 dBi
5725 ~ 5850 MHz / 4.73 dBi

Cet émetteur radio IC : 20682-P1AX203 a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antennes répertoriés ci-dessous, avec le gain maximal autorisé indiqué. Les types d'antenne non inclus dans cette liste qui ont un gain supérieur au gain maximum indiqué pour tout type répertorié sont strictement interdits pour une utilisation avec cet appareil.

Type d'antenne WIFI : omnidirectionnelle
Gain de l'antenne Wi-Fi : 2.4 GHz / 2.44 dBi
5150 ~ 5250 MHz / 4.1 dBi
5725 ~ 5850 MHz / 4.73 dBi

USB WAN Modem Port Specification

MAX Series

	MAX 700	MAX HD2 / MAX HD2 Media Fast	MAX HD2 Mini	MAX HD2 / HD4 MBX	MAX BR1 ENT	MAX HD4 / MAX HD4 Media Fast / MediaFast 200	MAX BR2 Pro
Output Rating	**5V DC, 2A**	**5V DC, 2A**	**5V DC, 2A**	**5V DC, 0.5A**	**5V DC, 2A**	**5V DC, 2A**	**5V DC, 2A**