

**Universal Network Management Controller
with Touch LCD Screen**

NMS-1000V

Quick Installation Guide

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1. Package Contents

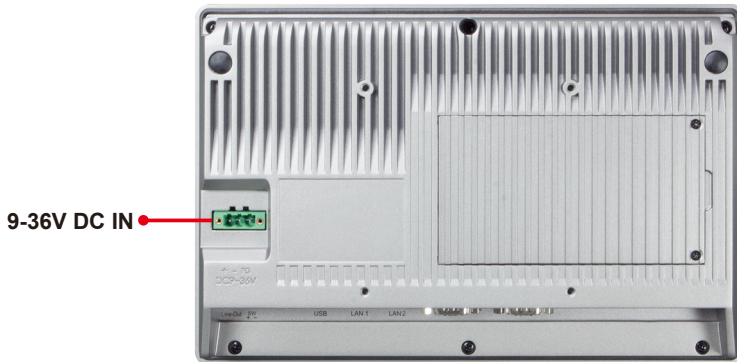
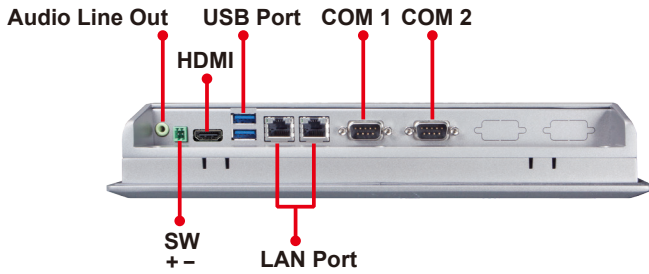
Thank you for purchasing PLANET Universal Network Management Controller. PLANET NMS-1000V comes in two sizes as described below:

- NMS-1000V-12** Universal Network Management Controller with 12" LCD Touch Screen
- NMS-1000V-10** Universal Network Management Controller with 10" LCD Touch Screen

- The NMS-1000V Controller x 1
- Quick Installation Guide x 1
- Adapter with Power Cord x 1
- Installation Kit x 1

If any item is found missing or damaged, contact your local reseller for replacement.

2. Hardware Description



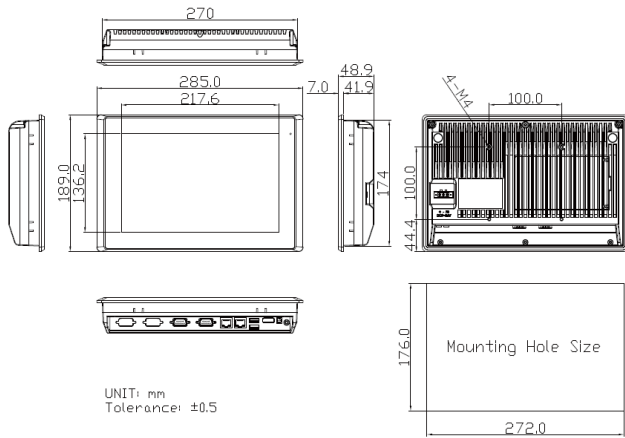
Power Indicator



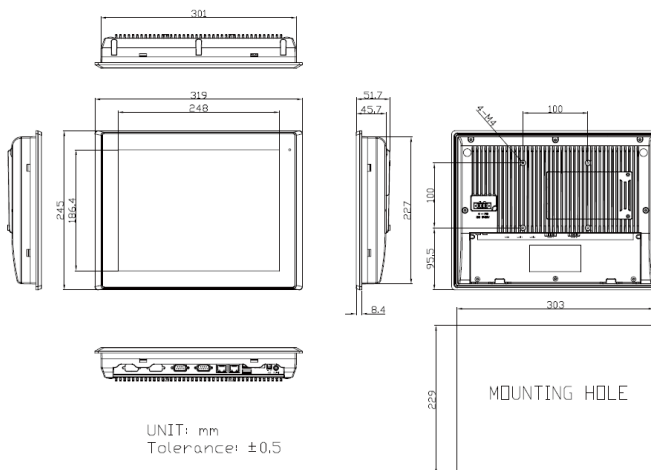
2.1 Physical Specifications

Model	NMS-1000V-10	NMS-1000V-12
Dimensions (W x D x H)	285 x 49 x 189 mm	319 x 51.7 x 245 mm
Weight	2 kg	2.9 kg

NMS-1000V-10 (10" Panel)

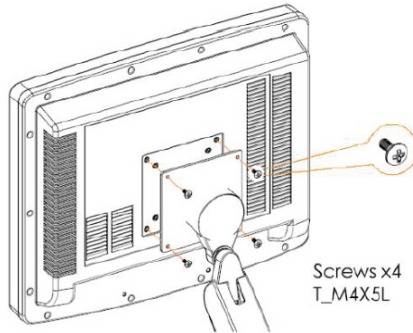


NMS-1000V-12 (12" Panel)



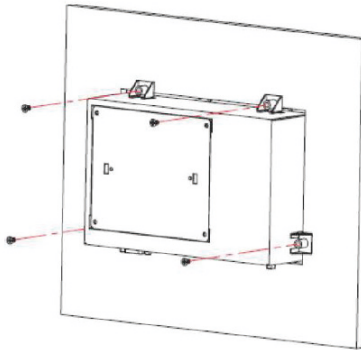
VESA Mounting

The NMS-1000V series is designed to be VESA-mounted as shown in the picture. Just carefully place the LCD stand on the back of the controller and tighten the given screws to secure the mounting.



Panel Mounting

There are eight holes located along the four sides of the NMS-1000V. Insert the clamp from the four sides and tighten them with the nuts provided.



2.2 Product Features

- Network Devices Management
 - **Dashboard:** Providing the at-a-glance view of system, device summary, traffic, and PoE network status.
 - **Setup Wizard:** Easy-to-use step-by-step guidance.

-
- **Node Discovery:** To detect PLANET managed devices available and allow AP grouping to accelerate AP management.
 - **Topology Viewer:** A topology of network devices compliant with SNMP, ONVIF, Smart Discovery and LLTD Protocol.
 - **Event Reports:** The status of a network can be reported via network alarm, and system log.
 - **Alarm System:** Popup alerts and email alerts for the administrator via the SMTP server.
 - **Batch Provisioning:** Enabling multiple APs to be configured and upgraded at one time by using the designated profile.
 - **Coverage Heat Map:** Real-time signal coverage of APs on the user-defined floor map to optimize Wi-Fi field deployment.
 - **Customized Profile:** Allowing the creation and maintenance of multiple wireless profiles.
 - **Auto Provisioning:** Multi-AP provisioning with one click.
 - **Cluster Management:** Simplifying high-density AP management.
 - **Zone Plan:** Optimizing AP deployment with actual signal coverage.
 - **Authentication:** Built-in RADIUS server seamlessly integrated into the enterprise network
 - **User Control:** Allowing on-demand account creation and user-defined access policy
 - **Scalability:** Free system upgrade and AP firmware bulk upgrade capability
 - **Maximum Scalability:** 50 floor maps, 1024 nodes, 128 AP groups, 128 SSID profiles, 1024 managed APs, 20,000 clients, 20,000 RADIUS user accounts, 50 RADIUS user groups and 1024 RADIUS clients.
- Network Management Characteristics
 - Built-in DHCP Server
 - Built-in RADIUS Server
 - SSL secure access
 - Web-based GUI management interface
 - SNMP v1, v2c, and v3 management
 - Supports PLANET DDNS/Easy DDNS

2.3 Specifications

	NMS-1000V-10	NMS-1000V-12
Product	Universal Network Management Controller with LCD Touch Screen	
Platform		
Form Factor	Panel Mount, VESA 100 x 100	
Processor	Intel® Celeron® N2930 up to 1.8 GHz	
Memory	Onboard 4GB DDR3L 1333MHz	
Physical Specifications		
I/O Interface	2 10/100/1000BASE-T Gigabit Ethernet RJ45 ports	
	2 USB 3.0 ports (They cannot be used at the same time.)	
	1 Audio Line Out (reserve)	
	1 HDMI interface	
	2 DB-9 COM1, COM2 (reserve)	
	1 3-pin DC power input terminal	
	1 2-pin connector for power on/off button (reserve)	
Storage	2.5" 32G SATA3 HDD	
Touch LCD Size	10.1" TFT-LCD	12.1" TFT-LCD
Touch Type	Resistive Touch Window Projected Capacitive Touch	
Display Resolution	1280 x 800	1024 x 768
Display Luminance (cd/m ²)	350	500
Display Viewing Angle (H°/V°)	160(H) / 160(V)	160(H) / 140(V)
Display Contrast	800:1	700:1
Display Backlight Lifetime (hrs)	40,000 hrs	30,000 hrs
Light Transmission (%)	Resistive Touch Window: over 80% Projected Capacitive Touch: over 90%	
Enclosure	Aluminum Die-casting Chassis	
Power Requirements	DC IN 9~36V 60W adapter 12V 5A with terminal block AC 100~240V, 2.0A, 60~50Hz.	

Environment & Certification	
IP Rating	IP66 compliant front bezel
Temperature	Operating: 0 ~ 50 degrees C Storage: -30 ~ 70 degrees C
Humidity	10 ~ 90% relative humidity (non-condensing)
MTBF (Hours)	100,000
Network Management	
Number of Managed Devices	1,024
Number of RADIUS Client Devices	1,024
Number of RADIUS User Accounts	20,000
Auto Discovery	Supports PLANET devices
Dashboard	Providing the at-a-glance view of system, device summary, traffic, and PoE network status
Device List	Allows creation and maintenance of device profiles
Topology View	Provides visual topology view of connected PLANET devices
Status Monitoring	Real-time online/offline devices
Event and Syslog Report	Real-time system event and syslog server supported
SMTP Alarm	E-mail alert to the administrator via the SMTP server
Popup Alert Message Window	Touch screen exclusive alert message window
SSID/RF Profile	Allows creation and maintenance of multiple wireless profiles
Cluster Management	Allows AP grouping for bulk provisioning and batch upgrading
Bulk AP Provisioning	Supports bulk AP provisioning with user-defined profiles
Bulk AP Firmware Upgrade	Supports bulk AP firmware upgrade
Coverage Heat Map	Enables real signal coverage of managed APs reflecting on the uploaded zone maps
Graphical Statistics	Real-time and historical visibility of wireless traffic flow
Backup/Restoration	Provides system and profile backup/restoration

SSIDs-to-VLANs Mapping		Allows to configure SSIDs-to-VLANs mapping in supported APs
RADIUS Authentication		RADIUS server is integrated for client authentication in a large-scale enterprise network
User Account Management		Supports on-demand account creation per user-defined access policy
Network Services		
Network	DDNS	Supports PLANET DDNS/Easy DDNS
	DHCP	Built-in DHCP Server for auto IP assignment to APs
	Management	Console; Telnet; SSL; Web browser (Chrome is recommended); SNMP v1, v2c, v3
	Discovery	Supports SNMP, ONVIF and PLANET Smart Discovery
Maintenance	Backup	System backup and restore to local or USB HDD
	Reboot	Provides system reboot manually or automatically per power schedule
	Diagnostic	Provides IPv4/IPv6 ping and trace route
Standards Conformance		
Regulatory Compliance		CE, FCC
Standards Compliance		IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab Gigabit 1000BASE-T

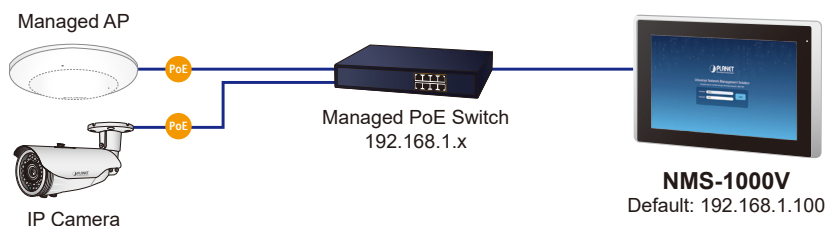
3. Deployed Devices Monitored via NMS-1000V Controller

The NMS-1000V can monitor all the deployed wired or wireless PoE industrial-grade network devices, such as managed switches, media converters, routers, smart APs, VoIP phones, IP cameras, etc. compliant with the SNMP Protocol, ONVIF Protocol and PLANET Smart Discovery utility.

Please regularly check PLANET website for the latest compatibility list of managed devices.

Follow the steps below to set up the device from the "Standalone device" mode to the "Managed device" mode.

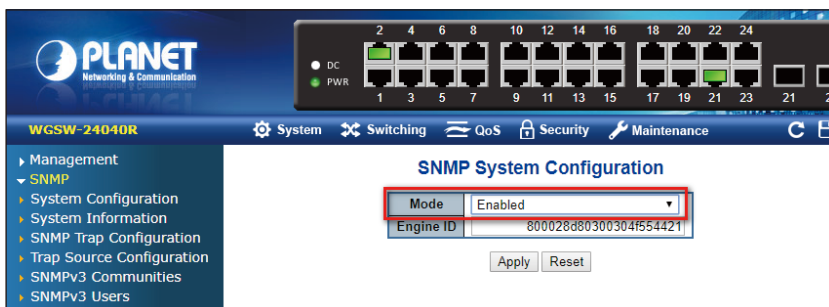
Step 1. Connect the devices, NMS-1000V Controller and your computer to the same network.



Step 2. Switch: Log in to the switch's Web user interface and **enable** the **SNMP and LLDP** function.

AP: Log in to the AP's Web user interface to configure the AP to "Managed AP". In support of SNMP AP, enable the **SNMP** function.

IP Cam: The **ONVIF** function is enabled by default.



- ▶ Port Management
- ▶ Link Aggregation
- ▶ VLANs
- ▶ VLAN Translation
- ▶ Spanning Tree
- ▶ IGMP Snooping
- ▶ MLD Snooping
- ▶ MVR
- ▶ **LLDP**
- ▶ LLDP Configuration
- ▶ LLDP Neighbors
- ▶ LLDP-MED Configuration
- ▶ LLDP-MED Neighbors
- ▶ Port Statistics
- ▶ MAC Address Table
- ▶ Loop Protection
- ▶ UDLD
- ▶ GVRP

LLDP Configuration

LLDP Parameters

Tx Interval	30	seconds
Tx Hold	4	times
Tx Delay	2	seconds
Tx Reinit	2	seconds

LLDP Port Configuration

Port	Mode	CDP Aware	Trap	Optional TLVs			
				Remote Port ID	System Name	System Capabilities	Management Address
*	Enabled ▼	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	Enabled ▼	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Enabled ▼	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Enabled ▼	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	Enabled ▼	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Setup Menu:

- ▶ **Operation Mode**
- ▶ Setup Wizard
- ▶ WLAN1 (5 GHz)
- ▶ WLAN2 (2.4 GHz)
- ▶ TCP / IP Settings
- ▶ Management
- ▶ Logout

Operation Mode

AP Operation mode configuration is used to configure the managed AP administrative mode.

Standalone AP

Managed AP

In Mode **Standalone AP**, the AP acts as an individual AP in the network, and you manage it by using the Administrator Web User Interface (UI), or SNMP.

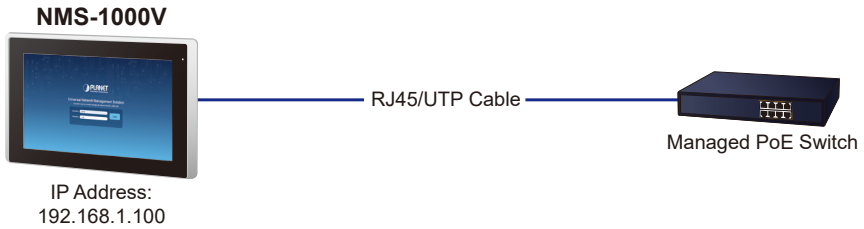
In Mode **Managed AP**, the AP is part of the PLANET Wireless AP controller System, and you manage it by using the WAPC Wireless Switch.

AP Controller IP Address

For more information on the configuration of **Managed Devices** by using **PLANET NMS-1000V Controller**, refer to the user manual of the NMS-1000V Controller.

4. Network Configuration

Set up the NMS-1000V Controller with Ethernet connection for the first-time configuration by wizard.




Default IP Address: 192.168.1.100
Default Management Port: 8888 (for remote login)
Default Username: admin
Default Password: admin




After logging on, connect the NMS-1000V Controller to the managed network to centrally control PLANET managed devices.

5. Setup Wizard


1. **Account Modification:** Set a new account and password for security.

Account Modification	
	Configuration
User Name	PLANET123
Password	1qaz!QAZ 
Retype Password	***** 
<small>*Please key in a new account, except using "admin" New Password must be included at least 1*[a-z], 1*[A-Z], 1*[0-9], 1*[-, !, @, ., ...] and must contain at least 8 character.</small>	

2. **IP Configuration Setting:** Set the NMS-1000V's IP into the same local network segment.

IP Configuration Setting		
	Configuration	Status
Mode	Static IP 	Static
IP Address	192.168.1.100	192.168.1.145
Subnet Mask	255.255.255.0	255.255.255.0
Default Gateway	192.168.1.254	192.168.1.1
DNS Server 1		192.168.1.1
DNS Server 2		

3. **SNMP Preference Setting:** Select region for AP Control (ETSI or FCC) and set up RO/RW community password.

SNMP Preference Setting	
	Configuration
Region *	ETSI 
RO Community	public
RW Community	private
<small>*Select Region for AP Control (ETSI or FCC)</small>	

4. **Devices Discovery:** Search the managed devices and add to list. (Finish Wizard)

Devices Discovery						
<input type="text" value="Search"/> <input type="button" value="Add"/> <input type="text" value="Filter by Content"/> <input type="button" value="Q"/>						
<input type="checkbox"/>	Num.	Device Type	Model No.	Device IP	Device Description	Support Authorization
<input type="checkbox"/>	1	Wireless	WNAP-W2201A	192.168.1.195	WNAP-W2201A	
<input type="checkbox"/>	2	Wireless	WBS-502AC	192.168.1.172	WBS-502AC	
<input type="checkbox"/>	3	Wireless	WDAP-C7200E	192.168.1.129	C7200E_2F	
<input type="checkbox"/>	4	Router	IVR-100	192.168.1.1 <small>LOADING</small>	Industrial VPN Security Gateway	
<input type="checkbox"/>	5	Industrial Switch	IGS-5225-8P4S	192.168.1.180	PLANET IGS-5225-8P4S 12G Managed Switch with 8 PoE+	
<input type="checkbox"/>	6	Switch	GS-4210-8P2S	192.168.1.109	L2/L4 Managed PoE Switch	
<input type="checkbox"/>	7	IP camera	ICA-3460V	192.168.1.177	PLANET	

6. Further Information

The above steps introduce the simple installations and configurations of the NMS-1000V Controller. For further configurations of PLANET NMS, please refer to the user manual, which can be downloaded from the website.

PLANET online FAQs:

<http://www.planet.com.tw/en/support/faq>

Support team mail address:

support@planet.com.tw

User's Manual:

<https://www.planet.com.tw/en/product/nms-1000v>



(Please select your model name from the Product Model drop-down menu)

If you have further questions, please contact the local dealer or distributor where you purchased this product.

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