

MM-5500PRO Quick Start Manual Wireless CDMA 1x EVDO Ethernet modem





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FCC RF EXPOSURE COMPLIANCE

In August 1996 the Federal Communications Commission (FCC) of the United States with its action in Report and Order FCC 96-326 adopted an updated safety standard for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of this phone complies with the FCC guidelines and these international standards.

Use only the supplied or an approved antenna. Unauthorized antennas, modifications, or attachments could impair call quality, damage the phone, or result in violation of FCC regulations.

This MM-5500PRO Wireless Ethernet modem has been tested for FCC exposure compliance with the MM-5500PRO wireless ethernet modem form factor. In order to comply with FCC RF exposure requirements, the MM-5500PRO Wireless Ethernet modem must be operated with the MM-5500PRO wireless ethernet modem form factor.

The use of this device in any other type of host configuration may not comply with FCC RF exposure requirements and should be avoided. During operation, a 20cm separation distance should be maintained between the antenna, whether extended or retracted, and the user's/bystander's body (excluding hands, wrists, feet, and ankles) to ensure FCC RF exposure compliance.

CAUTION

Change or modification without the express consent of Maxon Electronics Australia Pty. Ltd. voids the user's authority to use the equipment. This equipment has been tested and found to comply with the limits pursuant to Part 22 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in an appropriate installation. This equipment generates, uses, and can radiate radio frequency energy and, if not used in accordance with instructions, can cause harmful radiation to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If the equipment does cause harmful interference in radio and television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna





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Purpose

This manual includes how to configure and use the MM-5500PRO.





1. Introduction

1.1 MM-5500PRO Overview

There are a lot of connections for Internet. Figure 1 shows one of the connectivity on the internet using a normal ADSL modem.



[Figure 1. Normal Network using an ADSL Modem]

MM-5500PRO is an wireless ethernet modem that supports the connection between LAN (Local Area Network) to WAN(Wide Area Network) wirelessly in Small Office Home Office.

Figure 2 shows the MM-5500PRO's shape.

Power Connector		
An Ethernet Port	ABXON MM-5500PRO COMA EVDO Data Modem	
C		2
Reset Switch	Power Wirelage	
-Pin Data Connector	🔮 Signal Strength	CDMA 1x EVDO /

[Figure 2. Each part name of MM-5500PRO]

MM-5500PRO supports WAN protocol like PPP, HDLC etc. using CDMA 1x EVDO modem, routing and bridging functions internally for the high speed data transfer.

1.2 Features

- An 10/100Mbps Ethernet LAN Port
- An CDMA 1x EVDO modem for WAN(ISP)
- 32-bit RISC Processor
- An RS-232 console port for management
- Status LED of system operation.
- Adopt Embedded OS ...

- Support routing protocol like RIP v1/v2.
- Provide DHCP Server/Relay.
- Radius client.
- User-friendly Web-based page
- Remote management available.
- SNTP Client for network time.





2. Operation Process

There are two-way of MM-5500PRO operation. One is PPP (Point to Point Protocol) mode and the other one is PPPoE(PPP over Ethernet) mode.

2.1 PPP mode

On PPP mode MM-5500PRO has the IP from ISP (Internet Service Provider) itself, so MM-5500PRO can share the IP with many Host PCs. Below figure 3 shows PPP mode operation.



[Figure 3. PPP mode operation]

First, Host PCs get each private IP(hereby IP-1) from MM-5500PRO via DHCP server. Second MM-5500PRO gets public/Private IP(hereby IP-2) from ISP via CDMA 1x EVDO modem. Now MM-5500PRO has two kinds of IP, one is from ISP and the other ones are to Host PCs. Third, MM-5500PRO convert network data between IP-1 and IP-2 via NAT.

2.2 PPPoE mode

On PPPoE mode MM-5500PRO has no IP, just the Host PC gets IP from ISP.



[Figure 4. PPPoE mode operation]

Different on PPP mode, the IP from ISP goes to Host PC directly. MM-5500PRO converts protocol from PPP to PPPoE or on reverse direction, the Host PC processes all network protocols.





3. Factory Default

MM-5500PRO is already set for normal operation. So just connect between PC and MM-5500PRO. Check the network environment of Host PC.

3.1 Connecting Internet

For accessing Internet, should obtain IP automatically so refer below steps.

 Assumed the user uses the Windows XP. For connect between PC and MM-5100PRO, click "My Network Places" choose the [properties].



[Figure 5. First step of setting the Host PC]

(2) Check the "Local Area Connection", click the mouse right button then [Properties].



[Figure 6. Second step of setting the Host PC]

(3) Chose "Internet Protocol [TCP/IP]" Tab and double click the item.



Local Area Connection Properties ? X General Authentication Advanced Connect using: Compaq 10_100 MiniPCI Ethernet NIC
Configure This connection uses the following items: This connection uses the following items: This connection uses the following items: The substitution of the

[Figure 7. Third step of setting the Host PC]

(4) Check the "Obtain an IP address automatically" then click the [OK] button.

Internet Protocol (TCP/IP) Prope	rties 🔹 💽 🔀
General Alternate Configuration	
You can get IP settings assigned autor this capability. Otherwise, you need to the appropriate IP settings.	natically if your network supports ask your network administrator for
 Obtain an IP address automatical 	ly .
Use the following IP address: —	
IP address:	
Subnet mask:	
Default gateway:	
Obtain DNS server address autor	natically
→ Use the following DNS server add	dresses:
Preferred DNS server:	· · ·
Alternate DNS server:	
	Advanced
	OK Cancel

[Figure 8. Forth step of setting the Host PC]

(5) Host PC's setting is finished. Connect Power and Ethernet cable on MM-5500PRO. Wait for about 10 seconds or until the LED of PKT blinks. Connect your PC on Internet.





4. MM-5500PRO Configuration

User can change the function of MM-5500PRO by configuring it for user's purpose. Supports the web based configuration pages for simplified installation and setup. Figure 9 shows connection on MM-5500PRO's configuration.



[Figure 9. Configuration of MM-5500PRO]

- (1) Connect Power cable on MM-5500PRO.
- (2) Connect LAN cable between Host PC and MM-5500PRO.
- (3) Set Host PC network environment below.
 - Host PC IP : 192.168.0.2(except 1: 1 is MM-5500PRO)
 - Subnet mask : 255.255.255.0
 - DNS : (omit)

Figure 10 shows the window of Internet Protocol(TCP/IP) Properties.

(if don't know how to find below window, go to page 5)

Internet Protocol (TCP/IP) Prope	rties 🛛 🖓 🔀
General	
You can get IP settings assigned auton this capability. Otherwise, you need to a the appropriate IP settings.	natically if your network supports ask your network administrator for
🔿 Obtain an IP address automatical	y
• Use the following IP address:	
IP address:	192.168.0.2
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	
Obtain DNS server address autom	natically
 Use the following DNS server add 	resses:
Preferred DNS server:	
Alternate DNS server:	· · ·
	Advanced
	OK Cancel

[Figure 10. Setting Host PC]

(4) Start web browser like Internet explore then write IP address, 192.168.0.1 (by default) for connecting web page of configuration in MM-5500PRO.





- (5) The pop-up window of login page appears like figure 11.
 - User name: admin
 - Password: admin
- (6) "Home" page shows the system information of MM-5500PRO.



[Figure 11. Home Page]

ITEM	Description	
System Name	Product Name	
Up Time	Operation time from power on	
	eth0 : Status of Ethernet0 IP	
Interface	ppp0 : Status of CDMA0 IP	
	(After getting IP from ISP, this IP appears)	

(7) We saw the connecting web page of configuration in MM-5500PRO, now try to set each configurations for each mode.





5. PPP mode Configuration

We assume that MM-5500PRO current mode is not PPP mode in this chapter.

- (1) Connect Power cable on MM-5500PRO.
- (2) Follow the chapter 4, connect MM-5500PRO's configuration web page.
- (3) Click "PPP/PPPOE" menu then PPP/PPPOE page appears like figure 12.

_		MM5500PRO	Configuration - N	lozilla Firefo	x		ĸ
<u>F</u> ile <u>E</u> dit	<u>V</u> iew <u>G</u> o <u>B</u> o	ookmarks <u>T</u> ool	s <u>H</u> elp			<	2
🥠 • 📦	> - 🛃 🙁 🤶	👔 📄 http://19	2.168.0.1/pppconf.	shtml	✓ G.		
🗋 Red Ha	it, Inc. 🗋 Red Hat	Network 🗀 Su	pport 🗀 Shop 🗀	Products 🗀	Training		
G Google	뉴스 한국 - 경제		MM5500PRO Confi	guration		2	3
Home	Status	Ethernet	PPP / PPPOE	DNS	DHCP	NAT	
RADIUS	SNMP	SNTP	System	Reboot	Upgrade		
[PPP / PP	PoE]						
	Select Mode:	PPP 💌					
	User ID:	user@telstra.in	ternet				
	User Password:	****					
	Tel Number:	#777					
	CRM:	1					
		Apply Ca	ncel				
Done							

[Figure 12. PPP/PPPOE Page]

ITEM	Description
Select Mode	РРР
User ID	user@telstra.internet (or others)
User Password	Password
Tel Number	#777
	1 : 1x, EVDO (By default)
CRM	150 : 1x only
	160 : EVDO only

- (4) All setting finished then Click the Apply button.
- (5) Disconnect power cable then reconnect it.
- (6) Follow the chapter 3, change the Host PC's network environment.
- (7) Execute web browser and explore internet.





6. PPPoE mode Configuration

We assume that MM-5500PRO current mode is not PPPoE mode in this chapter.

- (1) Connect Power cable on MM-5500PRO.
- (2) Follow the chapter 4, connect MM-5500PRO's configuration web page.
- (3) Click "PPP/PPPOE" menu then PPP/PPPOE page appears like figure 13.

File Edit View Go Bookmarks Tools Help Image: Status Image: Status Red Hat Network Support Shop Products Training Home Status Ethernet PPP/PPOE DNS DHCP NAT RADIUS SNMP SNTP System Reboot Upgrade IPPP / PPPoE: User ID: user@ telstra.internet ####################################	▼		MM5500PRO Co	onfiguration - Me	ozilla Firefox		- = ×
Image: Product set of the set of th	<u>F</u> ile <u>E</u> dit <u>V</u>	<u>/</u> iew <u>G</u> o <u>B</u> oo	okmarks <u>T</u> ools	<u>H</u> elp			ं
Red Hat, Inc. Red Hat Network Support Shop Products Training Home Status Ethernet PPP / PPPOE DNS DHCP NAT RADIUS SNMP SNTP System Reboot Upgrade [PPP / PPPoE]	🤙 • 🧼 •	12 🕄 😪	http://192.1	68.0.1/pppconf.s	html	✓ G.	
Home Status Ethernet PPP/PPPOE DNS DHCP NAT RADIUS SNMP SNTP System Reboot Upgrade [PPP/PPPoE] Select Mode: PPPoE User ID: user@telstra.internet User Password: #7777 Tel Number: #7777] Apply Cancel	🗋 Red Hat, In	nc. 🗋 Red Hat I	Network 🗀 Suppo	ort 🗀 Shop 🗀	Products 🗀 T	raining	
AADIUS SIMP SITP System Reboot Upgrade FPP/PPPoE] Select Mode: Upgrade PPPoE Upgrade FPP/PPDeE Upgrade FPP/PPDE FPP/FPI FPP/FPI FPP/FPI FPP/FF FPF/FF FPP/FF FPF/FF FPF/FF FPF/FF FPF/FF FPF/FF FPF/F	Home	Status	Ethernet	PPP / PPPOE	DNS	DHCP	NAT
Select Mode: PPPoE User ID: user@telstra.intermet User Password: ******* Tel Number: \$777 CRM: 1 Apply Cancel	RADIUS	SNMP	SNTP	System	Reboot	Upgrade	
	[PPP/PPPoE] Us	Select Mode: User ID: er Password: Tel Number: CRM:	PPPoE user@telstra.inter #777 1 Apply Cance	net 2			

[Figure 13. PPP/PPPOE Page]

ITEM	Description
Select Mode	PPPoE
User ID	Not effect
User Password	Not effect
Tel Number	Not effect
	1 : 1x, EVDO (By default)
CRM	150 : 1x only
	160 : EVDO only

- (4) All setting finished then Click the Apply button.
- (5) Disconnect power cable then reconnect it.
- (6) Follow the chapter 3, change the Host PC's network environment.





(7) In this example we assumed the user uses the Windows XP. If it is not Windows XP, the user should install PPPoE connection application program. For connect between PC and MM-5500PRO click the "My Network Places" choose the [properties].



[Figure 14. First step of setting the Host PC]

(8) Check the "Local Area Connection", click the mouse right button then [Properties].





[Figure 15. Second step of setting the Host PC]

(9) Chose Internet Protocol[TCP/IP] Tab and double click the item.

🕂 Local Area Connection Properties 🛛 🔹 🔀
General Authentication Advanced
Connect using:
B Compaq 10_100 MiniPCI Ethernet NIC
Configure
This connection uses the following items:
RWLink NetBIOS
Rev Rev All Section 2 (1997) In the section of
M R Internet Protocol (TCP/P)
Install Uninstall Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
Show icon in notification area when connected
OK Cancel

[Figure 16. Third step of setting the Host PC]

(10) Check the "Obtain an IP address automatically" then click the [OK] button.



Inter	rnet Protocol (TCP/I	P) Properties
Ger	neral Alternate Configura	ation
Yi th th	ou can get IP settings assi is capability. Otherwise, yo e appropriate IP settings.	igned automatically if your network supports ou need to ask your network administrator for
	💿 Obtain an IP address a	automatically
	OUse the following IP ad	ddress:
	IP address:	
	Subnet mask:	
	Default gateway:	
	🔿 Obtain DNS server add	dress automatically
	Use the following DNS	server addresses:
	Preferred DNS server:	
	ALL L DUG	

[Figure 17. Forth step of setting the Host PC]

(11) You should make PPPoE connection so click the "Create a nee connection"



[Figure 18. First step of creating a PPPoE connection]

(12) New Connection Wizard appears, click [Next] button.







(13) Check "Connect to the Internet" then click [Next] button.

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New Connection Wizard
Network Connection Type What do you want to do?
Connect to the Internet Connect to the Internet so you can browse the Web and read email.
Connect to the network at my workplace Connect to a business network (using dial-up or VPN) so you can work from home, a field office, or another location.
Set up a home or small office network Connect to an existing home or small office network or set up a new one.
Set up an advanced connection Connect directly to another computer using your serial, parallel, or infrared port, or set up this computer so that other computers can connect to it.
< Back Next Cancel



(14) Check "Set up my connection manually" then click [Next] button.





New Connection Wizard
Getting Ready The wizard is preparing to set up your Internet connection.
How do you want to connect to the Internet? Choose from a list of Internet service providers (ISPs)
 Set up my connection manually For a dial-up connection, you will need your account name, password, and a phone number for your ISP. For a broadband account, you won't need a phone number. Use the CD I got from an ISP
< Back Next > Cancel

[Figure 21. Forth step of creating a PPPoE connection]

(15) Check "Connect using a broadband connection that requires a user name and password" then click [Next] button.

New Connection Wizard
Internet Connection How do you want to connect to the Internet?
 Connect using a dial-up modem This type of connection uses a modem and a regular or ISDN phone line. Connect using a broadband connection that requires a user name and password This is a high-speed connection using either a DSL or cable modem. Your ISP may refer to this type of connection as PPPoE. Connect using a broadband connection that is always on This is a high-speed connection using either a cable modem, DSL or LAN connection. It is always active, and doesn't require you to sign in.
< Back Next Cancel

[Figure 22. Fifth step of creating a PPPoE connection]





Maxor

australia.

New Connection Wizard
Connection Name What is the name of the service that provides your Internet connection?
Type the name of your ISP in the following box. ISP Name
sktelecom
The name you type here will be the name of the connection you are creating.
< Back Next Cancel

[Figure 23. Sixth step of creating a PPPoE connection]

(17) Write User name/Password/Confirm password what you use. Then click [Next] button.

New Connection Wizard					
Internet Account Information You will need an account name and password to sign in to your Internet account.					
Type an ISP account n safe place. (If you have	ame and password, then write down this information and store it in a forgotten an existing account name or password, contact your ISP.)				
User name:	sktelecom				
Password:					
Confirm password:					
Use this account in this computer	ame and password when anyone connects to the Internet from				
🗹 Make this the defat	ult Internet connection				
✓ Turn on Internet Connection Firewall for this connection					
	K Back Next Cancel				

[Figure 24. Sixth step of creating a PPPoE connection]





(18) All setting is finished, check "Add a shortcut to connection and close this wizard, click Finish" then click [Finish] button.



[Figure 25. Seventh step of creating a PPPoE connection]

(19) PPPoE connection program appears then click [Connect] button.



[Figure 26. PPPoE connection application program]





(20) Connecting window appears, trying to connect MM-5500PRO.



[Figure 27. Connecting between PC and MM-5500PRO]

(21) After connection between PC and MM-5500PRO, then go to the verifying stage.

Connec	ting sktelecom
2	Verifying username and password

[Figure 28. Verifying username and password]

(22) Changing Registering stage, the Host PC connecting on the network.

Connecting sktelecom				
2	Registering your computer on the network			
	Cancel			

[Figure 29. Registering PC on the network]

(23) Click the [Start] button then choose Internet Explorer.





[Figure 30. Starting Internet Explorer]

7. Firmware Upgrade

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Firmware is for MM-5500PRO. When the firmware is to be upgrade or to be download, use like this.

- (1) Connect Power cable on MM-5500PRO.
- (2) Follow the chapter 4, connect MM-5500PRO's configuration web page.
- (3) Click "Upgrade" menu then PPP/PPPOE page appears.
- (4) Click the **Browse**... button and search the firmware file.
- (5) Select the firmware file then "OK".





Red Hat, I	nc. 🗋 Red Ha	t Network 🖸 St	upport 🖸 Shop 🛍	Products	Training	
lome	Status	Ethernet	PPP / PPPOE	DNS	DHCP	NAT
RADIUS	SNMP	SNTP	System	Reboot	Upgrade	
Filena	me: /embed	ded/mm5500pro/	mm5500pro/m Bro	wse Upo	Irade	
Filent	ame: /embed	ded/mm5500pro/	mm5500pro/m Bro	wse Upg	rade	
Filena	ime: /embedd	ded/mm5500pro/	mm5500pro/m Bro	wse Upg	rade	
Filent	ame: /embed	ded/mm5500pro/i	mm5500pro/m Bro	wse Upg	rade	

[Figure 31. Firmware Upgrade]

(6) Click the Upgrade button then below Figure 31 appears.

✓		MM5500PRO	Configuration - M	ozilla Firefox			= = ×
<u>F</u> ile <u>E</u> dit	<u>V</u> iew <u>G</u> o <u>B</u> ool	marks <u>T</u> ool	s <u>H</u> elp				0
🥠 • 🧼 •	i 🔁 🙁 🏠	http://19	2.168.0.1/firmupok.	shtml	✓ C.		
🗋 Red Hat, I	nc. 🗋 Red Hat N	etwork 🗀 Su	pport 🗀 Shop 🗀	Products 🗀	Training		
Home	Status	Ethernet	PPP / PPPOE	DNS	DHCP	NAT	•
RADIUS	SNMP	SNTP	System	Reboot	Upgrade		
[Firmware Up Pi Ro	grade] rmware Upgrade is suc estart for starting of new	cessfully v firmware.					
4			///				~
Done							

[Figure 32. Firmware Upgrade finished]

(7) Execute web browser and explore internet.

8. Radius Test

There is no needed RADIUS on normal using wireless AP but if connect user PC using RADIUS protocol, there are some needed to define below.

- (1) Wireless AP supports RADIUS protocol to communicate with MM-5500PRO.
- (2) ISP(Internet Service Provider) supports subnet mask 255.255.255.xxx (because Client PCs should get their IP from RADIUS Server).
- (3) RADIUS Client Software is installed on Client PC.





- (4) Get the RADIUS Server information including Authentication Server IP/Port and Accounting Server IP/Port.
- (5) IP of MM-5500PRO should be registered in advance.(But now MM-5500PRO gets Dynamic IP from ISP so after get the IP from MM-5500PRO then let the RADIUS server know the MM-5500PRO's IP. In the future if MM-5500PRO using RADIUS protocol, MM-5500PRO needed Static IP from ISP).



[Figure 33. RADIUS Authentication and Accounting Network]

- (6) Connect Power cable on MM-5500PRO.
- (7) Follow the chapter 4, connect MM-5500PRO's configuration web page.
- (8) Click "RADIUS" menu then RADIUS page appears.







🤤 • 🕪 • 🚰 😡 👌	http://192.	168.0.1/radiusc	onf.shtml	✓ G.	
🗋 Red Hat, Inc. 📋 Red Hat	Network 🔁 Supp	ort 🗀 Shop 🕻	Products 🗀	Training	
Home Status	Ethernet	PPP / PPPOE	DNS	DHCP	NAT
RADIUS SNMP	SNTP	System	Reboot	Upgrade	
	Authentication Server				
Server IP:	192.168.0.2	Server	Port: 1812		
Shared Secret:	secret				
Server IP:	Accounting Server	Server	Port: 1813		
Shared Secret:	secret				
Server TimeOut:	10 second(1~6	(5535, Default 10)			
Max Request:	1 (1-10, Defa	ult I)			
Session Timeout:	By Server 💌	second(6	0-65535)		
Idle Timeout:	By Server 💌	second(6	0-65535)		
Interim Interval:	By Server 💌	second(6	0-65535)		
	Apply Canc	el			

[Figure 34. RADIUS Setting Page]

ITEM	Description
	Server IP : xxx.xxx.x.x
Authentication Server	Server Port : xxxx
	Shared Secret : depend on Authentication Server
	Server IP : xxx.xxx.x.x
Accounting Server	Server Port : xxxx
	Shared Secret : depend on Authentication Server
Server Timeout	Second of time out (depend on network speed)
Max.Request	Time of Request (normal 2~3 times)
Session Timeout	Default by server
Idle Timeout	Default by server
Interim Interval	Default by server

(9) All setting finished, execute the RADIUS Client Software that is installed on Client PC then connect on Internet.





9. Appendix

Below pages are descriptions of other configuration pages.

(1) "Status" page shows current protocol status.



[Figure 35. Status Page]

ITEM	Description
	Information of Target
	- Device
	- ARP
Coloct Statistics	- IP
Select Statistics	- ICMP
	- TCP
	- UDP
	- ROUTE





(2) "Ethernet" page shows the information of Ethernet interface.



[Figure 36. Ethernet Page]

ITEM	Description
Connect Type	Static: Should be Always (Dynamic: Will be omit)
IP Address	eth0 IP
Subnet Mask	Subnet mask IP Address
Gateway	Gateway Address
DHCP Hostname	(Will be omit)





(3) "PPP" page shows the information of PPP authentication.

	MM5500PRO	Configuration	- Mozilla Firefox			- = ×
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> o	ookmarks <u>T</u> ool	s <u>H</u> elp				$\langle \rangle$
🧇 • 🔿 - 🎅 🙁 🗧	http://19	2.168.0.1/pppco	nf.shtml	∀ G.		
🗋 Red Hat, Inc. 🗋 Red Hat	Network 🗀 Su	pport 🗀 Shop	Products 🗋	Training		
Home Status	Ethernet	PPP	DNS	DHCP	NAT	
RADIUS SNMP	SNTP	System	Reboot	Upgrade		
[PPP] User ID: User Password: Tel Number:	user ***** **** Apply Ca	ncel				

[Figure 37. PPP Page]

ITEM	Description
User ID	Received ID from ISP
User Password	Password
Tel Number	Calling number

(4) "DNS" page shows the information of setting DNS IP Address.

		MM5500PRO	Configuration	- Mozilla Firefox		/////// <u>- = ×</u>
<u>F</u> ile <u>E</u> dit <u>V</u> iew	<u>G</u> o <u>B</u> oo	okmarks <u>T</u> ools	<u>H</u> elp			0
🔶 • 🧼 • 🛃	7 🗵 😚	http://192	2.168.0.1/dnsco	nf.shtml	 ✓ G₊ 	
🗋 Red Hat, Inc.	🗋 Red Hat I	Vetwork 🗀 Sup	oport 🗀 Shop	Products 🔁	Training	
Home 5	Status	Ethernet	PPP	DNS	DHCP	NAT
RADIUS S	SNMP	SNTP	System	Reboot	Upgrade	
[DNS] 1st DNS IP 2nd DNS IP	Address: Address:	168.126.63.1 168.126.63.2 Apply Can	Icel			

[Figure 38. DNS Page]





ITEM	Description
1 st DNS IP Address	First DSN IP (Optional)
2 nd DNS IP Address	Second DSN IP (Optional)

(5) "DHCP" page shows the information of setting DHCP.

✓			MM5500PRO	Configuration -	Mozilla Firefox			= = ×
<u>F</u> ile	<u>E</u> dit <u>V</u> iew	<u>G</u> o <u>B</u> oo	kmarks <u>T</u> ools	<u>H</u> elp				$\langle \rangle$
	• 🖒 • 🎯 ।	🗵 😭	http://192	2.168.0.1/dhcpd	onf.shtml	✓ C.		
R	ed Hat, Inc. 🗋 F	Red Hat M	Vetwork 🗀 Sup	oport 🗀 Shop	Products 📄	Fraining		
Hom	ie Statu	s	Ethernet	PPP	DNS	DHCP	NAT	
RAE	DIUS SNM	IP	SNTP	System	Reboot	Upgrade		
[DF	HCP]							
	Ac	tivate:	Enable 💌					
	Start IP Ad	dress:	192.168.0.50					
	End IP Ad	draee	102 168 0 100					
			DEE 255 255 0					
	Subnet	Mask:	255.255.255.0					
	Default Lease	Time:	65536					
	Max Lease	Time:	65536					
	Default Gat	teway:	192.168.0.1					
			Apply Can	icel				

[Figure 39. DHCP Page]

ITEM	Description
Activate	Enable/Disable: DHCP server on-off
Start IP Address	Start address local IP(start range)
End IP Address	End address local IP(End range)
Subnet Mask	Subnet mask IP Address
Default Lease Time	Default Time of assigning IP
Max Lease Time	Maximum Time of assigning IP
Default Gateway	Gateway IP Address





(6) "NAT" page shows the information of setting NAT.

File Edit View Go Bookmarks Tools Help Image: Product Image: Product Image: Product Image: Product Image: Product Image: Product Image: Product Image: Product Image: Product Image: Product	File Edit View Go Bookmarks Tools Help Image: Image: Image: Image: Image: Image: Image: IMAT Image: Image: Image: Image: Image: Image: Image: IMAT Image: Image: Image: Image: Image: Image: Image: IMAT Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Im) 🗆 (×			- Mozilla Firefox	Configuration	M5500PRO	MN			
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Add	DMZ Host IP: 192.168.0.2						Add				
	DMZ Host IP: 192.168.0.2										
DMZ Host IP: 192.168.0.2						0.2	192.168.0	Host IP:	DMZ		
	VPN Pass-Through IP:							ough IP:	N Pass-Thro		

[Figure 40. NAT Page]

ITEM	Description
Operation	Enable/Disable: NAT on-off
Virtual Sever	User can select/configure NAT option
Access Control	End address local IP(End range)
DMZ Host IP	Setting DMZ Host IP Address
VPN Pass-Through IP	VPN IP Address





(7) "RADIUS" page shows the information of setting RADIUS.

	MM5500PRO Co	nfiguration -	Mozilla Firefox			- • ×
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> o	ookmarks <u>T</u> ools	<u>H</u> elp				\$**\$
🦕 • 🔶 - 🎅 😣 🔮	http://192.10	58.0.1/radiusc	onf.shtml	✓ G.		
🗋 Red Hat, Inc. 📄 Red Hat	Network 🗀 Suppo	rt 🗀 Shop 🕯	Products []]	Fraining		
RADIUS SNMP	Ethernet	PPP System	DNS	Ungrade	NAT	
	3411	System	Reboot	opgrade		
[RADIUS]						
	Authentication Server					
Server IP:	192.168.0.2	Server	Port: 1812			
Shared Secret:	secret					
	'					
	A second second					
	Accounting server					
Server IP:	192.168.0.2	Server	Port: 1813			
Shared Secret:	secret					
Server TimeOut:	10 second(1~65	535, Default 10)				
Max Request:	1 (1-10, Defau	lt 1)				
Session Timeout	Py Server V		(0.65525)			
Session mileout.	By Server	second(0~03333)			
Idle Timeout:	By Server	second(60~65535)			
Interim Interval:	By Server 💌	second(6	60~65535)			
	Apply Cance	1				

[Figure 41. RADIUS Page]

ITEM	Description
Server IP	Authentication Server IP & Port
Shared Secret	RADIUS Secret Key
Server IP	Accounting Server IP & Port
Shared Secret	Accounting Secret Key
Server TimeOut	Waiting Time of Accounting Server
Max Request	Repeat time of accounting request
Session Timeout	Available time of session status
Idle Timeout	Available time of Idle status



Maxon australia.	stay cor	nnected.
Interim In	terval	Frequent time of accounting packet

31

(8) "SNMP" page shows the information of setting SNMP.

✓ //////		MM5500PRO	Configuration ·	- Mozilla Firefox		
<u>F</u> ile <u>E</u> d	it <u>V</u> iew <u>G</u> o	<u>B</u> ookmarks <u>T</u> ools	s <u>H</u> elp			1
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🗋 Red H	lat, Inc. 📄 Red H	lat Network 🗀 Sup	oport 🗀 Shop	Products 📄	Training	
Home	Status	Ethernet	PPP	DNS	DHCP	NAT
RADIUS	SNMP	SNTP	System	Reboot	Upgrade	
[SNMP						
	Activate	Disable 📕				
Road	Community Namo	public				
neau						
Write	Community Name	: private				
	System Name	:				
	System Contact	:				
	System Location	:				
Trap	Community Name	: public				
1	st Trap Server IP	192.168.0.21				
2	nd Tran Server IP	192 168 0 21				
_	Auth Fall Teas	Disable				
	Auth. Fail Trap					
	Cold Start Trap	: Disable 💌				
	Link UP Trap	: Disable 💌				
	Link Down Trap	: Disable 💌				
		Apply Car	ncel			

[Figure 42. SNMP Page]

ITEM	Description		
Activate	Enable/Disable		
Read Community Name	Setting Reading authority		
Write Community Name	Setting Writing authority		
System Name	Setting system name		
System Contact	Setting system contact		
System Location	Setting system location		
Trap Community Name	Setting Trap community		





1 st Trap Server IP	Setting 1 st Trap Server IP		
2 nd Trap Server IP	Setting 2 nd Trap Server IP		
Auth. Fall Trap	Warning message to Trap server		
Cold Start Trap	First booting message to Trap server		
Link UP Trap	Normal status message to Trap server		
Link Down Trap	Abnormal status message to Trap server		

(9) "SNTP" page shows the information of setting SNTP.

	MM5500PRO C	onfiguration	- Mozilla Firefox			- = ×
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> o	okmarks <u>T</u> ools	<u>H</u> elp				\$
💠 - 🤣 😣 🔮	http://192.	168.0.1/sntpc	onf.shtml	✓ C.		
🗋 Red Hat, Inc. 🗋 Red Hat	Network 🗀 Supp	ort 🗀 Shop	Products DT	raining		
Home Status	Ethernet	PPP	DNS	DHCP	NAT	
RADIUS SNMP	SNTP	System	Reboot	Upgrade		
[SNTP]						
Oneration:	Disable 🔻					
SNTP Server Address:	time.nuri.net					
Time Zone:	GMT+9:00 💌					
	Apply Canc	el				

[Figure 43. SNTP Page]

ITEM	Description		
Operation	Enable/Disable: SNTP on-off		
SNTP Sever Address	Setting SNTP server		
Time Zone	Setting SNTP time zone		





(10) "System" page shows the information of System.

	MM5500PRO	Configuration -	Mozilla Firefox		////////==×	
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>G</u> o <u>E</u>	ookmarks <u>T</u> ool	s <u>H</u> elp			\$	
💠 • 🌳 • 🛞 (🟠 🗋 http://19	2.168.0.1/system	nconf.shtml	✓ G.		
🗋 Red Hat, Inc. 🗋 Red Hat Network 🗁 Support 🗁 Shop 🗁 Products 🗁 Training						
Home Status	Ethernet	PPP	DNS	DHCP	NAT	
RADIUS SNMP	SNTP	System	Reboot	Upgrade		
[SYSTEM]						
Admin Name:	admin					
Admin Password:	teletetete					
HTTP Port:	80					
Telnet Daemon:	Enable 💌					
	Apply Ca	ncel				

[Figure 44. System Page]

ITEM	Description
Admin Name	Name of Administrator
Admin Password	Setting Admin password
HTTP Port	HTTP Port number
Telnet Daemon	Enable/Disable Telnet

(11) "Reboot" page makes MM-5500PRO reboot.





		MM5500PRO	Configuration	- Mozilla Firefox		_ = = ×
<u>F</u> ile <u>E</u> dit	<u>V</u> iew <u>G</u> o <u>B</u> o	ookmarks <u>T</u> ool	s <u>H</u> elp			\$
🔶 • ⊳	- 🥩 🙁 🗧	http://19	2.168.0.1/reboo	t.shtml	✓ G	
🗋 Red Hat,	, Inc. 🗋 Red Hat	Network 🗀 Su	pport 🗀 Shop	Products 问	Training	
Home	Status	Ethernet	PPP	DNS	DHCP	NAT
RADIUS	SNMP	SNTP	System	Reboot	Upgrade	
[Reboot]	Reboot System:	Reboot				

[Figure 45. Reboot Page]

ITEM	Description		
Reboot System	Reboot MM-5500PRO		

(All document finished)





Thank you.

