

# Installation instructions

## Gigabit Network Card for UPS NMC G2

### 安装说明书

### 千兆UPS网络管理卡

### NMC G2

614-40323-00

It is highly recommended that browser access to the Network Module is isolated from outside access using a firewall or isolated network.

- STEP 1** – On a network computer, launch a supported web browser. The browser window appears.
- STEP 2** – In the Address/Location field, enter [https://\[IP address\]](https://[IP address]) with the IP address of the Network Module.
- STEP 3** – The login screen appears.
- STEP 4** – Enter the user name in the User Name field. The default user name is **admin**.
- STEP 5** – Enter the password in the Password field. The default password is **admin**.
- STEP 6** – The password must be changed at first login.
- STEP 7** – Click **Login**. The Network Module web interface appears.
- At first login:
- STEP 8** – Accept License Agreement. The Network Module web interface appears.

### 1.3.2 Finding and setting the IP address

A- Your network is equipped with a BOOTP/DHCP server (default)

#### 1. Read from the device LCD

Note: some device may not be able to display the IP address even if they have an LCD.

If your device has an LCD, from the LCD's menu, navigate to Identification>>>"COM card IPv4".

- Note the IP address of the card.
- Go to the section: Accessing the web interface through Network.

#### 2. Read from the Utility tool

Download the Utility tool from the website and then install to the computer.

The Utility tool could list the Network Modules within a network after scan.

- Note the IP address of the card by corresponding MAC address on the Network Module's front panel.
- Go to the section: Accessing the web interface through Network.

#### 3. With web browser through the configuration port

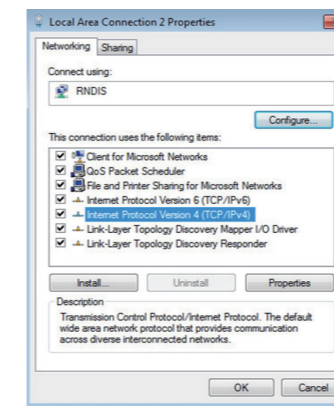
For example, if your device does not have an LCD, the IP address can be discovered by accessing the web interface through RNDIS and browsing to Settings>Network.

To access the web interface through RNDIS, see the [Accessing the web interface through RNDIS](#) section.

- Navigate to Contextual help>>>Settings>>>Network & Protocol>>>IPV4
- Read the IPv4 settings.

B- Your network is not equipped with a BOOTP/DHCP server

#### 1. Define from the configuration port



**STEP 4** – Then enter the configuration as below and validate (IP = 169.254.0.150 and mask = 255.255.0.0), click OK, then click on Close.

### 2. Accessing the web interface

**STEP 1** – Be sure that the Device is powered on.

**STEP 2** – On the host computer, download the rndis.7z file from the website and extract it. For more information, navigate to Servicing the Network Management Module>>>Accessing to the latest Network Module firmware/ driver section.

**STEP 3** – Launch setProxy.bat to add 169.254.\* in proxy's exceptions list, if needed. For manual configuration, navigate to Modifying the Proxy exception list section in the full documentation.

**STEP 4** – Launch a supported browser, the browser window appears.

**STEP 5** – In the Address/Location field, enter: <https://169.254.0.1>, the static IP address of the Network Module for RNDIS. The log in screen appears.

**STEP 6** – Enter the user name in the User Name field. The default user name is **admin**.

**STEP 7** – Enter the password in the Password field. The default password is **admin**.

**STEP 8** – Click **Login**. The Network Module local web interface appears.

### 1.3.4 Accessing the card through serial terminal emulation

This connection is used to access and configure the Network Module network settings locally through Serial (Serial over USB interface).

## 1 Installing the Network Management Module

### 1.1 Unpacking the Network module

The Network Management Card for UPS G2 will include the following accessories:

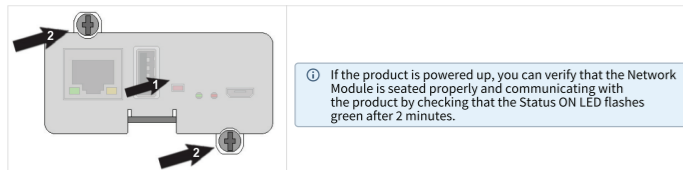
- Installation instructions

Packing materials must be disposed of in compliance with all local regulations concerning waste. Recycling symbols are printed on the packing materials to facilitate sorting.

### 1.2 Mounting the Network Module

The Network Module is hot-swappable. Inserting and/or extracting the Network Module from the communication slot of the product has no effect on the output. Remove the two screws securing the option slot cover plate and store the plate for possible future use.

- Install the Network Module along the alignment channels in the option slot.
- Secure the Network Module using the two screws.



### 1.3 Accessing the Network Module

#### 1.3.1 Accessing the web interface through Network

##### A- Connecting the network cable

Security settings in the Network Module may be in their default states. For maximum security, configure through a USB connection before connecting the network cable.

Connect a standard gigabit compatible shielded ethernet cable (F/UTP or F/FTP) between the network connector on the Network Module and a network jack.



##### B- Accessing the web interface

The IP address can be defined by accessing the web interface through RNDIS. To access web interface through RNDIS, see the [Accessing the web interface through RNDIS](#) section.

Define the IP settings:

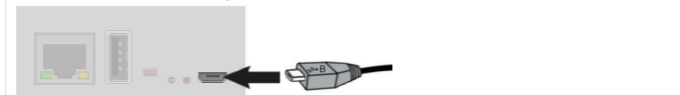
- Navigate to Contextual help>>>Settings>>>Network & Protocol>>>IPV4.
- Select Manual (Static IP).
- Input the following information: Address, Subnet Mask, Default Gateway
- Save the changes.

### 1.3.3 Accessing the web interface through RNDIS

This connection is used to access and configure the Network Module network settings locally through a RNDIS (Ethernet over USB interface).

#### A- Connecting the configuration cable

1. Connect a Micro-B to USB cable to a USB connector on the host computer.
2. Connect the cable to the Settings connector on the Network Module.



#### B- Web interface access through RNDIS

##### 1. Configuring the RNDIS

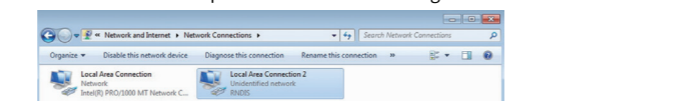
Automatic configuration

RNDIS driver is used to emulate a network connection from USB. After the card is connected to the PC, **Windows**® OS will automatically search for the RNDIS driver.

On some computers, the OS can find the RNDIS driver then configuration is completed, and you can go to Accessing the web interface. On some others it may fail then proceed to manual configuration.

Manual configuration

**STEP 1** – In case **Windows**® OS fails to find driver automatically, go to the Windows control panel>Network and sharing center>Local area connection



**STEP 2** – Right click on the RNDIS local area connection and select Properties.

**STEP 3** – Select Internet Protocol Version 4 (TCP/IPv4) and press the Properties button

#### A- Connecting the configuration cable

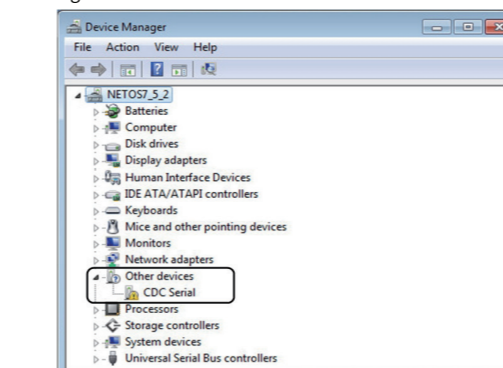
#### B- Manual configuration of the serial connection

Serial driver is used to emulate a serial connection from USB. After the card is connected to the PC, manual configuration of the driver is needed for **Windows**® OS to discover the serial connection.

**STEP 1** – On the host computer, download the rndis.7z file from the website and extract it.

**STEP 2** – Plug the USB cable and go to **Windows**® Device Manager.

**STEP 3** – Check the CDC Serial in the list, if it is with a yellow exclamation mark implying that driver has not been installed follow the steps 4-5-6-7 otherwise configuration is OK.



**STEP 4** – Right click on it and select Update Driver Software. When prompted to choose how to search for device driver software, choose Browse my computer for driver software. Select Let me pick from a list of device drivers on my computer.

**STEP 5** – Select the folder where you have previously downloaded the driver file Click on Next.

**STEP 6** – A warning window will come up because the driver is not signed. Select Install this driver software anyway

**STEP 7** – The installation is successful when the COM port number is displayed for the Gadget Serial device in the **Windows**® Device Manager.

#### C- Accessing the card through Serial

It is intended mainly for automated configuration of the network and time settings of the network card. It can also be used for troubleshooting and remote reboot/reset of the network interface in case the web user interface is not accessible.

CLI can be accessed through:

- SSH
- Serial terminal emulation.

Changing network parameters may cause the card to become unavailable remotely. If this happens it can only be reconfigured locally through USB.

You can see this list of available commands by typing in the CLI: **?**  
You can see the help by typing in the CLI: **help**

For more details, refer to Information>>>CLI section in the Network Module User Guide on the website.

## 1.4 Configuring the Network Module settings

Use the web interface to configure the Network Module. The main web interface menus are described below:

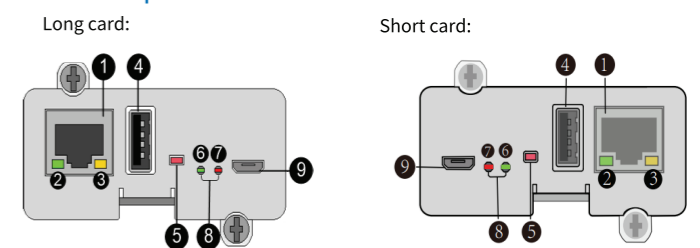
### 1.4.1 Menu structure

	Extend menu display.
	<b>Home:</b> Overview and status of the Device (Active alarms, Outlet status, ...).
	<b>Meters:</b> Power quality meters and logs.
	<b>Controls:</b> Device and outlets control.
	<b>Protection:</b> Agents list, Agents shutdown sequencing, Shutdown on power outage.
	<b>Environment:</b> Commissioning/Status, Alarm configuration, Information.
	<b>Settings:</b> Network Module settings.
	<b>UPS settings:</b> General information, Settings.
	<b>Maintenance:</b> Firmware, Services, Resources, System logs.

For more information, see the Network Module User Guide on the website.

## 2 Information

### 2.1 Front panel connectors and LED indicators



Nbr	Name	Description
1	Network connector	Ethernet port
2	Network speed LED	Flashing green sequences: • 1 flash — Port operating at 10Mbps • 2 flashes — Port operating at 100Mbps • 3 flashes — Port operating at 1Gbps
3	Network link/activity LED	• Off — UPS Network Module is not connected to the network. • Solid yellow — UPS Network Module is connected to the network, but no activity detected. • Flashing yellow — UPS Network Module is connected to the network and sending or receiving data.
4	AUX connector	For Network Module accessories only. <b>Do not use for general power supply or USB charger.</b>
5	Restart button	Ball point pen or equivalent will be needed to restart: Long press (>9s) — Forced hardware restart.
6	ON LED	Flashing green — Network Module is operating normally.
7	Warning LED	Solid red — Network Module is in error state. Flashing red - Network Module is being shutdown or rebooting
8	Boot LEDs	Solid green and flashing red — Network Module is starting boot sequence.
9	Settings/UPS data connector	Configuration port. Access to Network Module's web interface through RNDIS (Emulated Network port). Access to the Network Module console through Serial (Emulated Serial port).