

Network Management Teleservice Card (66124)

Installation manual



by Schneider Electric



990-3402231500AC


3402231500/AC

INTRODUCTION

The **Network Management Teleservice Card (66124)** is recommended for central UPSs protecting entire networks or for UPS units backing up critical loads.

With the card installed, the UPS has its own IP address and uses the local computer capabilities to:

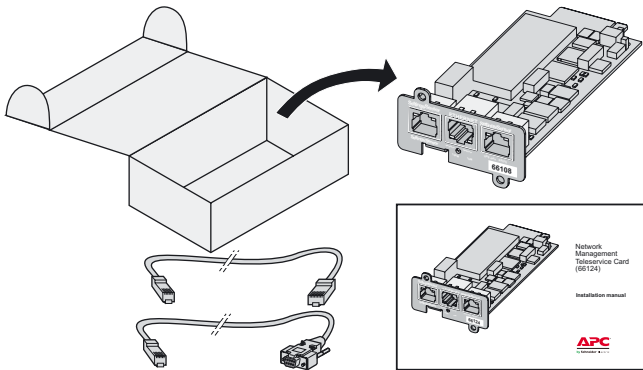
- ▶ supply web pages (http or https (SSL)) with information on status conditions and measurements/settings/alarms,
- ▶ integrate an SNMP-based NMS such as HP OpenView, IBM Tivoli Netview and Computer Associates Unicenter,
- ▶ communicate with shutdown modules installed on the protected servers (Network Shutdown Module),
- ▶ send e-mail and SMS messages,
- ▶ control the ON/OFF function of the UPS and the outlets,
- ▶ monitor the Environment Sensor,
- ▶ Access the Teleservice solution for remote monitoring and maintenance services of your UPS.



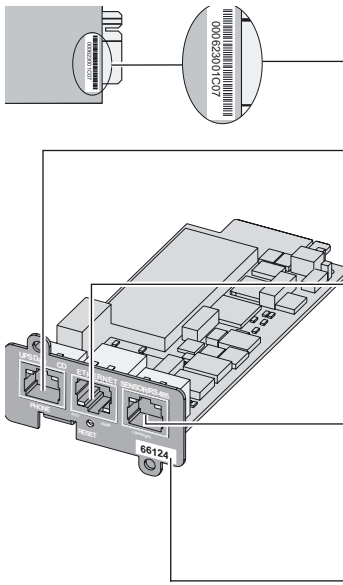
The **Network Management Teleservice Card** must be installed and used in accordance with manufacturer instructions.

UNPACKING AND CHECKS

- ▶ One **Network Management Teleservice Card (66124)**,
- ▶ One serial cable for configuration (3402226700),
- ▶ One phone cable for teleservice (3402226800),
- ▶ One installation manual (34022315EN),
- ▶ One Teleservice information form (3402228500),



OVERVIEW



- MAC address**
- PHONE port:**
 - Green LED : Phone communication with the UPS
 - Orange LED : Modem connection
- ETHERNET port:**
 - Green LED : Connection + activity
 - Orange LED : 10/100 M
- Service port (Sensor/RS485):**
 - Green LED : Communication with the UPS
 - Orange LED :RS232 activity
- Catalogue number**

INDICATIONS

PHONE port

LED	Colour	Status	Description
UPS Data	Green	▶ OFF	▶ Card not connected to phone network
		▶ ON	▶ Card connected to phone network, but no activity
		▶ Flashing	▶ Port is sending/receiving
CD	Orange	▶ OFF	▶ Modem is not connected
		▶ ON	▶ Modem is connected
		▶ Flashing	▶ Modem is connecting

ETHERNET port

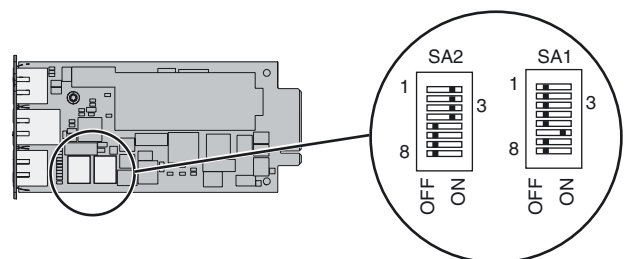
LED	Colour	Status	Description
ACT	Green	▶ OFF	▶ Card not connected to network
		▶ ON	▶ Card connected to network, but no activity
		▶ Flashing	▶ Port is sending/receiving
100M	Orange	▶ OFF	▶ Port operating at 10 Mbits/s
		▶ ON	▶ Port operating at 100 Mbits/s

Service port (Sensor/RS485)

LED	Colour	Status	Description
Sensor	Green	▶ OFF	▶ Card starting
		▶ ON	▶ Card ready
		▶ Flashing	▶ Communication with environment Sensor is operational
RS485	Orange	▶ OFF	▶ Settings mode activated
		▶ Flashing	▶ Port is sending/receiving
		▶ Flashing every seconds	▶ Communication fault or configuration errors

SWITCHES SETTING

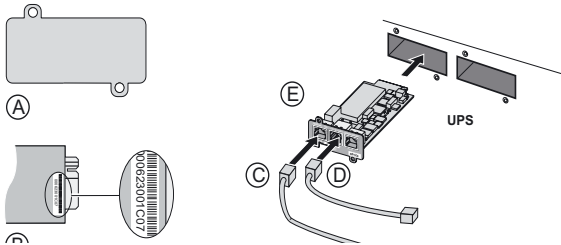
Default settings, sensor configuration :



INSTALLATION

The **Network Management Teleservice Card** (66124) can be hot-plugged on MGE™ Galaxy™ 7000 UPSs. It is not necessary to shutdown the UPS, disconnect the load or restart the UPS.

- ▶ A. Remove the plastic cover of the Minislot.
- ▶ **B. Note the MAC address of the card before inserting it.**
- ▶ C. Connect the PHONE cable.
- ▶ D. Connect the ETHERNET cable (network already connected).
- ▶ E. Insert and secure the card with the screws.



- ▶ Check the ETHERNET port indications.
- ▶ Wait until the UPS Data LED flashes regularly (approx. two minutes), indicating that card start-up has terminated correctly.

IP SETTINGS

Once the card has started, proceed as indicated below.

- ▶ Connect one end of the serial cable to the Service port.
- ▶ Connect the other end of the cable to the COM (IOIOI) port of a PC.
- ▶ Run a terminal emulator such as HyperTerminal™ with these settings

Bits per second	Data bits	Stop bits	Flow control
38400	8	1	none

"Echo typed characters locally" option: disabled

- ▶ Press the ↵ key.
- ▶ press the 1 key (Network configuration menu)
- ▶ Type MGEUPS (or mgeups), then press the ↵ key.

The main configuration menu is displayed

```

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NETWORK MANAGEMENT CARD
1 : Reset
2 : Network configuration
3 : Set Login Password to Default
4 : Return to Default Configuration
0 : Exit
    
```

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

The card is configured by default with this service enabled. No manual configuration is required. The IP parameters are automatically collected by the card.

To view the network configuration(from the main configuration menu):

- ▶ Press the 2 key (Network configuration), then press the ↵ key.
- ▶ Press the 1 key(Read Network settings)., then press the ↵ key.

The settings supplied by the server are displayed:

```

Network configuration :
MAC address : 00:06:23:00:1C:07
Mode : DHCP
IP address : 172.17.23.18
Subnet mask : 255.255.248.0
Gateway : 172.17.17
    
```

- ▶ Note the IP address.
- ▶ Press the ↵ key
- ▶ Press the 0 key (Exit), then press the ↵ key.
- ▶ Press the 0 key (Exit), then press the ↵ key.

Your network is not equipped with a BOOTP/DHCP server

Manual configuration is required.

To set the network configuration(from the main configuration menu):

- ▶ Press the 2 key (Network configuration), then press the ↵ key.
- ▶ Press the 2 key (Modify Network settings), then press the ↵ key.
- ▶ Follow the instructions and enter the IP parameters:

```

1 : Read Network settings
2 : Modify Network settings
3 : Set ethernet speed
0 : Exit
    
```

For each of the following questions, you can press "Return" to select the value shown in braces, or you can enter a new value
Should this target obtain IP settings from the network?[N] N
Static IP address [172.17.16.16]? 172.16.1.82
Subnet mask IP address [255.255.0.0]? 255.255.255.0
Gateway address IP address [0.0.0.0]? 172.17.17.1
Done

Wait until "Done" is displayed, indicating that the IP parameters have been saved.

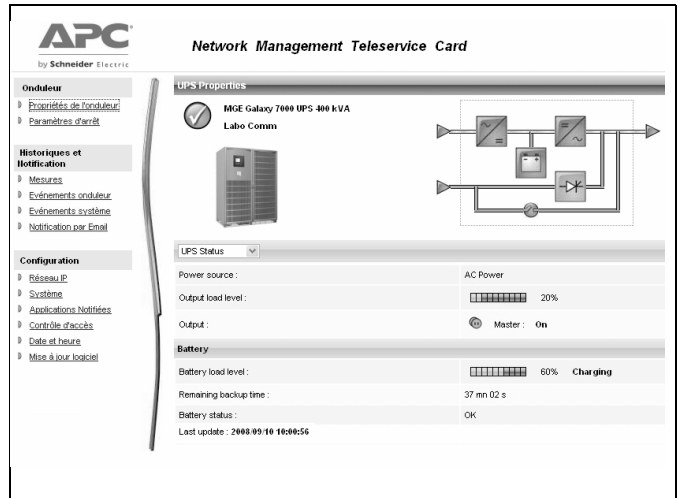
- ▶ Press the 0 key (Exit), then press the ↵ key.
- ▶ Press the 1 key (Reset), then press the ↵ key.

The card restarts with the new IP settings (after approx. two minutes).

ACCESS TO SUPERVISION

To check whether the **Network Management Teleservice Card** is operational after installation and IP settings, proceed as follows.

- ▶ Run a browser
- ▶ Enter in the address bar:
http://IP address/ (e.g. <http://172.16.1.82/>)
- ▶ The home page is displayed:



- ▶ Set the time by clicking the Time command.
- ▶ Continue configuration via the sections in the Settings menu.

Teleservice procedure

- ▶ Install the **Network Management Teleservice Card** kit using the present manual.
- ▶ Fill in the information form (3402228500).
- ▶ Send the form to your Teleservice centre (by Fax or Internet).
- ▶ Your centre will activate this service.
- ▶ You receive an acknowledgement of receipt.

The information form must be sent back in order to trigger remote monitoring of your equipment.

USER MANUAL

The manual (34003991EN) provides all the information required to use, install and configure the **Network Management Teleservice Card**.

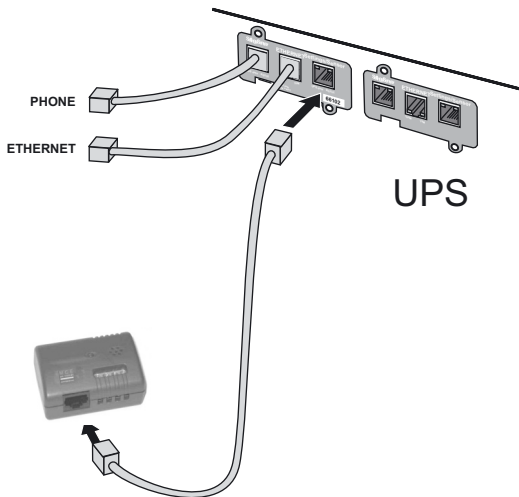
For more information on the supervision, control and configuration functions offered by the **Network Management Teleservice Card**, see the user manual on the www.apc.com web site.

SENSOR CONNECTION (option)

The Environment sensor is a **Network Management Teleservice Card** option.

The sensor remotely monitors the UPS environment by regularly measuring the temperature and humidity, and checking the states of two external contacts. It can also send alarms (e-mail, SNMP trap) tripped by pre-set thresholds.

Connection is made via the Service port (Settings/Sensor) on the **Network Management Teleservice Card**. The sensor is detected automatically. Configuration and supervision use a menu that may be accessed directly from the home page. For more information, see the user manual of the **Network Teleservice Management Card**.



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Network Management Teleservice Card

UPS

- UPS Properties
- Shutdown Parameters

Logs and Notification

- Measurements
- Event Log
- System Log
- Email Notification

Settings

- Network
- System
- Notified Applications
- Access Control
- Time
- Firmware Upload

Environment

- Status
- Settings
- Log

Environment Status

MGE Galaxy 7000 UPS 400 kVA

Temperature

0 °C 25.2 °C 70 °C

Min: 21.5 recorded on 2008/06/23 17:45:14
Max: 35.4 recorded on 2008/06/26 03:08:40

Reset Min/Max Calibrate

Humidity

0 % 37.3 % 100 %

Min: 26.9 % recorded on 2008/06/26 04:02:09
Max: 61.2 % recorded on 2008/06/23 17:45:14

Reset Min/Max Calibrate

Input #1

1970/01/01 00:00:41 Input #1 close

Input #2

1970/01/01 00:00:41 Input #2 close

TECHNICAL CHARACTERISTICS

Physical characteristics	
Dimensions (W x D x H)	132 x 66 x 42 mm
Weight	85 g
RoHS	100% compatible
Storage	
Storage temperature range	-10°C to 70°C
Ambient conditions	
Operating temperature range	0°C to 40°C
Relative humidity	90% RH max. without condensation
Card performance	
Supply voltage	5V ±5%
Supply current (all LEDs ON and Environment Sensor connected)	500 mA max.
Functions	
Web supervision	5 browsers max. (http), 3 browsers max. (https)
Languages	English
Alarms	E-mail, SNMP TRAP, Web page
Log	400 measurements or events
Server protection	Up to 35 servers protected
Network	Fast ETHERNET, 10/100 Mbits, auto-negotiation HTTP 1.1, SNMP V1, NTP, TFTP, SMTP, BOOTP/DHCP
Identification	User name and password
Security	SSL 3.0, TLS 1.0
Browsers	Microsoft Internet Explorer 6.x or higher
NMS	Enterprise Power Manager (EPM) Management-Pac 2
MIB	MIB II standard - MGE V1.7 MIB
Settings (default values)	
IP network	BOOTP/DHCP enabled IP address: 172.17.16.16 Subnet mask: 255.255.0.0 Gateway: 0.0.0.0 NTP server: pool.ntp.org
Web-page access control	User name: MGEUPS Password: MGEUPS
Service-port menu access control	Password: MGEUPS or mgeups (not modifiable)
Date and time	Synchronise with an NTP server (GMT)
Service port	38400 bits/s, 8 bits, 1 bit stop, no parity
Standards	
ITE (Information Technology Equipment) safety	IEC/EN 60950-1 (2005)
R&TTE	99/05/EEC
EMC	EN 61000-6-2 (2005), EN 61000-6-3 (2006) 2004/108/EEC
Low voltage	2006/95/EEC
FCC (Federal Communication Commission)	This equipment has been tested and found to comply with the limits for a Class B 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.