NETWORK MANAGEMENT CARD A COMPLETE INSTALLATION AND USER GUIDE FOR SNMP/HTTP INTERFACE

### NETWORK MANAGEMENT CARD

An SNMP/ HTTP interface for the CertaUPS range of UPS systems.

### www.certaups.com

For assistance please contact your local CertaUPS partner.

#### CONTENTS

HARDWARE INSTALLATION	. 5
CONFIGURATION	. 6
WINDOWS 10 SETUP	. 6
CNMC / UPS WEB INTERFACE	. 8
FINDING THE IP ADDRESS OF THE CNMC CARD IF PREVIOUSLY CHANGED	. 9
SYSTEM PROTECT SOFTWARE (SPS) SETUP	10
EMP CONNECTION (OPTIONAL)	12

#### HARDWARE INSTALLATION

KEEP THESE INSTRUCTIONS IN A SAFE PLACE This section contains essential information and instructions that should be followed to ensure the safe handling, installation and maintenance of CertaUPS equipment

Required tools – Phillips Screwdriver



BEFORE INSERTING THE NMC ENSURE UPS IS SWITCHED OFF

Remove the blanking plate from the intelligent slot on the rear of the UPS and insert the Network Management Card (CNMC) into the intelligent slot. Secure the CNMC card into place with the screws provided.



#### STEP 2

Connect the CNMC network port to either a LAN switch, or directly to the network port or a computer. (Direct connection may require a crossover cable\*.)

\*Crossover cable not included

The ACT and 100 LEDs should illuminate to indicate that a physical connection to another network device has been made If the lights do not illuminate, ensure both ends are seated correctly and that the appropriate cable type has been used.



#### CONFIGURATION

The default IP address of the CNMC is 10.10.10.10. To allow communication, the IP address of the connecting device must be brought into the range of the CNMC i.e., 10.10.10.11. This can be changed back to its original configuration later if necessary.

WINDOWS 10 SETUP

1. Right click the network icon located to the right of the task bar.



2. Select "open network and internet settings" from the menu.



3. From the network and internet settings window select "ethernet" from the menu, followed by "change adapter options" from the menu on the right-hand side.

Settings	Related settings
டை Home	Change adapter options
Find a setting ,0	Change advanced sharing options
Network & Internet	Network and Sharing Centre
⊕ Status	Windows Firewall
<i>ſſ</i> ≈ WiFi	
🔛 Ethernet	
☆ Dial-up	

4. Right click the option of the adaptor being used for the connection and select "properties"



5. From the "connection properties" screen, click the line that states "TCP/IPV4" so it is highlighted in blue, and click the "properties" button below

Clean Day	torosoft Networks et Scheduler Inter Sharing for Microsof otocol Version 6 (TCP/If action 4 (TCP/If action 4 (TCP/If Topology Discovery Na Topology Discovery Re	rt. Networks PvE) 2009 Sport /O Driver sponder
lostal	Uninstal	Properties

6. Only the IP address and Subnet mask are required to allow communication. This should be set to something in the same range (10.10.10.X) but not identical to the CNMC, or the IP addresses will be in conflict with one another.

apability. Otherwise, you need ne appropriate IP settings.	d to ask your network administrator
Obtain an IP address automati	ically
Use the following IP address:	
IP address:	10 . 10 . 10 . 1
Subnet mask:	255.0.0.0
efault gateway:	
Obtain DNS server address au	itomatically
Use the following DNS server a	addresses:
Preferred DNS server:	
Alternate DNS server:	

Make a note of any existing IP settings as they will need o be reentered once configuration is complete. When changing these details, normal network connectivity will stop until returned to its initial state.

Once the IP information has been entered, select "OK" on the dialog boxes opened in step 5&6

7. The PC should now be able to communicate with the CNMC, you can confirm this via a 'ping'.

Simultaneously press the '##' key + the 'R' key. This will load "Run" then within the run window, enter 'CMD' and click "OK".

🖅 Run		х
	Type the name of a program, folder, document or Internet resource, and Windows will open it for you.	
Open:	CMD	v
	OK Cancel Browse.	

Now type "PING 10.10.10.10" into the opened window and press enter. The test will run 4 times.\*



\*If the response is "reply from 10.10.10.10: bytes=32..." the configuration has been successful. Any other results are a failure in communication. Check the above steps.

#### **CNMC / UPS WEB INTERFACE**

 Now the PC and CNMC/UPS are synchronised, key system information such as current status and settings configurations can be browsed in a webpage. To do this, open a web browser, enter the recently set IP of the CNMC (10.10.10.10) in the address bar of the browser to log onto the CNMC card.

\*If the page fails to load properly, try an alternative browser.

The default login details are

Username: root Password: password

Certal		MANAGEMENT CARD FOR UPS	ON-LINE Location: Office 26/05/2017 17:14:27
UPS Monitoring	UPS Monitoring » UPS Status		help
UPS Status			
UPS Alarm	UPS Status	Line	
UPS Parameters	Input		
UPS Powered Devices	Voltage	232.9 V	
UPS Identification	Frequency	50.0 Hz	
IPS Management	Output		
UPS Battery Test	Load(%)	0	
UPS Battery Test Schedule	Voltage	2297V	
SNMP TRAP Receivers	Frequency	50.0 Hz	
UPS Configuration	Prequency	50.0 Hz	
UPS Control	Battery	2 m - 1	
UPS Shutdown	Status	Battery Normal	
Shutdown Schedule	Capacity(%)	98	
etungs	Voltage	27.2 V	
NMC System	Time On Battery	00:00:00	
Reboot System			
Access Control			
SNMDud/2 Configuration			
Wake On LAN			
Email Notification			
Firmware Upload			
File Management			
005			
UPSLog			
UPS Statistics Log			
Event Log			
and the second se			



The IP address of the CNMC can be altered by clicking the "NMC System" button down the left menu bar.

\*The required IP depends on the users LAN configuration. Contact the network administrator to confirm the necessary configuration.

2. When saving the amended CNMC network configuration the user might be prompted for authentication.

Configuration of the CNC IP address is now complete. Changes made during step 6 can be returned to their original values if necessary. \*

\*Repeat step 7 using the new IP details to confirm that the CNMC has been configured successfully.

← → × ① 10.10.10.10		9 ☆
Certal	Authentication Require http://10.10.10.10 require Your connection to this si	ired X S Username and password. S Location Office Let is not private.
PS Monitoring	Setting	help
UPS Status	Systa User Name:	
UPS Alarm	BootPf	
UPS Parameters	Password:	
UPS Powered Devices	P 740	
UPS Identification	oupre	
IPS Management	Gatewa	Log la Cassal
UPS Battery Test	Primar	Log m Concer
UPS Battery Test Schedule	Secon	
SNMP TRAP Receivers	1Pv6	Enable *
UPS Configuration	IPv6 Auto Configuration	Enable T
UPS Control	IPu6 Address 1	E. C.
UPS Shutdown	Desta lanath	0
Shutdown Schedule	Press renger	P
ettings	Invo Gabeway (United	0.0.0 0
NMC system	IPv6 Local Address	FE80: 220 85FF FEF7 A361
Neuron System	IPv6 Address 2	
Access Control		Save
SMMDv1/2 Configuration	SNMP Support	SNMP v1 *
Wake On LAN	Teinet Connection	Enable T
Email Notification	SSH Connection	Dirable *
Firmware Upload	ewtp.	Eastle .
File Management	Lange may load for web arrange	Plante P
ogs	Login required for web access	UISODIO *
UPS Log	UPS Description	
UPS Statistics Log	UPS Location	Office
Event Log	Default Language	Auto *
System Log	History Log Interval(Sec)	60
	Production is not induce and it that	20

#### FINDING THE IP ADDRESS OF THE CNMC CARD IF PREVIOUSLY CHANGED

If the IP address of the CNMC card has already been changed from the default 10.10.10.10 and the user is unable to connect to the CNMC over the network, the current IP and subnet mask settings can be read from the NMC to enable access.

- 1. Connect to the CNMC card's setter port using an RJ45 to DB9 serial connector. (The user might use a USB to serial adapter)
- 2. Open the serial terminal client on the PC, such as Hyper terminal, Tera Term or Putty.
- 3. Enter the following settings for a serial connection

S PuTTY Configuration	)	<b></b>
Category:		
Session	Options controlling	local serial lines
- Logging - Terminal	Select a serial line	0084
- Keyboard - Bell	Configure the setal line	CONT
· Window	Speed (baud)	9600
- Behaviour	Deta bita	8
- Translation - Selection	Stop bits	1
Colours	Party	None •
- Connection - Deta	Bow control	None •
- Proxy - Teinet		
- Riogin H- SSH		
550		
About		jpen Qancel

4. Once the connection is established, the user will be prompted to enter the password. The default password is **password** 

+
Network Management Card Configure Menu
,
Password:

5. After inputting the CNMC password, all main menus will be shown on the hyper terminal interface. Refer to the below diagram.

***************************************	++
Network Management Card Configure Menu	1
+	+
1. IP Configurations	
2. Pass Through	
3. Reset Configuration to default	
4. Restart	
5. Change Password	
0. Exit	

Please Enter Your Choice :

6. From the main menu, selecting option 1 will display the current IP settings for the CNMC card.



7. Once the IP address and Subnet mask details have been found, they can be used in the above 'configuration guide' to connect via a web browser.

#### SYSTEM PROTECT SOFTWARE (SPS) SETUP

1. Double click the setup.exe icon to begin the installation process.



2. Choose a suitable directory to install the software into. It is advisable to leave this as its default directory.



3. To start the SPS software, follow the directory path shown from the start menu (start > all programmes > System Protect Software > Stat System Protect Software)

System Protect Software
 Start System Protect Service
 Uninstall System Protect Software

The system tray icon will then load (

4. To configure, left click the SPS icon shown in the system tray and select "configuration"

SPS will then load, and this window will open









5. Select "system > act as administrator" the default password ("admin") will need to be inserted.



6. Within "device list" select Add.

Enter the CNC IP address chosen previously and device model.

Add	×
IP Address or Host Name:	192.168.1.101
Service or Port:	2993
Device Model:	CertaUPS
Cluster:	
Powered By:	Master
	OK Cancel

7. If the connection was successful, a dialog box will confirm the details given.



8. Once a connection has been established, the UPS shutdown and other parameters can be configured.

ysten Log Language		
Device List Events		
- <u>S</u> 10.10.10(2993) - Ce		-
Rattery Low		
UPS Overload		
UPS Over Temperature		
Veekly Schedule Shutdown		
Specific Day Schedule Shutdown		
EMP Over Temperature		
BMP Over Humidity		
Add Remove EMP Contact1 Alarm		
Modify View EMP Contact2 Alarm		<u> </u>
Alae: MattWight.pcontrol.local		Default
System Shutoown Options		
Cancel Shutdown if events Restored in Shutdown Delay	Action	
	C Event Warning	
Shutdown Delay: 0 Sec.		
Run Script Before Shutdown	Shutdown	
Pile Path:	1	
	C Sleep	
Script Max Execution Time: 60 Sec.		
04 0000 100	alar and a second s	

#### **EMP CONNECTION (OPTIONAL)**

The environmental monitor probe (EMP) is an NMC option. It monitors the temperature and humidity of the UPS environment and checks the state of two external contacts. It can also send alarms (email, trap) by pre-set thresholds. Connection is made via the setting port on the NMC, the EMP is detected automatically.

Configuration can be made via the UPS configuration menu.



Network Management C 🗙					
← → C	10.10.10.10				<b>☆</b> :
Certal	JPS	NETWORK MANAGEM	IENT CARD FOR UPS	ON-LINE Location: 30/05/20	Office 17 11:27:20
UPS Monitoring	UPS Managemen	t » UPS Configuration			help
UPS Status	105				
UPS Alarm	Over Load Set Point%) 80				
UPS Parameters	Over Load bet Politicity)		50		
UPS Powered Devices	Over Temperature Set Point(°C)		50		
UPS Identification	Buzzer		On 🔻		
UPS Management	Save				
UPS Battery Test					
UPS Battery Test Schedule	EMP	Auto T			
SNMP TRAP Receivers	Sensor	ensor Description		Low Point	High Point
UPS Configuration	Temperature/90) EMP Temperature				
UPS Control	reinperature( G)	And the second second		15	50
UPS shutdown	Humidity(%)	EMP Humidity			
Shutdown Schedule				50	90
NMC Sectors	Alarm-1	Alarm-1		Not Used	•
Rebool System	Alarm-2	Alarm-2		Not Used	•
Access Control	Save				
Date and Time					
SNMPy1/2 Configuration	UPS Battery				
Wake On LAN	Last Replace Date(dd/mm/yyyy)				
Email Notification	Shutdown when battery capacity is below(%)		30		
Firmware Upload	Save				
File Management					
Logs					
UPS Log					
UPS Statistics Log					
Event Log					

\* For further technical assistance, email <u>techsupport@certaups.com</u> or subscribe to our <u>YouTube</u> <u>channel</u> for unboxing videos, quick start guides, and software screencasts.

www.certaups.com