

# NPM-PDU

**Network Power Manager Distribution Unit** 

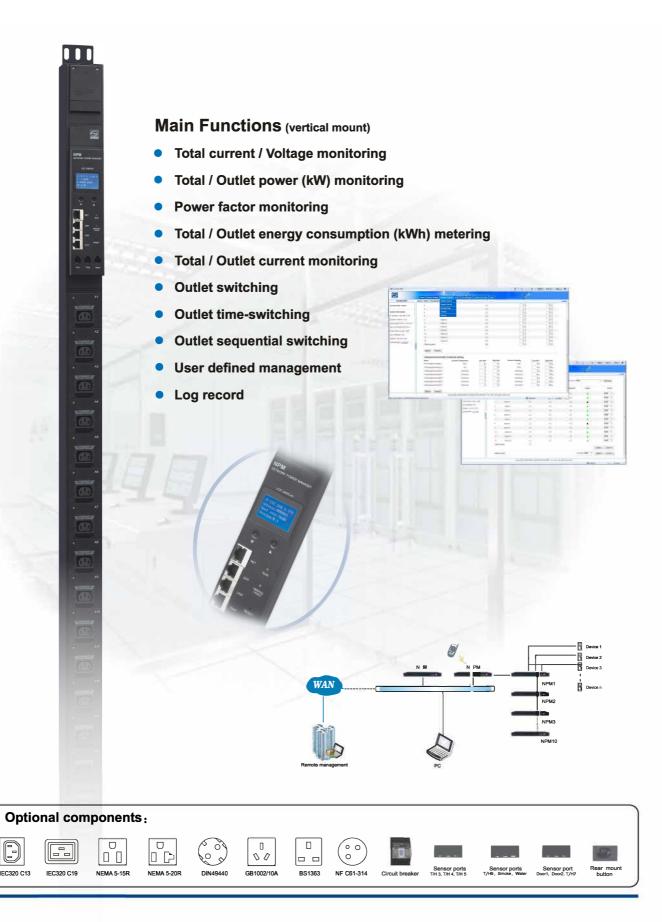












## Features (vertical mount)

## 0 U:

Vertical mount, no rack space occupied;

#### 1 U thickness:

Thin and high strengthen aluminum alloy, do not affect the installation of other devices;

#### 1.5 U width:

Narrow aluminum alloy, easy installation;

# 2 /Double protection:

Threshold exceeding protection, master circuit breaker protection;

## 3 access method:

SNMP, Telnet, Web;

# 4 metering data:

Total and outlet energy consumption (kWh), total and outlet power (kW);

#### 5 function series:

A (Total metered), B (Outlet metered), C (Total metered and Outlet switched), D (Outlet metered and switched), E (Group metered and switched);

## 6 alarm methods:

E-mail, SNMP trap, indicator on web interface flashes, audible and visible alarm, LCD display flashes and NPM buzzers, SMS alert (not available in some countries);

### 7 main monitoring data:

Input voltage, total and outlet current, power factor, power (kW), outlet state, environment state;

## 8 outlet types:

IEC320 C13, IEC320 C19, NEMA5-15R, NEMA5-20R, GB1002 10A, DIN49440, NFC61-314, BS1363;

# 9 main controlling functions:

Total current, outlet current, outlet switching, group outlet switching, sequential switching with delay, threshold exceeding alerts, power automatic cut-off when overload occurs, centralized management;

# 10 NPM daisy-chain:

10 NPM daisy-chain through serial port connection;

# 11 sensor ports:

2 temperature and humidity sensor ports on NPM, other sensor ports are on optional modules;

# 24 outlets at most for 42U rack:

Outlets designed with every 4 on one board, can do customized specification;

## 32 A Max. load on each phase or circuit:

Voltage 110V, 220V, 380V, Max. 380V with 96A load;

# Nx NPM centralized management:

Via CLEVER Manager, administrator or user can do centralized management of thousands of NPM;



# NPM7000/8000 (vertical mount) function parameters list 1

Main Functions		Details		Function levels				
			Monitor		Control			
			A	В	С	D	Е	
		Total load current	•	•	•	•	•	
		Input voltage	•	•	•	•		
		Total energy consumption (kWh)	•	•	•	•	•	
		Total power (kW) and power factor	•	•	•	•	•	
Monitor		Outlet power (kW)		•		•		
		Group outlet power (kW)					•	
		Group outlet load current					•	
		Outlet load current		•		•		
		Group outlet state					•	
		Outlet state (on/off)		•	•	•		
		System operating state (RUN indicator)	•	•	•	•	•	
		Temperature and humidity state	•	•	•	•	•	
		Smoke occurs or not	•	•	•	•	•	
		Water-logging occurs or not	•	•	•	•	•	
		Door opened or closed	•	•	•	•	•	
		Outlet switching			•	•		
		Group outlet switching					•	
		Set the delay of outlet sequential switching			•	•		
Cont	rol	Set the delay of group outlet sequential switching					•	
55		Set the automatic switching time of outlet		·	•	•		
		Set the automatic switching time of group outlet					•	
		Set to cut off power or not when overload occurs				•	•	
Keep the	e former state	Keep the former state of group or individual outlet after reset			•	•	•	
		Threshold of total load current	•	•	•	•	•	
		Threshold of group outlet load current					•	
	User defined alarm	Threshold of outlet load current		•		•		
		Threshold of temperature and humidity	•	•	•	•	•	
Automatic	System automatic alarm	Threshold of total load current is exceeded	•	•	•	•	•	
alarm		Threshold of group outlet load current is exceeded					•	
		Threshold of outlet load current is exceeded		•		•		
		Smoke occurs	•	•	•	•	•	
		Water logging occurs	•	•	•	•	•	
		Door opening	•	•	•	•	•	
		Record the total energy consumption (kWh)	•	•	•	•		
	nsumption	Record the energy consumption of group outlet		-			•	
met	ering	Record the energy consumption of individual outlet		•				
		RUN indicator on controlling panel flashes and buzzer sounds						
		Indicator on Web interface flashes						
		Send Email to administrator automatically						
Ala	arm	Send SMS to administrator (not available in some countries)						
		SNMP send Trap alarm information						
		Logical port outputs level signal (RJ11 port, < 50VDC)						

# NPM7000/8000 (vertical mount) function parameters list 2

Main Functions	Details
Daisy-chain	10 NPM for daisy-chain ( < 5 is suggested)
Log record	Record and save the operation and alarm information which can be checked and output
Time synchronization	SNTP to realize network time synchronization
	Different user permission configuration
User management	Outlet alarm permission configuration
	Set the permission to clear the energy consumption (kWh) number
	Web, access via IE
Accessing method	SNMP V1, V2 support
	Telnet, SSH (optional)
Software system	Multi-user operation system, support software upgrade

# NPM7000/8000 (vertical mount) function parameters list 3

	Details		Parameters			
Main Functions			NPM7000		NPM8000	
	Rated input voltage		110/220VAC 50/60 Hz		380VAC 50/60 Hz	
Input characteristics	Max. load current		32A		3X32A	
input characteristics	Cable specification		3×2.5mm², 3×6.0mm²		5×2.5mm², 5×6.0mm²	
	Cable length		2.5M		2.5M	
	Rated output voltage		110/220VAC		220VAC	
	Outlet standard		IEC320 C13	EC320 C19  NEMA 5-20R	DIN49440 NF C61-314  GB1002 BS1363	
Output characteristics	Outlet specification		The standard outlet number is 12, 16, 20 or 24 for A, B, C, D series			
			The standard outlet is 2, 3, 4 or 5 groups for E series.  *Standard combination of each group is 5 x IEC320 C13 + 1 x IEC320 C19  *Can produce customized products if standard version cannot meet specific requirem			
	Outlet safety device		IEC320 C13 is patented outlet with anti-fall device to lock C14 plug			
	Sensor port	T/H1, T/H2				
	Logical port		Alarm			
	Product dimension		L: subject to actual length W: 66.6mm H: 44.4mm			
	Case material		Aluminum			
Physical properties	Case color		Black, with surface spray coating treatment			
	Mounting method		Both ends installation with brackets or rear button mounting			
	Factory standard fittings		User Manuel, 2 x RJ 45 network wire			
Environment characteristics	Working environment		Temperature: 0 - +55℃ Relative humidity: 5-95%			
Environment unaracteristics	Storage environment		Temperature: -20- +60℃ Relative humidity: 5-95%			
	Master circuit breaker module					
	Rear button mounting					
	Terminal block Connect optional cables and co		connectors			
Optional functions	Centralized management		ze centralized mo	onitoring, controlling a	and management of thousand of N	
		Sensor ports module: T/H 3, T		Optional functions (2 different modules can be		
	Sensor port expanding Sensor ports module: T/H 6, S		Smoke, Water			
		Sensor ports module: Door 1,	door 2, T/H7			

# NPM6000 (horizontal mount) function parameters list 1

Main Functions				Function levels								
		Details	Monitor		Control							
				В	C	D						
Monitor		Total load current	•	•	•	•						
		Input voltage	•	•	•	•						
		Total energy consumption (kWh)	•	•	•	•						
		Total power (kW) and power factor	•	•	•	•						
		Outlet power (kW)		•		•						
		Outlet load current		•								
		Outlet state (on/off)		•	•							
		System operating state (RUN indicator)	•	•	•							
		Temperature and humidity state	•	•	•							
		Outlet switching			•							
		Set the delay of outlet sequential switching			•							
Co	ontrol	Set the automatic switching time of outlet			•							
		Set to cut off power or not when overload occurs										
Keep the	former state	Keep the former state of group or individual outlet after reset			•							
	User defined alarm	Threshold of total load current	•	•	•							
		Threshold of outlet load current		•								
Automatic alarm		Threshold of temperature and humidity	•	•	•							
	System automatic alarm	Threshold of total load current is exceeded	•	•	•							
		Threshold of outlet load current is exceeded		•								
_		Record the total energy consumption (kWh)	•	•	•	•						
	onsumption etering	Record the energy consumption of individual outlet		•								
		RUN indicator on controlling panel flashes and buzzer sounds										
		Indicator on Web interface flashes										
		Send Email to administrator automatically										
A	larm	Send SMS to administrator (not available in some countries)										
		SNMP sends Trap alarm information										
		Logical port outputs level signal (RJ11 port, ≤ 50VDC)										
Log	record	10 NPM for daisy-chain ( < 5 is suggested)										
Dais	y-chain	Record and save the operation and alarm information which can be checked and output										
Time syr	nchronization	SNTP to realize network time synchronization										
		Different user permission configuration										
User ma	anagement	Outlet alarm permission configuration										
		Set the permission to clear the energy consumption (kWh) number										
		Web, access via IE										
Accessi	ng method	SNMP V1, V2 support										
7 toocsoming method		Telnet, SSH (optional)										
						Multi-user operation system, support software upgrade						

# 6.1 NPM7000/8000 A series



# **Typical models**

Product code	Socket standard	Outlet quantity	Load current (A)
NA712C1212	IEC320 C13	12	16
NA712H1612	IEC320 C13 / C19	16	16
NA712M2012	NEMA 5-15R	20	16
NA712H2012	NEMA 5-15 / 5-20R	20	16
NA712F2412	NF C61-314	24	16
NA812D1242	DIN49440	12	3×32
NA812B2442	BS1363	24	3×32

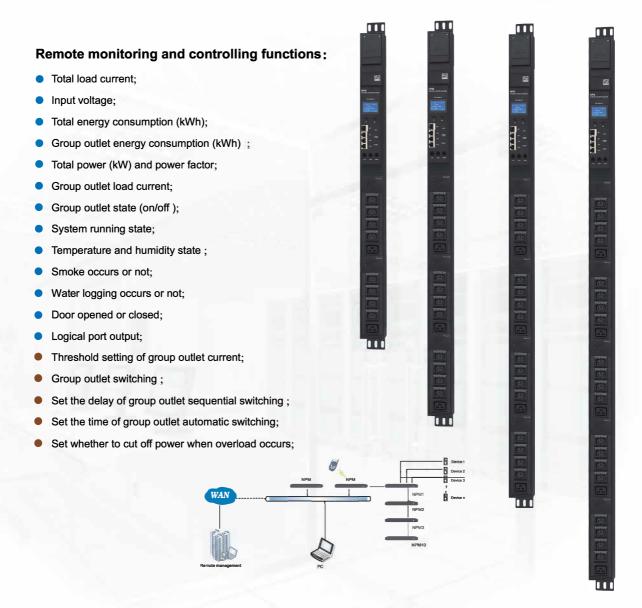
# 6.3 NPM7000/8000 C series



## **Typical models**

Product code	Socket standard	Outlet quantity	Load current (A)
NC712C1212	IEC320 C13	12	16
NC712H1612	IEC320 C13 / C19	16	16
NC712M2012	NEMA 5-15R	20	16
NC712H2012	NEMA 5-15 / 5-20R	20	16
NC712F2412	NF C61-314	24	16
NC812D1242	DIN49440	12	3×32
NC812B2442	BS1363	24	3×32

# 6.5 NPM7000/8000 E series



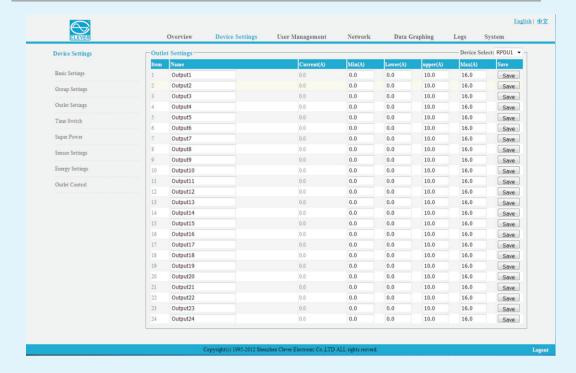
## **Typical models**

Product code	Socket standard	Outlet quantity	Load current (A)
NE712C1212	IEC320 C13	12	16
NE712H1612	IEC320 C13 / C19	16	16
NE712M2012	NEMA 5-15R	20	16
NE712H2012	NEMA 5-15 / 5-20R	20	16
NE712F2412	NF C61-314	24	16
NE812D1242	DIN49440	12	3×32
NE812B2442	BS1363	24	3×32

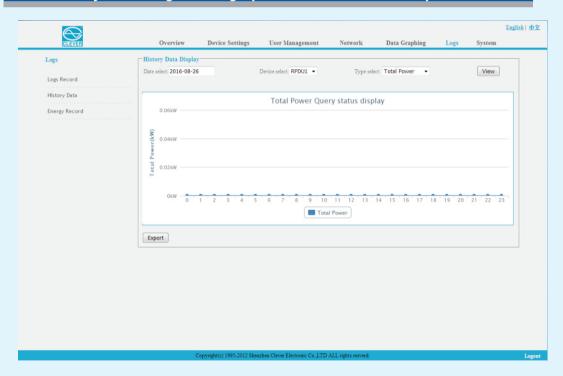
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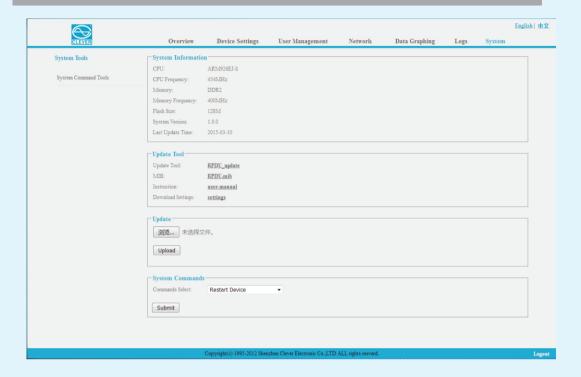
## PDU Outlets can be freely grouped



# Firmware system can generate graphs to show the status of past 24hours



# Firmware system supports remote upgrade without power off





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