

# Battery backup NEO FLX S Series



The **NEO Series** is normally used in security facilities where the requirements are higher concerning; more features and alarm functions, longer spare times or when the power supply need to handle higher loads.

## INTELLIGENT CHARGING

The **NEO series** offers **INTELLIGENT CHARGING** which means that when the batteries are fully charged they will be disconnected electronically for standby mode for up to 20 days. By charging the batteries every 20 days (instead of not being used), the system extends the battery life by up to 50%. The batteries automatically reconnects in less than 50 microseconds when needed. The NEO Series can be used both with AGM batteries and Lithium LiFePO4 batteries.

## FLEXIBLE & EXPENDABLE

The **NEO FLX S series** shall be mounted on the wall or in 19" rack (reversible angles included). The system can be supplemented with a battery box if needed (only 24V). The battery box shall be places underneath the battery back-up and connects through a cable thats comes with the battery box. The battery box have space for 4x 14Ah batteries per each battery box.

## MORE THAN JUST A POWERSUPPLY

If the NEO series is connected to RS485 (needs communication with superior system) it is able to send information about;

- System voltage (max, average, minimum)
- System temperature (max, average, minimum)

The system also presents all alarm functions through RS485 communication.

The above features are also possible to read through a PC software which is available to download free of charge. In addition to the PC software, you also need a USB-TTL adapter.

Expected backup operating time at below conditions (new batteries):

@ Current

System Voltage	Batteries		0,5A	1A	2A	4A	6A	8A
12V	2x 7,2Ah		24h	12h	5h	2h	1h	30min
12V	2x 14Ah		48h	24h	10h	4h	2h	1,5h
24V	2x 7,2Ah		12h	5h	2h	1h	30min	15min
24V	2x 14Ah		24h	12h	5h	2h	1h	45min
24V	6x 14Ah (42Ah)	(with 1x battery box)	72h	38h	20h	9h	5h	3,5h
24V	10x 14Ah (70Ah)	(with 2x battery box)	120h	65h	32h	16h	11h	7h

# Technical data

NEO 12V 5A FLX S

NEO 12V 10A FLX S

NEO 24V 3A FLX S

NEO 24V 5A FLX S

NEO 24V 10A FLX S

## Recommended environment and the product's enclosure:

Recommended environment:	Environment Class 1, Inhouse, 20% ~ 90% relative humidity				
Ambient temperature:	+5 °C - 40 °C (For optimal battery life +15 °C - +25 °C)				
Protection class:	IP32				
Recommended mounting:	Wall or Rack (angles included)				
Dimension (HxWxD):	222x437x145mm (5U)				
Net weight:	6kg	6,5kg	6kg	6,5kg	7kg
Number of cable penetrations:	9 pcs baffle inlets/knockouts				
The color of the enclosure:	Black				
Built in fan for cooling:	No	Yes	No	Yes	Yes

## Electrical information:

Input voltage:	110V-264VAC/47-63Hz				
Output voltage:	13,6VDC		27,3VDC		
Max current:	5A	10A	3A	5A	10A
Charge current:	1A	1A	1A	1A	1A
Rated power:	75W	120W	75W	120W	240W
Overload:	105-150% rated output power				
Ripple at normal operation:	120mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p
Efficiency:	89%	87,5%	90%	89%	89%
Heat generation at 50% / 80% of rated power:	4W / 7W	10W / 16W	4,5W / 7,3W	8,4W / 13,5W	17W / 27W
Input current:	1,4A	1,7A	1,4A	1,7A	2A
Number of fused outputs:	2 pcs				
Type of fuse output:	2x F5A (glass)	2x F10A (glass)	2x F3A (glass)	2x F5A (glass)	2x F10A (glass)
Deep-discharge protection occurs at:	10,5V		21V		
Possible to connect in parallel:	YES				
Protection against:	Overload, Overvoltage, Overtemperature, Short circuit and Deep discharge				
Alarm functions (3 outputs):	Delayed power failure (10 sec) (output 1), low battery voltage in battery mode (24V), over/undervoltage, disconnected batteries (10 sec), load fuse failure (output 2), tamper alarm (output 3).				
Alarm through:	Alternating relay or RS485 (need to have communication with parent system for RS485 communication)				

## Article information:

Article name:	NEO 12V 5A FLX S	NEO 12V 10A FLX S	NEO 24V 3A FLX S	NEO 24V 5A FLX S	NEO 24V 10A FLX S
Article number:	FS01N10112P050	FS01N10112P100	FS01N10124P030	FS01N10124P050	FS01N10124P100
E-number:	5213528	5213529	5213530	5213531	5213532
The products meet:	EMC Directive 2014/30EU, Low Voltage directive: 2014/35/EU CE directive according to 765/2008, Emission: EN61000-6-2:2001, EN55022:1998--A1:2000, A2:2003 Class B, EN61000-3-2:2001. Immunity: EN61000-6-2:2005, EN61000-4-2, -3, 4, -5, -6, -11.				
Warranty period:	2 years				
Designed and produced by:	Milleteknik AB				
Country of origin:	Sweden				

## Information and choice of battery / batteries:

Designated battery type:	12V Maintenance-free batteries, type AGM or Lithium LiFePO4				
Possible battery types:	2x 7,2Ah / 2x 14Ah				
Recommended batteries:	UPLUS 10+ Design Life 7,2Ah and 14Ah batteries				
Article number 7,2Ah batteries:	MT113-12V07-01				
Article number 14Ah batteries:	MT113-12V14-01				

Version: NEO3