

Battery backup NEO FLX L 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 Series FLX L Series** can be supplemented with up to 4 battery boxes if needed. The battery boxes are connected through a pluggable connector. The battery box have space for up to 2x 45Ah 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 | | 2A | 4A | 8A | 10A | 14A | 18A |
|----------------|------------------|-----------------------------|------|-----|-----|------|-------|-------|
| 24V | 2x 28Ah | | 12h | 5h | 2h | 1,5h | 50min | 30min |
| 24V | 2x 45Ah | | 21h | 12h | 4h | 3h | 2h | 1,5h |
| 24V | 4x 28Ah (56Ah) | (with 1x FLX M battery box) | 25h | 12h | 5h | 4h | 2,5h | 1,5h |
| 24V | 4x 45Ah (90Ah) | (with 1x FLX M battery box) | 42h | 20h | 12h | 8h | 5h | 3,5h |
| 24V | 6x 28Ah (84Ah) | (with 2x FLX M battery box) | 38h | 18h | 9h | 7h | 4,5h | 3h |
| 24V | 6x 45Ah (135Ah) | (with 2x FLX M battery box) | 64h | 30h | 15h | 12h | 9h | 6h |
| 24V | 8x 28Ah (112Ah) | (with 3x FLX M battery box) | 50h | 25h | 12h | 10h | 6,5h | 4,5h |
| 24V | 8x 45Ah (180Ah) | (with 3x FLX M battery box) | 82h | 42h | 20h | 16h | 12h | 10h |
| 24V | 10x 28Ah (140Ah) | (with 4x FLX M battery box) | 65h | 32h | 16h | 12h | 9,5h | 6,5h |
| 24V | 10x 45Ah (225Ah) | (with 4x FLX M battery box) | 108h | 54h | 26h | 20h | 15h | 13h |

Technical data

NEO 24V 5A FLX L

NEO 24V 10A FLX L

NEO 24V 15A FLX L

NEO 24V 25A FLX L

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): | 444x437x212mm (10U) | | | |
| Net weight: | 12kg | 13kg | 14kg | 15kg |
| Number of cable penetrations: | 4 pcs baffle inlets/knockouts | | | |
| The color of the enclosure: | Black | | | |
| Built in fan for cooling: | Yes | | | |

Electrical information:

| | | | | |
|--|--|----------------|-----------------------------|-----------|
| Input voltage: | 110V-264VAC/47-63Hz | | | |
| Output voltage: | 27,3VDC | | | |
| Max current: | 5A | 10A | 15A | 25A |
| Charge current: | 1A | 1A | 3A | 3A |
| Rated power: | 156W | 240W | 336W | 648W |
| Overload: | 105-150% rated output | | 105-135% rated output power | |
| Ripple at normal operation: | 200mVp-p | 200mVp-p | 150mVp-p | 150mVp-p |
| Efficiency: | 89% | 89% | 87% | 88% |
| Heat generation at 50% / 80% of rated power: | 8,4W / 13,5W | 17W / 27W | 31W / 49W | 50W / 80W |
| Input current: | 1,7A | 2A | 1,8A | 3,6A |
| Number of fused outputs: | 2 pcs | | | |
| Type of fuse output: | 2xF5A (glass) | 2xF10A (glass) | 2xC16A | 2xC25A |
| Deep-discharge protection occurs at: | 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 24V 5A FLX L | NEO 24V 10A FLX L | NEO 24V 15A FLX L | NEO 24V 25A FLX L |
| Article number: | FL01N10124P050 | FL01N10124P100 | FL01P10024P150 | FL01P10024P250 |
| E-number: | 5213541 | 5213542 | 5213543 | 5213544 |
| The product meets: | 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 28Ah or 2x 45Ah | | | |
| Recommended batteries: | UPLUS 10+ Design Life 28Ah or UPLUS 10+ Design Life 45Ah | | | |
| Article number 28Ah batteries: | MT113-12V28-01 | | | |
| Article number 45Ah batteries: | MT113-12V45-01 | | | |

Version: NEO3 & Pro1