

Battery backup NOVA FLX S Series



The **NOVA series** is mainly used in security systems where an SSF 1014* approved battery backup is required or where the requirements are higher concerning; more features and alarm functions.

INTELLIGENT CHARGING

The **NOVA 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.

BATTERY CHANGE INDICATION

The system is also equipped with internal power resistors for qualified battery capacity test, which announces when the batteries need to be replaced before the batteries are aged.

FLEXIBLE & EXPENDABLE

The **NOVA 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. The battery box shall be places underneath the battery backup 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 NOVA series is connected to RS485 (needs communication with superior system) it is able to send information about;

- System load (max, average, minimum)
- System voltage (max, average, minimum)
- System temperature (max, average, minimum)
- Possible operating time in case of power failure

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
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

NOVA 24V 5A FLX S

NOVA 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 (reversible angles included)	
Dimension (HxWxD):	222x437x145mm (5U)	
Net weight:	6,5kg	7kg
Number of cable penetrations:	9 pcs baffle inlets/knockouts	
The color of the enclosure:	Black	
Built in fan for cooling:	Yes	Yes

Electrical information:

Input voltage:	110V-264VAC/47-63Hz	
Output voltage:	27,3VDC	
Load current I _{max a} :	4,5A	10A
Load current I _{max b} :	5A	10A
Rated power:	120W	240W
Overload:	105-150% rated output power	
Ripple at normal operation:	200mVp-p	200mVp-p
Efficiency:	84%	89%
Heat generation at 50% / 80% of rated power:	8,4W / 13,5W	17W / 27W
Input current:	1,7A	2A
Number of fused outputs:	2pcs	
Type of fuse output:	2x F5A (glass)	2x F10A (glass)
Deep-discharge protection occurs at:	21V	
Possible to connect in parallel:	YES	
Protection against:	Overload, Overvoltage, Overtemperature, Short circuit and Deep discharge	
Alarm functions (4 outputs):	Power failure (output 1), low battery voltage (output 2), over/undervoltage, aged batteries, disconnected batteries, battery short circuit failure, battery capacity to low, charging error, low system voltage, load fuse failure (output 3), tamper alarm (output 4).	
Alarm through:	Alternating relay or RS485. (need to have communication with parent system for RS485 communication)	

Article information:

Article name:	NOVA 24V 5A FLX S	NOVA 24V 10A FLX S
Article number:	FS01P30024P050-SSF	FS01P30024P100-SSF
E-number:	5213562	5213563
Certification name:	NOVA 27 50-XS2_PRO3	NOVA 27 100-XS2_PRO3
The product meets and are certified according to:	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. SSF1014, Alarm Class 1-3, (Burglar Alarms and Integrated Security Systems).	
Certification No:	20-117	
Warranty period / Rules for warranty:	5 years. / 1. Ambient temperature shall not exceed 32° Celsius. 2. Medium current shall not exceed 80% of rated current. 3. The system must be used with UPLUS 10+ Design Life batteries. 4. The fan shall be cleaned annually and changed if needed.	
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	
Possible battery types:	2x 7,2Ah / 2x 14Ah	
System tested and certified with:	UPLUS 10+ Design Life 7,2Ah and 14Ah batteries	
Article number 7,2Ah batteries:	MT113-12V07-01	
Article number 14Ah batteries:	MT113-12V14-01	

Approved average load according to SSF1014 Alarm Class 1-3:

Article name:	NOVA 24V 5A FLX S	NOVA 24V 10A FLX S
excl. battery box (2x 14Ah batteries):		
Alarm Class 1-2:	1,1A	1,1A
Alarm Class 3:	0,45A	0,45A
incl. 1x batterybox (6x 14Ah batteries):		
Alarm Class 1-2:	3,4A	3,4A
Alarm Class 3:	1,4A	1,4A
incl. 2x batterybox (10x 14Ah batteries):		
Alarm Class 1-2:	-	5,7A
Alarm Class 3:	-	2,3A

Version: TEQ-COM Pro3