

# Battery backup DSS FLX S Series



The **DSS 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.

**The DSS Series** offers communication through RS485 and are system tested and certified acc. to SSF 1014, edition 5 together with; Sentrion S4, S4 Duo, CISS S4 & CISS S4 Duo by TLAB West AB.

## INTELLIGENT CHARGING

The **DSS 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 **DSS 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

When the DSS series is connected to Sentrion 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.

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

DSS 24V 5A FLX S

DSS 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:	6,5kg	7kg
Number of cable penetrations:	9 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	
Load current I <sub>max a</sub> :	4,5A	10A
Load current I <sub>max b</sub> :	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:	1pcs	
Type of fuse output:	1x F5A (glass)	1x 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:	Delayed power failure (10 sec), low battery voltage in battery mode (24V), over/undervoltage, aged batteries, disconnected batteries, battery short circuit failure, battery capacity to low, charging error, load fuse failure, tamper alarm, low system voltage.	
Alarm through:	RS485 (Alternating relay is optional). Alarms are presented in Sention S4, S4 Duo, CISS S4 & CISS Duo	

## Article information:

Article name:	DSS 24V 5A FLX S	DSS 24V 10A FLX S
Article number:	FS01P10024P050-DS1	FS01P10024P100-DS1
E-number:	5213576	5213577
Supplier type description:	NOVA 27 50-XS2_PRO1	NOVA 27 100-XS2_PRO1
The products meet 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 1-4, (Burglar Alarms and Integrated Security Systems).	
Certification No:	20-117	
Certification name:	NOVA 27 50-XS2_PRO1	NOVA 27 100-XS2_PRO1
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	

## 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 (up to 10x 14Ah batteries; 70Ah)	
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:	DSS 24V 5A FLX S	DSS 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