POWERNET

DATASHEET

ADA 19” SERIES

Battery back-up power supplies 24VDC, 48VDC 250W

DC UPS system in one compact module

- Charging unit, batteries and alarm functions included in same enclosure
- 19” 3U rack mounting
- Connection for external battery
- Mains terminal IEC320
- Output connection by screw terminals

Intelligent control and monitoring features

- Mains failure
- Battery test, remote test automatic or manual and local manual test
- Charger fail, charger output low / high alarm
- Battery alarm
- Output over voltage protection
- Temperature compensation
- Deep discharge protection

Led indications:

- Battery test
- Battery operation (=mains OFF)
- Battery alarm
- Charger OK

POWER SUPPLIES WITH BATTERY BACK-UP						
Type *) See x below	Available x selection codes (others on request)	Input Voltage	Nominal Output Voltage	Output Current	Battery Capacity	Installation / dimensions (Width x Height x Depth)
ADA713x	x = 0	230 VAC	24 VDC	10 A	14 Ah	19” 3U / 482 x 133 x 180mm
ADA714x	x = 0, 1	230 VAC	48 VDC	5 A	7 Ah	19” 3U / 482 x 133 x 180mm
70130751	Mains power cord 2.5m					

x selection code: 0 = with batteries 1 = without batteries

BATTERY TEST SOFTWARE VERSIONS	
Type	Description
713B0v01	Standard version for 24V. Batteries are tested automatically every three months. 1.0 Ah capacity is discharged during the test.
714B1v09	Standard version for 48V. Batteries are tested automatically every three months. 1.0 Ah capacity is discharged during the test.
714B0v12	Optional quick test for 48V. Test is started manually or by remote +5V signal. 10mAh capacity is discharged during the test

All versions also include the possibility for local manual test by pressing the button in the front panel.
Optional software versions can be re-programmed.

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INPUT

Voltage	184...264VAC
Frequency	45...65Hz
Power factor	>0.5
Efficiency (U_{in} = 230VAC, I_{out} = 5A)	48V models >89%, 24V models > 87%
Safety	According to EN60950, Class I
Hold up time without batteries (U_{in} = 230VAC, P_{out} = 250W)	>10ms
Isolation	
- Input / ground	1500VAC RMS 50Hz, 1min
- Input / outputs	3000VAC RMS 50Hz, 1min
- Output / ground	500VDC
Inrush current protection	Limited by NTC 7R 5A
Over voltage protection	VDR 275 VAC 72J
Input current protection	Fuse T4A, high breaking

EMC

Radio interference	EN55022, class B
Electrostatic discharge immunity	EN 61000-4-2, 8kV air / 4kV contact
Radiated electromagnetic field immunity, AM	EN 61000-4-3 (ENV 50140), 10V/m
Radiated electromagnetic field immunity, pulse modulated	ENV 50204, 10V/m
Electrical fast transient immunity	EN 61000-4-4, 2kV / 1kV
Surge immunity	EN 61000-4-5, 4kV / 2kV
RF common mode immunity	EN 61000-4-6 (ENV 50141) 10V
Power Frequency Magnetic Field	EN 61000-4-8, 30A
PQT immunity	EN 61000-4-11
Approvals	CE marked

OUTPUT 54.6V 5A 250W	**24VDC**	**48VDC**
Nominal output voltage	24VDC	48VDC
Factory setting (50% load)	27.3VDC	54.6VDC
Adjustment range (typical), access through the cover	21.5…29.5 VDC	48.0...59.0VDC
Ripple voltage (f = 20Hz...300kHz, T_{amb} = 25°C)	< 15mV_{rms}	< 15mV_{rms}
Load regulation (I_{out} = 0...100%)	< 1.1 %	< 0.4 %
Line regulation (U_{inmin}...U_{inmax})	< 0.02 %	< 0.02 %
Temperature coefficient	< 0.02 % / °C	< 0.02 % / °C
Output current	10A	5A
Current limit	<11A	< 6A

MECHANICAL SPECIFICATIONS

Dimensions	Width 19" Height 3U Depth 180mm excluding the front panel handles and mating connectors on the rear panel.
Weight	5 kg without batteries (15.4 kg including batteries)
Enclosure	Steel / Aluminum cabinet, IP20

ENVIRONMENTAL

Temperature range	Storage	-40°C...+85 °C without batteries
	Operation	-40°C...+55 °C without batteries -20°C...+45 °C with batteries
Humidity		85% RH IEC68-2-30
Cooling		Natural convection
Vibration & shocks		ETS 300 019-2-4, class 4M5

CONNECTION

Input IEC 320 on the rear panel

Output 12-pole PCB mounting terminal block, R 5.08mm

1 - OUTPUT +
2 - OUTPUT +
3 - OUTPUT -
4 - OUTPUT -
5 - RELAY 1 (CHARGER OK), NO
6 - RELAY 1 (CHARGER OK), NC
7 - RELAY 1 (CHARGER OK), COM
8 - SIGNAL 1 (CHARGER OK)
9 - BATTERY TEST INPUT
10 - SIGNAL 2 (BATTERY ALARM)
11 - RELAY 2 (BATTERY ALARM), COM
12 - RELAY 2 (BATTERY ALARM), NO

External batteries 3-pole PCB mounting terminal block, R 5.08mm

1 - OUTPUT +
2 - NC
3 - OUTPUT -