

Solar UPS Module

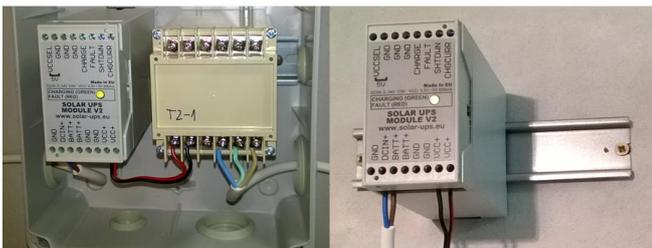
to low consumption equipment



V1 variant: - Add-on board with sandwich structure, connect high row pins
 - IP67 protection Fibox Euronord housing, sandwich structure



V2 variant: - DIN rail on wall, indoor applications
 - DIN mounting box for indoor or outdoor applications



The device can serve constant uninterruptible power supply (UPS) in low consumption equipment where mains power supply could not be or is difficult to be solved. Power may come from a 10W solar panel, but it is also possible to charge from the AC adapter. The device stores the energy in a 8800mAh Li-ion battery pack. Charging of the battery pack is performed intelligently with a Maximum Power Point Tracking function, using the power fed from the solar panel very efficiently. The circuit shuts off in dark operation, so the own consumption of the device remains below 10uA.

Features

- Very efficiently MPPT charging (optimized for 10W solar panels), very low own consumption
- 8800mAh Li-ion Battery pack (wide temperature range, longer lifetime)
- Charge current monitor (voltage output)
- Charge status outputs, Shutdown input
- Direct battery power output (2,9-4,2V/2A)
- Buck-boost power supply, 3,3V or 5V 500mA output (you can choose with jumper)
- Battery pack deep discharge protection
- Temperature protection in charger circuit
- DC input polarity and power supply short circuit protection

Design

- Add-on board (sandwich structure with V1 variant) with metal spacers and high row pins
- Outdoor applications (V1 variant, add-on board style possible) with Fibox Euronord IP67 housing (variable sizes, UV protected PC or normal ABS materials)
- DIN rail applications (V2 variant)

Specification

Solar UPS Module	V1 variant	V2 variant
DC input	0...34 V max. 1 A	
Battery output	2,9...4,2 V max. 2 A	
VCC output	3,3 V or 5V max. 500 (900) mA	
Battery pack	Li-ion 8800 mAh	
Charging temp	-10...+60 degree	
Disch/Stor. temp	-40...+60 degree	
Device size	110 x 95 x 28 mm	110 x 75 x 45 mm
Device weight	300 g	320 g

Conformity with directive 2014/30/EU for electromagnetic compatibility (EMC).