

## 80 W – 12/24 V

### DC-UPS, AC to DC uninterruptable power systems for critical DC loads.

All-in-One: Power supply + Battery charger + Back-up functions, all packaged in one box.

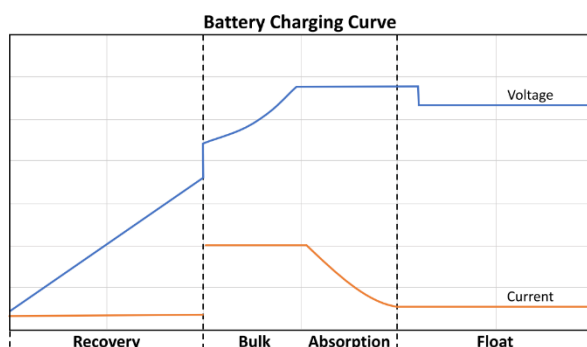
- Selectable Output Voltage, 12 Vdc or 24 Vdc
- Load-first, Dynamic Load/Battery power sharing
- Adjustable maximum battery charging current
- Suitable for backup of high inrush current DC loads
- Buffer time setting of load backup
- Universal charging output, selectable Battery Type
- SBS Smart Temperature Compensation probe (opt.)
- Manual Battery start-up button with no mains
- Battery life test, automatic or via manual button
- Extensive BATTSAFE battery management firmware
- Full set of protection and monitoring functions
- Local monitoring and diagnostics on LEDs
- Remote alarms via 2 dry relay contacts

### Norms and certifications

Compliance	Electrical safety	EN IEC 62368-1, UL1236, DIN41773
	EMC	Emission: IEC 61000-6-3 Immunity: IEC 61000-6-2.
Declaration of Conformity	CE, UKCA	

### Battery Management

Charging Curve	3 stages (IUoU) + Recovery							
Rated Voltage	12 Vdc				24 Vdc			
Charge Current setting min/max	0.4 A / 4 A				0.3 A / 3 A			
Battery Type, selectable by dipswitch	Lead Acid		Other		Lead Acid		Other	
	AGM	GEL	Li-Io, Li-PoFe	NiCd/Ni-Mh	AGM	GEL	Li-Io, Li-PoFe	NiCd/Ni-Mh
Boost Voltage	14.4V		14.6V	13.1V	28.8V		29.2V	26.1V
Float Voltage	13.6V	13.8V	13.8V	12.8V	27.2V	27.6V	27.6V	25.6V
Recovery Charge	2-10V				2-20V			
Voltage max	14.75 Vdc				29.50 Vdc			
Time Boost-Bulk Charge (Typ. IN)				min 5 s, max 15 h				
Fast charge voltage				Enable/Disable by jumper				



### Features

#### Input

Rated Input Voltage AC	115/230/277 Vac (range 85-305 Vac)
Frequency Range	50/60 Hz (range 47-440 Hz)
Input Current AC (Typ.)	1.5 A (115 Vac), 0.6 A (230 Vac)
Rated Input Voltage DC	110/220 Vdc (range 110-420 Vdc)
Input Current DC (Typ.)	1.2 (110 Vdc), 0.5 A (220 Vdc)
Inrush Current (Typ. Cold Start)	≤ 16 A @ t ≤ 5ms
Setup, Rise Time Max	1 s
Recommended External Fuse/MCB	4 A, curve C

#### Load Output – Power Supply Mode – Mains ON & Battery OFF

Voltage, selectable by Dip Switch <sup>1</sup>	12 Vdc	24 Vdc
Rated Current (I <sub>R</sub> )	4 A	3 A
Ripple / Noise <sup>2</sup>	100 mVpp	100 mVpp
Short Circuit Protection	yes	
Over Load Protection	Constant Current mode > 110% I <sub>R</sub>	
Over Voltage Protection	35 Vdc	

#### Load Output – Standby Mode – Mains ON & Battery ON

Voltage Range, Automatic Set <sup>1</sup>	10-14.4 Vdc	20-28.8 Vdc
Max Continuous Current (I <sub>R</sub> +I <sub>BATT</sub> )	≤ 8 A	≤ 8 A
Max Current for 30	≤ 10 A	≤ 10 A
Max Current for 15 s	≤ 11 A	≤ 11 A
Max Current for 5 s	≤ 12 A	≤ 12 A

#### Load Output – Backup Mode – Mains OFF & Battery ON

Voltage Range, Automatic Set <sup>1</sup>	9.5-12 Vdc	18.5-24 Vdc
Max Continuous Current (I <sub>R</sub> +I <sub>BATT</sub> )	≤ 8 A	≤ 8 A
Max Current for 30	≤ 10 A	≤ 10 A
Max Current for 15 s	≤ 11 A	≤ 11 A
Max Current for 5 s	≤ 12 A	≤ 12 A
Quiescent current	Max 25mA	Max 35mA

#### Signal Output/Input

Standby / Backup	NO relay contact, M terminals
Common Fault	NO relay contact, F terminals
Full set of monitor and alarm LED signals	Flashing code on 3, three-color LEDs

#### Climatic Data

Operating Ambient Temperature (T <sub>A</sub> )	-25 up to +70°C
Relative Humidity, no condensation @ 25°C	max 95%
Storage Temperature	-40 up to +85°C
Cooling	Natural Convection

#### General Data

Efficiency (Typ.)	>90%	>92%
Temperature Derating Factor <sup>1</sup>	2.5 %/°C, T <sub>A</sub> > 60°C	
Altitude Derating Factor <sup>1</sup>	0.5°C/100 m, above 2000 m	
Insulation Voltage (In/Out)	4 kVac	
Insulation Voltage (In/PE)	2 kVac	
Insulation Voltage (Out/PE)	500 Vdc	
Insulation Resistance (500 V)	> 100 MΩ	
Protection Class (EN/IEC 60529)	IP 20	
Pollution Degree Environment	2	
Dimensions (W x H x D)	40 x 105 x 116 mm	
Weight	0.35 kg	

#### Commercial Data

Weight per unit, including packing	0.42 kg
Dimensions per unit, including packing	50 x 120 x 130 mm
Volume per unit, including packing	0.0012 m <sup>3</sup>
Custom Tariff HS	85044055
Country of origin	Italy