



## 240 W – 12/24 V

### Basic Battery Charger and LV DC-UPS Module

Battery charger + Back-up functions, all packaged in one box.

- Low Voltage Input DC-UPS with charging function of a 12 or 24 Vdc battery
  - Suitable for power supplies with adjustable output
  - Allows to feed the load and to charge the battery simultaneously
  - Built-in battery overcurrent protection fuse
  - Battery deep discharge protection
  - To be used with lead acid and lithium batteries
- Instantaneous LOAD switch to BACKUP mode

### Norms – Conformity

Overvoltage category	EN50178
Safety Standards	UL508; IEC/EN61010-1; IEC/EN61010-2-201; IEC/EN60950
EMC Emissions	EN55011 (CISPR11) Class A; (CISPR22) Class A
EMC Immunity	EN61000-4-2 Level 3; EN61000-4-3 Level 3; EN61000-4-4 Level 3; EN61000-4-5 Level 1; EN61000-4-11 Level 2
Protection degree	EN60529 IP20
Vibration sinusoidal	IEC 60068-2-6 (5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2hours / axis [X,Y,Z])
Shock	IEC 60068-2-27 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total)
Conformity	CE, UKCA

### Technical Data

Model	DBU240B12	DBU240B24
<b>Input</b>		
Input DC rated voltage from power supply	13...14.5Vdc	26...28.5Vdc
Input DC rated current	3 – 10 A	
<b>Load Output</b>		
Load rated voltage	12 Vdc	24 Vdc
Load Maximum current	10 A	
<b>Battery Output</b>		
Maximum charging current setting	2.0 A or 4.0 A settable	
Battery Fuse	15 A / 32 V – Miniblade type, user replaceable	
Battery float voltage	[Vin - 0.4V] 11Vdc min.	[Vin - 0.4V] 26Vdc min.
Deep discharge cut-off voltage	9.2Vdc ± 0.5V	18Vdc ± 0.5V
Maximum chargeable battery capacity	15% @ 13Vdc 85% @ 13.5Vdc 100% @ 14Vdc	75% @ 26Vdc 85% @ 27Vdc 100% @ 28Vdc
LED Battery OK	ON for U Batt. > 11.6Vdc ± 0.2V	ON for U Batt. > 23.5Vdc ± 0.2V
LED Battery Low	ON for U Batt. < 11.6Vdc ± 0.2V	ON for U Batt. > 23.5Vdc ± 0.2V
Protections	Battery reverse connection Battery short-circuit/overload Battery deep discharge	
Status signal	PS OK - green LED LOAD OK - amber LED BATT. OK - green LED BATT. LOW - red LED REVERSE POLARITY - red LED Dry contact (SPDT, 24Vdc /1A)	
<b>General Data</b>		
Operating temperature <sup>1)</sup>	- 40°C...+ 70°C	
Derating	0.25A/°C over 60°C	
Storage temperature	- 40°C...+ 80°C	
Humidity	5...95% r.H. non condensing	
Life time expectation	64'000h (7.3 years) at 25°C ambient full load	
MTBF	MIL-HDBK-217F > 500'000h at 25°C ambient full load	
Connection terminals	2.5mm <sup>2</sup> , screw type pluggable (24...12AWG)	
Case material	Aluminium	
Weight	0.30kg	
Size	54.0 x 115.0 x 110.0mm	
1) Start-up type tested: - 40°C, possible at nominal voltage with load deration.		
<b>Notes:</b>		
- Technical parameters are typical, measured in laboratory environment at 25°C at nominal values, after minimum 5 minutes of operation.		
- Power rating, losses, efficiency, ripple, thermal behavior, and start-up may change outside of the nominal rated input range. Contact factory for details.		
- Data may change without prior notice to improve the product.		

