

PSB series power supply



Enclosed, switch mode buffer power supply 13,8V DC, without automatic operation control

CODE: **PSB-351225** v1.0/IX
TYPE: **PSB 13,8V/2,5A enclosed switch mode buffer power supply**

EN

Features of the power supply:

- DC 13,8V/2,5A uninterruptible power supply*
- wide AC input voltage range 176÷264V
- high efficiency 74%
- controlling of battery charging and maintaining
- protecting of battery against excessive discharging (UVP)
- battery charging current 0,5A
- additional accessories: automation module MP5B12 (technical outputs):
 - EPS technical output indicating AC power loss
 - PSU technical output indicating PSU failure
 - LoB technical output indicating battery low voltage
- battery output is full protected against short-circuit and reverse connection
- LED optical signalisation
- protections:
 - short-circuit protection SCP
 - over voltage protection OVP
 - surge protection
 - overload protection OLP
- warranty – 2 year from the production date



DESCRIPTION

Buffer-type power supply units are intended for continuous power supply to devices that require stabilised voltage of **12V DC (+/-15%)**. The power supply provides a voltage of **U=13,8V DC** with an output current of **I=2A+ 0,5A battery charging***. In case of power voltage decay, prompt switching to battery supply occurs. The power supply unit is protected against a short circuit, an overload, a surge or over voltage protection.

TECHNICAL DATA

Supply voltage	176÷264V AC
Current consumption	0,45A@230VAC max.
Supply power	35W max.
Efficiency	74%
Output voltage	11V± 13,8VDC – buffer operation 9,5V±13,8V DC – battery operation
Output current t_{AMB}<30°C	2A + 0,5A battery charging - see chart 1
Output current t_{AMB}=40°C	1,4A + 0,5A battery charging - see chart 1
Voltage adjustment range	12±14V DC
Ripple voltage	120mV p-p max.
Battery charging current	0,5A max
Short-circuit protection SCP	electronic, automatic recovery
Overload protection OLP	105-150% of power supply, automatic recovery
Overload protection (battery) OLP	polymer fuse (PTC)
Surge protection	varistors
Overvoltage protection OVP	>16V (automatic recovery)
Excessive discharge protection UVP	U<9,5V (± 5%) – disconnection of battery
Optical signalisation	green LED- presence of AC voltage
Output of optical signalization	LED AC- presence of AC voltage LED DC- presence of DC voltage on power supply output
Additional accessories	Module MP5B12 (technical outputs)
Operation conditions	2-nd enviromental class, temperature: -10 °C÷40 °C relative humidity 20%...90%, without condensation
Dimensions	L=129, W=98, H=40 [±2mm]
Net/gross weight	0,39kg / 0,42kg
Protection class EN 60950-1:2007	I (first) - requires a protective conductor (PE)
Declarations, warranty	CE, RoHS, 2 year from the production date
Connectors	power-supply: Φ0,63±2,5 I/O PCB: Φ0,41±1,63 battery output BAT: 6,3F-2,5/40cm, output of optical signalization: plug 3-pin 5 mm

* See chart 1

PSB series power supply

Enclosed, switch mode buffer power supply 13,8V DC, without automatic operation control

Output current vs temperature

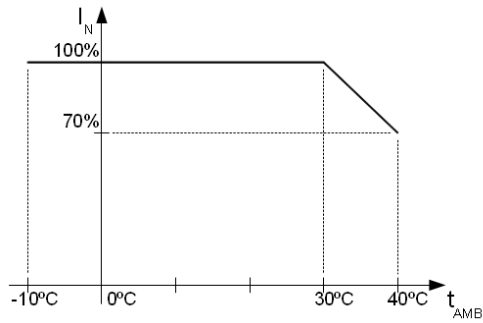


Chart 1.
Allowable output current from the power supply depending on ambient temperature.

Dimensions and fitting of the PSB-351225 power supply

