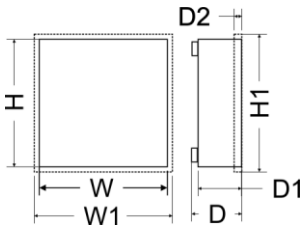
HPSB series power supply unit

Buffer, switch mode power supply unit 13,8V DC

EN**

CODE: **HPSB 2512C** v.1.0/I

TYPE: **HPSB 13,8V/2A/17Ah Buffer, switch mode power supply unit**



Features:

- DC 13,8V/2A uninterruptible power supply*
- fitting battery: 17Ah/12V
- wide range of mains supply: 176÷264V
- high efficiency 74%
- battery charging and maintenance control
- excessive discharging (UVP) protection
- battery charge current 0,5A
- battery output full protection against short-circuit and reverse polarity connection
- LED indication
- protections:
  - SCP short-circuit protection
  - OVP overvoltage protection
  - overvoltage protection (output AC)
  - against sabotage
  - overload protection (OLP)
- warranty – 2 year from the production date

DESCRIPTION

A buffer PSU intended for uninterrupted supply to devices that require stabilised voltage of **12V DC (+/-15%).** The PSU provides voltage of **U=13,8V DC** with output current of **I=2A + 0,5A for battery charging*.** In case of power decay, a battery back-up is activated immediately. The PSU is constructed based on the switch mode PSU, with high energy efficiency. The PSU is housed in a metal enclosure (colour RAL 9003) which can accommodate a 17Ah/12V battery. A micro switch indicates door opening (front cover).

During normal operation, the total current drawn by the equipment may not exceed I = 2 A*.

Maximum battery charging current: 0,5 A*.

Total device current + battery: 2,5 A max*.

The power supply housing has space for additional modules (fuse blocks, voltage regulators and DC-DC converters).

* Refer to chart 1

Tel. +48-14-610-19-40, fax: +48-14- 610-19-50, www.pulsar.pl, e-mail: sales@pulsar.pl

HPSB series power supply unit

Buffer, switch mode power supply unit 13,8V DC

SPECIFICATIONS	
PSU type	A (EPS - External Power Source)
Mains supply	176÷264V AC 50÷60Hz
Current up to	0,45A@230VAC
Supply power	35W max.
Efficiency	74%
Output voltage	13,8V DC – buffer operation 9,5V÷13,8V DC – battery-assisted operation
Output current t_{AMB}<30°C	**2A + 0,5A battery charge - refer to chart 1**
Output current t_{AMB}=40°C	**1,4A + 0,5A battery charge - refer to chart 1**
Voltage adjustment range	12÷14VDC
Ripple	120mV p-p max.
Battery charge current	0,5A max. @ 17Ah (± 5%)
Short-circuit protection SCP	electronic, automatic return
Overload protection OLP	105-150% of the PSU power, automatic return
Battery circuit protection SCP and reverse polarity connection	PTC polymer fuse
Surge protection	varistors
Overvoltage protection OVP	>16V (automatic recovery)
Excessive discharge protection UVP	U<9,5V (± 5%) – disconnect of connection battery
Sabotage protection: - TAMPER output indicating enclosure opening	 - microswitch, NC contacts (enclosure closed), 0,5A@50V DC (max.)
LED indication	Yes
Operating conditions	2nd environmental class, -10 °C÷40 °C
Enclosure	Steel plate DC01, thickness: 0,7mm, colour: RAL 9003
Enclosure dimensions	280 x 292 x 80+8 [mm] (WxHxD)
Net/gross weight	2kg / 2,2 kg
Fitting battery	17Ah/12V (SLA) max. 180x120x75mm (WxHxD) max 
Closing	Cheese head screw x 2 (at the front), (lock assembly possible)
Declarations, warranty	CE, 2 year from the production date
Notes	The enclosure does not adjoin the assembly surface so that cables can be led. Convectional cooling. Connectors: Power-supply: Φ0,63÷2,5 Battery output BAT: 6,3F-2,5.

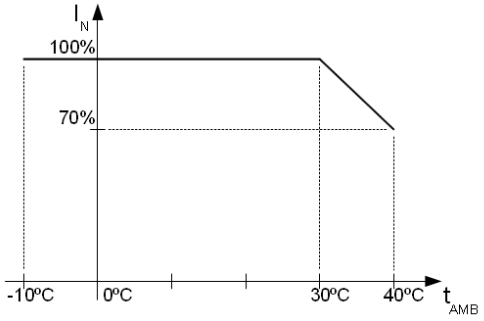


Chart 1. Acceptable output current from the PSU depending on ambient temperature.