

PSBS series power supply unit



Buffer, switch mode power supply unit 13,8V DC with technical outputs

CODE:
TYPE:

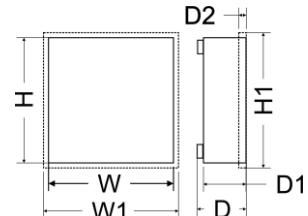
PSBS 1012B v.1.0/II

PSBS 13,8V/1A/7Ah/OC Buffer switch mode power supply unit
with technical outputs.

EN**



BLUE POWER



PSU features:

- uninterruptible power supply DC 13,8V/1A
- battery housing: 7Ah/12V
- supply voltage AC 230V
- high efficiency 71%
- low voltage ripple
- battery charging and maintenance control
- deep discharge battery protection (UVP)
- battery charging current 0,2A/0,5A jumper selectable
- START button to start the battery
- battery output protection against short-circuit and reverse connection
- LED indication
- EPS technical output of 230V power failure – OC type
- PSU technical output indicating PSU failure – OC type
- LoB technical output indicating low battery voltage – OC type
- Optional installation of the MPSBS relay module changing technical outputs of the OC type to relay type
- adjustable times of 230V AC failure indication
- Protection type:
 - SCP short-circuit protection
 - Overheat protection OHP
 - surge protection
 - Tamper protection: enclosure opening and detachment from the wall
 - overload protection OLP
- warranty - 5 years from the production date

DESCRIPTION

A buffer PSU is designed for uninterrupted supply of devices requiring stabilized voltage of **12V DC** (+/-15%). The PSU supplies voltage of **U=13,8V DC** and total current capacity of:

1. Output current 1A + 0,2A battery charging
2. Output current 0,7A + 0,5A battery charging

Total current + battery is max. 1,2A

In case of mains power loss, the unit will instantly switch to battery operation. The PSU is enclosed in a metal casing (color RAL 9003) with battery housing for 7Ah/12V batteries. The enclosure is fitted with a micro switch indicating door opening (front cover) and the detachment from the wall.

PSBS series power supply unit



Buffer, switch mode power supply unit 13,8V DC with technical outputs

SPECIFICATIONS

PSU type	A (EPS - External Power Source)
Mains supply	230V AC (-15% /10%) 50Hz
Current consumption	0,13A@230VAC
PSU's power	17W
Efficiency	71%
Output voltage	11V÷ 13,8V DC – buffer operation 10V÷ 13,8V DC – battery operation
Output current	1A + 0,2A battery charging 0,7A + 0,5A battery charging
Voltage adjustment range	12÷14,5VDC
Ripple voltage	50mV p-p max.
Battery charging current	0,2A or 0,5A – jumper selectable
Short-circuit protection SCP	Electronic - automatic return
Overload protection OLP	110-150% of the PSU power, manual restart
Battery circuit protection SCP and reverse polarity connection	F2A- current limitation, the F_{BAT} melting fuse
Surge protection	varistors
Deep discharge battery protection UVP	U<10V ($\pm 0,5V$) – disconnection of battery terminal
Tamper protection: - TAMPER output indicating enclosure opening or detachment from the wall	- micro switch x 2 NC contacts (enclosure closed and mounted to the mounting base), 0,5A@50V DC (max.)
Technical outputs: - EPS; output indicating AC power failure	- OC type: 50mA max. Normal operation: L state (0V), failure: hi-Z state, - delay time 10s/60s (+/-20%) – jumper selectable T_{AC}
- PSU; output indicating no DC power/PSU failure	- OC type: 50mA max. Normal operation: L state (0V), failure: hi-Z state,
- LoB output indicating low battery voltage	- OC type, 50mA max. Normal operation (UBAT >11,5V): L state (0V), failure (UBAT <11,5V): hi-Z state
LED indication	Yes – LEDs
Operating conditions	2nd environmental class, -10 °C÷40 °C
Enclosure	Steel plate, DC01 0,7mm color RAL 9003
Enclosure dimensions	230 x 230 x 80+8 (WxHxD) [mm] (+/- 2)
Net/gross weight	2,02kg / 2,2kg
Battery housing	7Ah/12V (SLA) max. 150x95x75mm (WxHxD) max
Closing	Cylindrical screw (at the front) (lock assembly possible)
Deklarations, warranty	CE, RoHS, 5 years from the production date
Notes	The enclosure does not adjoin the mounting surface so that cables can be led. Convection cooling. Mains supply 230V AC: $\Phi 0,51\div 2$ (AWG 24-12) Outputs : $\Phi 0,41\div 1,63$ (AWG 26-14) BAT battery outputs: 6,3F-2,5, 30cm TAMPER output: cables, 25cm



PSBS series power supply unit



Buffer, switch mode power supply unit 13,8V DC with technical outputs

OPTIONAL POWER SUPPLY CONFIGURATIONS:

1. Buffer power supply unit PSBS 13,8V/relay module MPSBS/7Ah
 - PSBS 1012B + MPSBS + 7Ah
2. Buffer power supply unit PSBS 13,8V/2x0,5A/MPSBS/7Ah
 - PSBS 1012B + LB2 2x0,5A (AWZ586) + MPSBS + 7Ah
3. Buffer power supply unit PSBS 13,8V/12V/1A/MPSBS/7Ah
 - PSBS 1012B + RN250 (13,8V/12V) + MPSBS + 7Ah
4. Buffer power supply unit PSBS 13,8V/12V/2x0,5A/MPSBS/7Ah
 - PSBS 1012B + RN250 (13,8V/12V) + LB2 2x0,5A (AWZ586) + MPSBS + 7Ah
5. Buffer power supply unit PSBS 13,8V/5V÷7,4V/2A/MPSBS/7Ah
 - PSBS 1012B + DCDC20 (5V÷7,4V/2A) + MPSBS + 7Ah
6. Buffer power supply unit PSBS 13,8V/5V÷7,4V/2x1A/7Ah
 - PSBS 1012B + DCDC20 (5V÷7,4V/2A) + LB2 2x1A (AWZ585 or AWZ586) + 7Ah