

PSBS series power supply unit

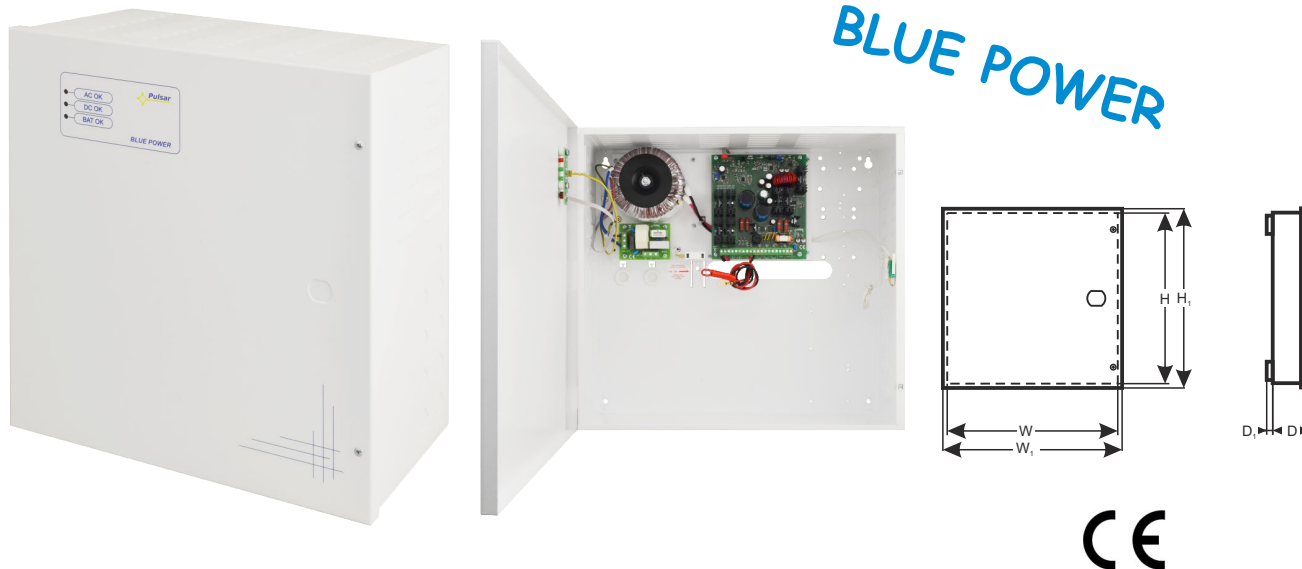
Buffer, switch mode power supply unit 13,8V DC with technical outputs



CODE: **PSBS 10A12E** v.1.1/VII

TYPE: **PSBS 13,8V/10A/65Ah/OC** Buffer switch mode power supply unit with technical outputs.

EN**



PSU features:

- uninterruptible power supply DC 13,8V/10A
- alternative outputs AUX1, AUX2, AUX3, 3x2,5A current limit
- battery housing: 65Ah/12V
- supply voltage AC 230V
- high efficiency 79%
- low voltage ripple
- battery charging and maintenance control
- deep discharge battery protection (UVP)
- battery charging current 1A/2A/3A/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
 - overload protection OLP
 - overvoltage protection OVP
 - Tamper protection: enclosure opening and detachment from the wall
- 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 **10A + 1A battery charging**
2. Output current **9A + 2A battery charging**
3. Output current **8A + 3A battery charging**
4. Output current **6A + 5A battery charging**

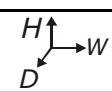
Total current + battery is max. 11A

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 65Ah/12V batteries. The enclosure is fitted with a micro switch indicating door opening (front cover) and the detachment from the wall.

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SPECIFICATIONS	
PSU type	A (EPS - External Power Source)
Mains supply	230V AC (-15% /10%) 50Hz
Current consumption	1,1A@230VAC
PSU's power	152W
Efficiency	79%
Output voltage	11V± 13,8V DC – buffer operation 10V± 13,8V DC – battery operation
Output current	10A + 1A battery charging 9A + 2A battery charging 8A + 3A battery charging 6A + 5A battery charging
Voltage adjustment range	12÷14,5VDC
Ripple voltage	80mV p-p max.
Battery charging current	1A / 2A / 3A / 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	T10A- current limitation, the F _{BAT} melting fuse
Surge protection	varistors
Overvoltage protection OVP	>16V (automatic return)
Deep discharge battery protection UVP	U<10V (± 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 - PSU; output indicating no DC power/PSU failure - LoB output indicating low battery voltage	- OC type: 50mA max. Normal operation: L state (0V), failure: hi-Z state, - delay time 10s/60s (+/-20%) – jumper selectable T _{Ac} - OC type: 50mA max. Normal operation: L state (0V), failure: hi-Z state, - OC type, 50mA max. Normal operation (U _{BAT} >11,5V): L state (0V), failure (U _{BAT} <11,5V): hi-Z state The power supply unit does not feature a battery detection function.
LED indication	Yes – LEDs
Operating conditions	2nd environmental class, -10 °C÷40 °C
Enclosure	Steel plate, DC01 1,2mm color RAL 9003
Dimensions	W=400 H=370 D+D ₁ =172 + 8 [+/- 2mm] W ₁ =405 H ₁ =375 [+/- 2mm]
Net/gross weight	9,3kg / 10,7kg
Battery housing	65Ah/12V (SLA) max. 350x175x165mm (WxHxD) max 
Closing	Cylindrical screw x2 (at the front), (lock assembly possible)
Deklarations, warranty	CE, 5 years from the production date
Notes	The enclosure does not adjoin the mounting surface so that cables can be led. Convection cooling.

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Optional configurations:

PSBS 10A12E Battery 65Ah.

1. Buffer power supply PSBS 13,8V/relay module MPSBS/65Ah

- PSBS 10A12E + MPSBS + 65Ah

2. Buffer power supply PSBS 13,8V/8x1A/65Ah

- PSBS 10A12E + LB8 8x1A (AWZ579 or AWZ580) + 65Ah

3. Buffer power supply PSBS 13,8V/2x12V/2x5A/65Ah

- PSBS 10A12E + 2xRN500 (13,8V/12V) + 65Ah

PSBS 10A12E Battery 40Ah.

1. Buffer power supply PSBS 13,8V/relay module MPSBS/40Ah

- PSBS 10A12E + MPSBS + 40Ah

2. Buffer power supply PSBS 13,8V/16x0,5A/40Ah

- PSBS 10A12E + 2xLB8 16x0,5A (AWZ578 or AWZ580) + 40Ah

3. Buffer power supply PSBS 13,8V/2x12V/2x5A/MPSBS/40Ah

- PSBS 10A12E + 2xRN500 (13,8V/12V) + MPSBS + 40Ah

4. Buffer power supply PSBS 13,8V/10x1A/40Ah

- PSBS 10A12E + 2xLB8 10x1A (AWZ579 or AWZ580) + 40Ah

5. Buffer power supply PSBS 13,8V/2x12V/16x0,5A/40Ah

- PSBS 10A12E + 2xRN500 (13,8V/12V) + 2xLB8 16x0,5A (AWZ578 or AWZ580) + 40Ah