

# PSCLB series power supply

Buffer switch mode power supply unit 13,8V DC, IP67

CODE: **PSCLB13810** v1.0/l

EN

TYPE: **PSCLB 13,8V/1A buffer switch mode power supply unit**

## Features of the power supply unit:

- DC13,8 V/1 A uninterrupted supply + 0,3 A battery charging current
- universal AC input voltage range 90÷264 V
- high efficiency 80%
- battery charging and maintenance control
- deep discharge battery protection (UVP)
- battery output protection against short circuit and reverse polarity connection
- IP 67 case
- protections:
  - SCP short-circuit protection
  - overvoltage protection (AC input)
  - overload (OLP)
- warranty – 2 year from the production date



## DESCRIPTION

The buffer power supply is designed for uninterrupted supply of devices requiring stabilized voltage of **12 V DC (+/- 15%)**. The PSU supplies voltage of **13,8 V DC** with current efficiency of **I = 1 A + 0,3 A battery charging**. In the case of mains power failure, the unit will instantly switch to battery power. The power supply unit is protected against short-circuit, overload and overvoltage.

During normal operation, the total current drawn by the device cannot exceed **I=1 A**. The maximum battery charging current is **0,3 A**. The total current of the receivers + battery is max. **1,3 A**.

## SPECIFICATIONS

|                                       |  |
|---------------------------------------|--|
| Supply voltage                        | AC 90÷264 V/50Hz   |
| Current consumption                   | 0,2 A@230 V max.   |
| Supply power                          | 18 W max.  |
| Efficiency                            | 80%  |
| Output voltage                        | 11 V÷ 13,8 V DC – buffer operation<br>9 V÷ 13,8 V DC – battery operation     |
| <b>Output current</b>                 | <b>1 A + 0,3 A battery charging</b>  |
| Ripple voltage                        | 100mV p-p max.   |
| Battery charging current              | 0,3 A max.   |
| Current consumption by PSU systems    | 50mA/13,8 V DC   |
| Short-circuit protection SCP          | failure melting fuse in the battery circuit (requires fuse replacement)      |
| Overload protection OLP               | 150-200% of power supply, automatic recovery                                 |
| Surge protection (AC input)           | varistor   |
| Deep discharge battery protection UVP | U<9 V (+/- 0,5 V) – disconnection of the battery terminal                    |
| Fuse                                  | F1 A/250 V, mounted using a positive battery cable (BAT+)                    |
| IP protection class                   | IP67   |
| Operation conditions                  | temperature -10 °C÷40 °C<br>relative humidity 20%...90% without condensation |
| Dimensions (LxWxH)                    | 135 x 50 x 33 [mm]   |
| Net/gross weight                      | 0,3kg / 0,4kg  |
| Protection class EN 60950-1:2007      | II (second)  |
| Lenght of DC cable                    | 0,5 m  |
| Lenght of AC cable                    | 0,4 m  |
| Storage temperature                   | -20°C...+60°C  |

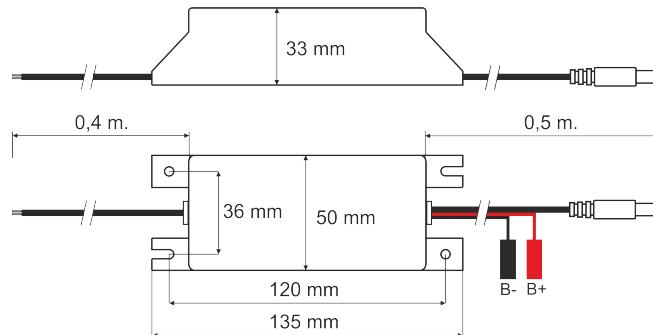


Fig.1 Dimension of power supply.