

CODE: RWB v.1.0/1
NAME: Switch mode power supply units with battery backup in RACK 19" 2U enclosure

EN



Equipment:



2x 2-pin pluggable screw terminal block (pitch 7.62 mm)



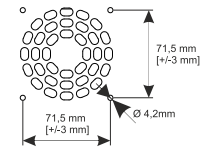
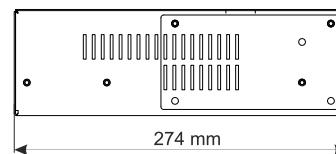
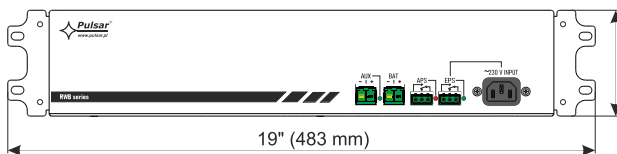
1x 3-pin pluggable screw terminal block (pitch 5.08 mm)



1x right-angle power cord - E/F (Unischuko) to C13 (female)



4x M6



Features:

- supply voltage ~200 – 240 V
- DC 52 (54) V uninterruptible power supply
- available versions with the following current efficiencies:
52 V: 2,3A
54 V: 5A
- high efficiency (up to 87%)
- battery charging current jumper selectable (only RWB-48V5A)
- deep discharge battery protection (UVP)
- possibility to mount ARAS...N rails
- **EPS** technical output for power failure - relay type
- LED optical indication
- battery output protection against short circuit and reverse connection
- protections:
 - SCP short circuit protection
 - OLP overload protection
 - OVP overvoltage protection
 - surge protection
- warranty: 2 years

DESTINATION

Switch mode power supply units with battery backup RWB are intended for continuous power supply to devices that require stabilised voltage of 52 (54) V (e.g. PoE power systems, PoE switches). In case of lack of main power, battery back-up is activated immediately. The devices have been designed based on high-efficiency switch mode power supply modules mounted in metal enclosures (RAL 9005 colour – black) intended for installation in 19" RACK cabinets. The enclosures are equipped with a microswitch indicating opening of the cover. Moreover, the RWB-52V2A model features a built-in DC/DC converter, which reduces the construction and operating costs of a small system by limiting the number of batteries required.

PARAMETERS OF POWER SUPPLIES:

PSU's name	Output voltage	Charging current	Total output current with charging
RWB-52V2A	52 V	0,5 A	2,3 A
RWB-48V5A	54 V	0,5 A / 1 A / 2 A	5 A



TECHNICAL DATA	RWB-52V2A	RWB-48V5A
Supply voltage	~200 – 240 V	
Current consumption	1,2 A	1,5 A
Power frequency	50/60 Hz	
Inrush current	60 A	
Output power PSU	134 W	270 W
Total output current with charging	2,3 A	5 A
Efficiency	87%	
Output voltage	52 V - buffer operation 52 V - battery-assisted operation	44 – 54 V - buffer operation 38 – 54 V - battery-assisted operation
Ripple voltage (max.)	100 mV p-p	150 mV p-p
Current consumption by PSU systems during battery-assisted operation	50 mA	40 mA
Battery capacity (recommended)	7 – 20 Ah	7 – 65Ah
Number of batteries	2	4
Charging voltage	22 – 27,6 V	44 – 54 V
Charging current (jumper selectable)	I1: 0,5 A	I1: 0,5 A I2: 1 A I3: 2 A
Battery circuit protection SCP and reverse polarity connection	- F _{BAT} fuse (in case of a failure, fuse-element replacement required)	
Overload protection (OLP)	105 – 150% of power supply, automatic recovery	
Over voltage protection (OVP)	>37 V (after running, disconnect PSU for about 1 minute)	>60 V (after running, disconnect PSU for about 1 minute)
Deep discharge battery protection UVP	U<19 V (± 5%) – disconnection of battery circuit	U<38 V (± 5%) – disconnection of battery circuit
Optical indication	- LEDs on the front panel	
Technical outputs: EPS (AC power failure)	relay type: 1A@ 30 V DC / 50 V AC	
Fuse: - F _{BAT}	F 5A/250V	T 5A
Operating conditions	Temperature: -10°C – +40°C, Relative humidity 5% – 90%, without condensation	
Protection class EN 62368-1	I (first)	
Degree of protection EN 60529	IP20	
Operating temperature	-10°C...+40°C	
Storage temperature	-20°C...+60°C	
Vibrations and impulse waves during	According to PN-83/T-42106	
Enclosure colour	RAL 9005 (black)	
Enclosure dimensions	W=19", H=2U; 481 x 88 x 274 (WxHxD)	
Net/gross weight	4,4 / 4,8 [kg]	4,9 / 5,4 [kg]
Terminals: Mains supply Outputs Technical outputs	IEC C14 power inlet Φ0,5±3,2 (AWG 24-8) 0,5-4mm ² Φ0,5-2,1 (AWG 24-12) 0,5-1,5mm ²	
Equipment	1.8 m power cable, set of connectors (2x PC 5/2-2P, 1x 2EDGK-3P), mounting kit (4x M6 screws + cage nuts + plastic washers)	
Declarations, warranty	CE, 2 years	
Notes	Convictional cooling	Forced cooling

19" RACK buffer power supply system
Power supply units with battery backup 52 V DC / 54 V DC
RWB series

Examples of application:

