

# HPSB series power supply unit

Buffer, switch mode power supply unit 54V DC

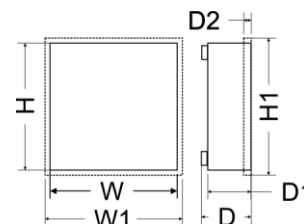


EN\*\*

CODE: **HPSB 2548B** v.1.0/I  
TYPE: **HPSB 54V/2,5A/4x7Ah Buffer, switch power supply unit**



GREEN POWER



## Features:

- DC 54V/2A uninterruptible power supply\*
- fitting battery: 4x7Ah/12V
- wide range of mains supply: 176÷264V
- high efficiency 86%
- battery charging and maintenance control
- excessive discharging (UVP) protection
- jumper selectable battery charge current 0,5A/1A
- battery output full protection against short-circuit and reverse polarity connection
- LED indication
- protections:
  - SCP short-circuit protection
  - OVP overvoltage protection
  - overvoltage protection (AC input)
  - against sabotage
  - overload protection (OLP)
- warranty – 2 year from the production date

## DESCRIPTION

A buffer PSU is intended for an uninterrupted supply to devices requiring stabilised voltage of **48V DC (+/-15%)**. The PSU provides voltage of **U=54V DC**. Current efficiency:

**1. Output current 2A + 0,5A battery charge\***

**2. Output current 1,5A + 1A battery charge\***

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

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 4x7Ah/12V battery. A micro switch indicates door opening (front cover).

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

\* Refer to chart 1

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SPECIFICATIONS	
PSU type	A (EPS - External Power Source)
Mains supply	176÷264V AC 50Hz
Current up to	1,4A@230VAC max.
Supply power	135W max.
Efficiency	86%
Output voltage	44V÷54V DC – buffer operation 38V÷54V DC – battery-assisted operation
Output current $t_{AMB}<30^{\circ}\text{C}$	<b>2A + 0,5A battery charge - refer to chart 1</b> <b>1,5A + 1A battery charge - refer to chart 1</b>
Output current $t_{AMB}=40^{\circ}\text{C}$	<b>1,5A + 0,5A battery charge - refer to chart 1</b> <b>1A + 1A battery charge - refer to chart 1</b>
Voltage adjustment range	48÷56VDC
Ripple	150mV p-p max.
Current consumption by PSU systems	40mA
Battery charge current	0,5A or 1A – jumper selectable
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	>62V (activation requires disconnecting the load or supply for about 20 s.)
Excessive discharge protection UVP	$U<38\text{V} (\pm 5\%)$ – 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, $-10^{\circ}\text{C}\div+40^{\circ}\text{C}$
Enclosure	Steel plate DC01, thickness: 1,0mm, colour: RAL 9003
Enclosure dimensions	400 x 350 x 90+8 [mm] (WxHxD)
Net/gross weight	3,50/ 3,70 kg
Fitting battery	4x7Ah/12V (SLA) max. 395x160x85mm (WxHxD) max
Closing	Cheese head screw x 2 (at the front), lock assembly possible
Declarations, warranty	CE, RoHS, 2 year from the production date
Notes	The enclosure does not adjoin the assembly surface so that cables can be led. Convectional cooling.

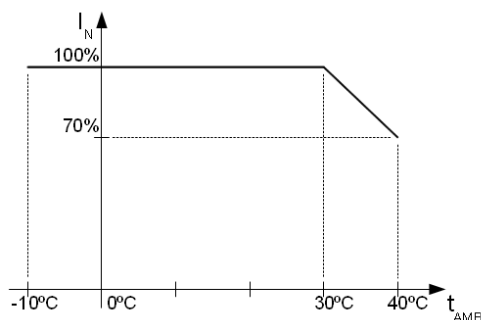


Chart 1. Acceptable output current from the PSU depending on ambient temperature.