

# HPSB series power supply unit

## Buffer, switch mode power supply unit 27,6V DC



CODE: **HPSB 3524B** v.1.0/VII  
TYPE: **HPSB 27,6V/3A/2x7Ah Buffer, switch mode power supply unit**

EN\*\*



### Features:

- DC 27,6V/3A uninterruptible power supply\*
- fitting battery: 2x7Ah/12V
- wide range of mains supply: 176÷264V
- high efficiency 83%
- 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 (output AC)
  - 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 **24V DC (+/-15%)**. The PSU provides voltage of **U=27,6V DC**. Current efficiency:

1. Output current 3A + 0,5A battery charge\*
2. Output current 2,5A + 1A battery charge\*

**Total device current + battery: 3,5A 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 two 7Ah/12V batteries. A micro switch indicates door opening (front cover).

\* Refer to chart 1

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SPECIFICATIONS	
PSU type	A (EPS - External Power Source)
Mains supply	176÷264V AC 50÷60Hz
Current up to	0,9A@230VAC
Supply power	100W max.
Efficiency	83%
Output voltage	27,6V DC – buffer operation 19V÷27,6V DC – battery-assisted operation
Output current $t_{AMB}<30^{\circ}\text{C}$	<b>3A + 0,5A battery charge - refer to chart 1</b> <b>2,5A + 1A battery charge - refer to chart 1</b>
Output current $t_{AMB}=40^{\circ}\text{C}$	<b>2A + 0,5A battery charge - refer to chart 1</b> <b>1,5A + 1A battery charge - refer to chart 1</b>
Voltage adjustment range	24÷28VDC
Ripple	150mV p-p max.
Battery charge current	0,5A / 1A max. @ 2x 7Ah ( $\pm 5\%$ ) – 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	>32V (automatic recovery)
Excessive discharge protection UVP	$U<19\text{V} (\pm 5\%)$ – 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: 0,7mm, colour: RAL 9003
Dimensions	$W=280$ $H=292$ $D+D_1=82 + 8$ [ $\pm 2\text{mm}$ ] $W_1=285$ $H_1=296$ [ $\pm 2\text{mm}$ ]
Net/gross weight:	2,2 / 2,4 kg
Fitting battery	2 x 7Ah/12V (SLA) max. 180x155x75mm (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. Convictional cooling. Connectors: Power-supply: $\Phi 0,63\div 2,5$ Battery output BAT: 6,3F-2,5.

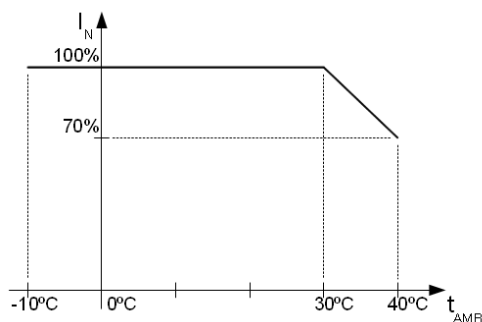


CHART 1. Acceptable output current from the PSU depending on ambient temperature.

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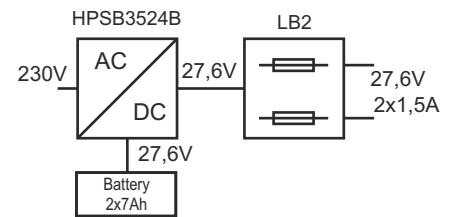
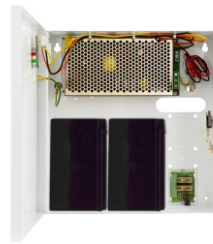
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### Optional configurations:

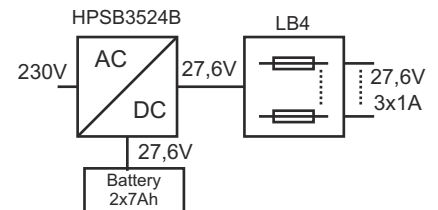
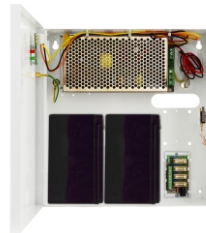
#### Buffer power supply unit HPSB 27,6V/2x1,5A/2x7Ah.

- HPSB3524B + LB2 2x1,5A (AWZ586) + 2x7Ah



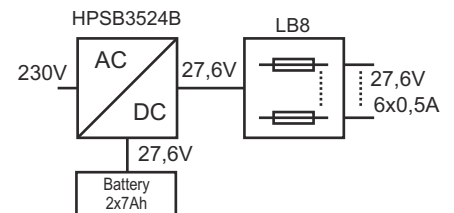
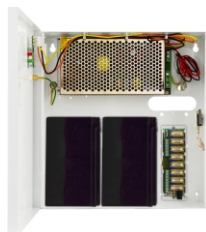
#### Buffer power supply unit HPSB 27,6V/3x1A/2x7Ah.

- HPSB3524B + LB4 3x1A (AWZ575 or AWZ576) + 2x7Ah



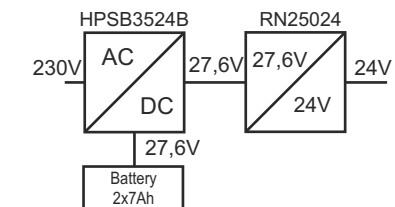
#### Buffer power supply unit HPSB 27,6V/6x0,5A/2x7Ah.

- HPSB3524B + LB8 6x0,5A (AWZ578 or AWZ580) + 2x7Ah



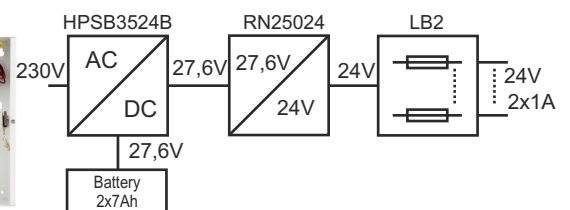
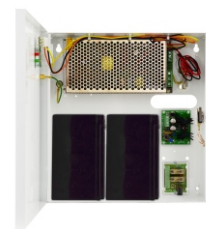
#### Buffer power supply unit HPSB 27,6V/24V/2,5A/2x7Ah.

- HPSB3524B + RN25024 (27,6V/24V) + 2x7Ah



#### Buffer power supply unit HPSB 27,6V/24V/2x1A/2x7Ah.

- HPSB3524B + RN25024 (27,6V/24V) + LB2 2x1A (AWZ585 or AWZ586) + 2x7Ah



#### Buffer power supply unit HPSB 27,6V/5V÷18V/2A÷1,3A/2x7Ah

- HPSB3524B + DCDC20 (5V÷18V/2A÷1,3A) + 2x7Ah

