

PSBEN/LCD series power supply unit

Buffer switched mode power supply 27,6VDC

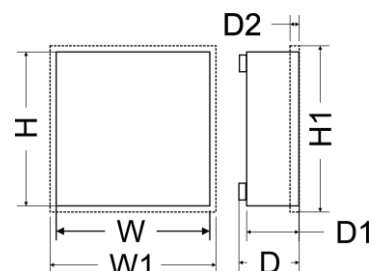


COD:
TYPE:

PSBEN 5024C/LCD v.1.0
PSBEN 27,6V/5A/2x17Ah/EN/LCD buffer, switched mode PSU

EN

BLACK POWER



Function	PSBEN5024C/ LCD
EPS network absence	YES
Battery low voltage	YES
Protection against full battery discharge	YES
Battery fault	YES
No battery charge	YES
Output low voltage	YES
Output high voltage	YES
PSU fault	YES
Surge protection	YES
Short circuit protection	YES
Overload protection	YES
Output fuse activation	YES
Battery fuse fault	YES
EPS technical output	YES
APS technical output	YES
Battery low voltage indication	YES
PSU technical output	YES
Remote test (option)	YES
Tamper resistance – enclosure opening	YES
Tamper resistance – detachment from the mounting surface	YES

Features:

- mains supply of 230VAC
- uninterrupted voltage of 27,6VDC/5A
- fitting battery: 2x17Ah/12V
- high efficiency 83%
- PSU current efficiency:
- serial port for communication with a computer, "Power security" program
- remote monitoring (option: WiFi, Ethernet, USB)
- load current control
- output voltage control
- output fuse status control
- dynamic battery test
- battery circuit continuity control
- battery voltages control
- battery fuse status control
- battery charge and maintenance control
- deep discharge battery protection (UVP)
- battery output protection against short circuit and reverse polarity connection
- battery charging current: 0,6A/1,5A/2,2A/3A jumper selectable
- remote test (option)
- START button for battery activation
- STOP button for disconnecting during battery-assisted operation
- optical indication – LCD panel
 - electrical parameters reading
 - failure indication
 - PSU settings adjusted from the panel level
 - 3 levels of access, password-protected
 - PSU operation history
 - failure history
 - real-time clock, battery-backed
- acoustic indication
- adjustable times indicating AC power failure
- EPS technical output indicating AC power loss
- PSU technical output indicating PSU failure
- APS technical output indicating battery failure
- internal memory of PSU operating status
- protections:
 - SCP short circuit protection
 - OLP overload protection
 - OHP overheat protection
 - OVP over voltage protection
 - surge protection
 - against sabotage: unwanted enclosure opening, detachment from the mounting surface

DESCRIPTION

A buffer PSU is intended for an uninterrupted supply to alarm system devices requiring stabilized voltage of **24V/DC (+/-15%)**. The PSU provides voltage of **27,6 V DC** with current efficiency of:

- 1. Output voltage 5A + 0,6A battery charge**
 - 2. Output voltage 4,1A + 1,5A battery charge**
 - 3. Output voltage 3,4A + 2,2A battery charge**
 - 4. Output voltage 2,6A + 3A battery charge**
- Total current of the receivers + battery: 5,6A max.**

In case of power decay, a battery back-up is activated immediately. The PSU is housed in a metal enclosure (colour: RAL 9005) which can accommodate a 2x17Ah/12V battery. It features a micro switch that indicates door opening (faceplate) and detaching from the mounting surface.

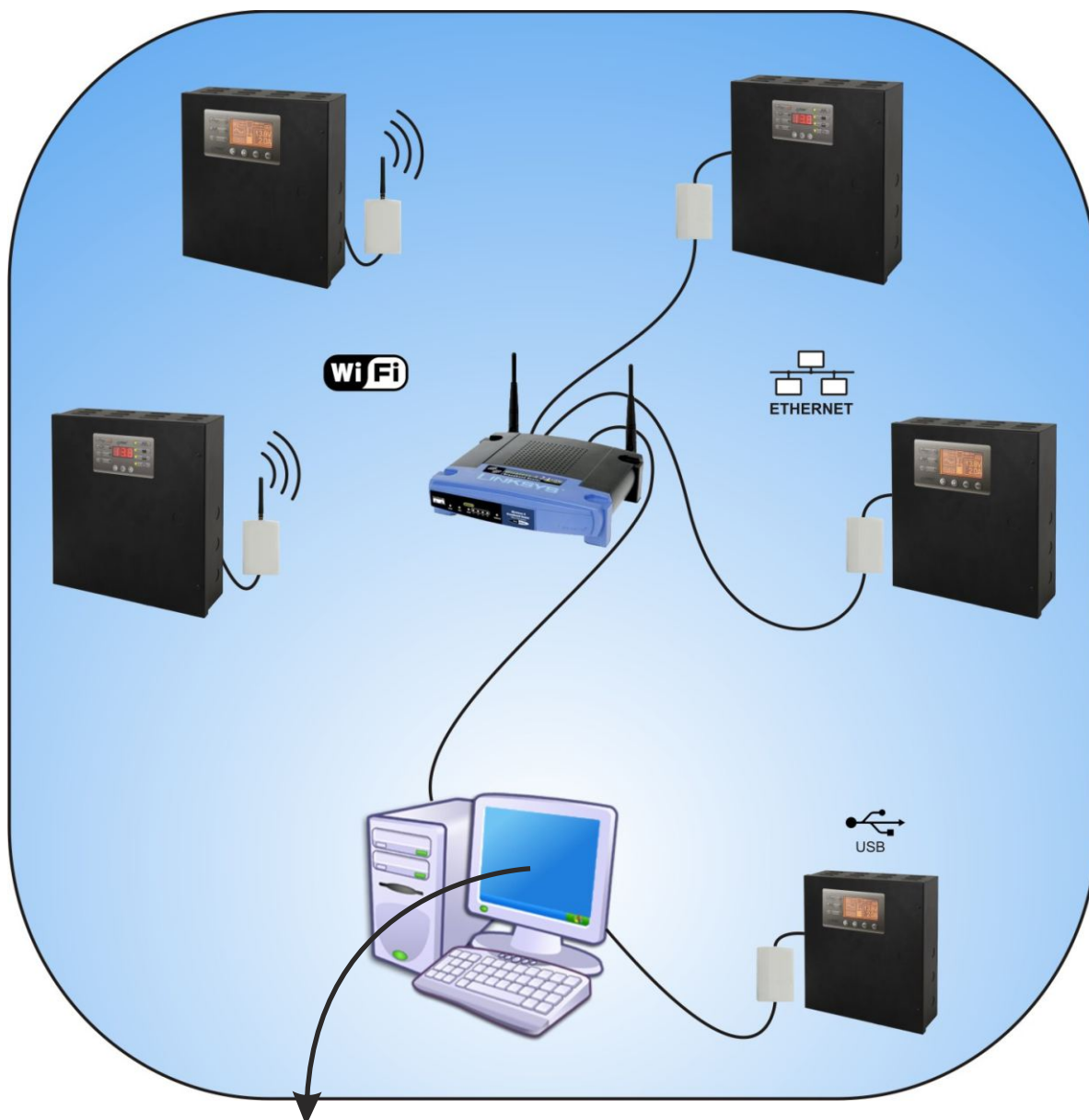
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SPECIFICATIONS	
PSU type	A
Mains supply	230V/AC (-15%/+10%)
Current consumption	1,1A
PSU power	155W
Efficiency	83%
Output voltage	22,0V±27,6VDC – buffer operation 20,0V±27,6VDC – battery-assisted operation
Output current	Io = 5A + 0,6A battery charge Io = 4,1A + 1,5A battery charge Io = 3,4A + 2,2A battery charge Io = 2,6A + 3A battery charge
Voltage adjustment range	24,0 V ÷ 29 V
Ripple voltage	50mV p-p max.
Current consumption by the PSU systems	45mA – battery-assisted operation
Battery charging current	0,6A / 1,5A / 2,2A / 3A – I _{BAT} (J1, J2, J3) jumper selectable
Over voltage protection OVP	U>33V, disconnection of the output voltage, automatic return (AUX+ disconnection)
Short circuit protection SCP	200% ÷ 250% of the PSU power - current limiting and/or fuse fault in the battery circuit (fuse-element replacement required)
Overload protection OLP	110% ÷ 150% (@25°C) of the PSU power - current limiting with the PTC polyswitch, manual restart (failure requires disconnection of the DC output circuit)
Battery circuit protection SCP and reverse polarity connection	6,3A - current limiting, F _{BAT} fuse (failure requires fuse-element replacement)
Deep discharge battery protection UVP	U<20,0 V (± 2%) – disconnection (-BAT) of the battery, adjustment via P _{BAT} jumper
Technical outputs: - EPS; output indicating AC power failure	- R type – relay, 1A@ 30V DC/50V AC max. - OC type, 50mA max. normal state: L (0V) level, failure: hi-Z level - time lag, approx. 5s/140s/17m/2h 20m (+/-5%)
- APS; output indicating battery failure	- OC type, 50mA max. normal state: L (0V) level, failure: hi-Z level
- PSU; output indicating PSU failure	- OC type, 50mA max. normal state: L (0V) level, failure: hi-Z level
- TAMPER; output indicating enclosure opening or detaching from the mounting surface	- micro switches, NC contacts (enclosure closed and fixed to the mounting surface), 0,5A@50V DC (max.)
Optical indication:	- LEDs on the PSU pcb, - LCD panel • electrical parameters reading • failure indication • PSU settings adjusted from the panel level • 3 levels of access, password-protected • PSU operation history - 6000 • failure history - 2000 • real-time clock, battery-backed
Enclosure	metallic, IP20, colour: RAL 9005
Dimensions	405x 355 x 98 (400 x 350 x 90+8) (WxHxD) [mm] (+/- 2)
Net/gross weight	2,15kg/2,3 kg
Fitting battery	2x17Ah/12V (SLA) max.
Closing	Cheese head screw x2 (at the front), lock assembly possible
Notes	The enclosure does not adjoin the assembly surface – the distance: 8mm PSU cooling: convectional

Remote parameter control system.



POWER SECURITY

