

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

CODE: **APSOSEC4** v.1.0/1
NAME: **OSEC PAX4**

EN**



Features:

- supply voltage ~200 - 240 V
- DC 13,8 V uninterruptible power supply
- PSU current efficiencies: 8 A (10 A total)
- high efficiency (up to 86%)
- battery charging current jumper selectable
- deep discharge battery protection (UVP)
- START function of manual switch to battery power
- fitting battery: 17Ah/12V
- dynamic battery test
- battery circuit continuity control
- battery voltage control
- battery charging and maintenance control
- EPS technical output indicating AC power loss – relay
- APS technical output indicating battery failure – relay
- FPS technical output of fuse activation indication - relay
- 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
 - against sabotage: unwanted enclosure opening

DESCRIPTION

A buffer PSU is intended for an uninterrupted supply to devices requiring stabilised voltage of **12 V DC (+/-15%)**. The PSU provides voltage of **U=13,8 VDC**. Current efficiency:

1. Output current 4 x 2 A + 1 A battery charge
2. Output current 4 x 2 A + 2 A battery charge

Total device current + battery: 10 A 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 17Ah/12 V battery. It is fitted with micro switches indicating unwanted door opening (front panel).

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SPECIFICATIONS	
Mains supply	~200 – 240 V; 50/60 Hz
Current up to	1,3 A
Inrush current	40 A
Supply power	138 W
Efficiency	86%
Output voltage	11 – 13,8 V DC - buffer operation 9,5 – 13,8 V DC - battery operation
Output current	4x2 A
Output current (total)	10 A
Ripple	100mV p-p max.
Battery charge current	1 A / 2 A max. – 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	melting fuse T10A (in case of a failure, fuse-element replacement required - under power supply cover)
Surge protection	varistors
Overvoltage protection OVP	>19 V (activation requires disconnecting the load or supply for about approx. 1 min.)
Excessive discharge protection UVP	U<9,5 V (± 5%) – disconnect of connection battery
Sabotage protection: - TAMPER output indicating enclosure opening or detachment from the ground	- microswitch, NC contacts (enclosure closed, attachment to the ground), 0,5 A@50 V DC (max.)
Technical outputs: - EPS; output indicating AC power failure - APS; output indicating battery failure - PSU; output indicating PSU failure	- relay type: 1 A; 30 V DC/50 V AC, time lag: approx. 30s - relay type: 1 A; 30 V DC/50 V AC - relay type: 1 A; 30 V DC/50 V AC
LED indication	Yes
Operating conditions	Temperature: -10 C – +40 C relative humidity 20%...90%, without condensation
Enclosure	steel sheet DC01, thickness: 1,2 mm, colour: RAL 9003
Dimensions	W=445 H=505 D=111 [+/- 2mm]
Net/gross weight	7,4 / 8,1 [kg]
Fitting battery	17Ah / 12 V (SLA) max.
Closing	Cheese head screw (at the front)
Declarations	CE
Notes	The enclosure does not adjoin the assembly surface so that cables can be led. Convectional cooling. Connectors: Power-supply: Φ 0,63±2,5 Battery output BAT: 6,3F-2,5 + angle muffs