

# APS-612

## BACKUP POWER SUPPLY

APS-612 is an advanced backup power supply that meets the high security requirements of EN 50131-3 standard for Grade 3. Its output current is 6 A: 3 A for powering devices + 3 A for charging the battery. It is designed to power loads working at 12 V DC, including, but not limited to the devices used in alarm systems, access control systems and CCTV systems. APS-612 can also be used to power medical devices, for industrial automation applications, as well as for critical infrastructure systems. It has a special 3-pin connector for use with SATEL devices, including zone/output expanders or ACCO-NT access control panels.

The LLC topology SMPS, used in its construction, is characterized by high efficiency and provides excellent performance with low heat losses. Because of the direct supply from 230 V AC mains, the device does not require installation of any additional mains transformer. APS-612 is provided with overheating, short circuit and overload protection. It has a noise filter and an active circuit of PFC power factor correction (to 0.98) at the input.

A battery can be connected directly to the power supply. Microprocessor control of battery status and performance, precise voltage regulation and automatic disconnection in case of excessive discharge keep the battery in good condition and reduce the possibility of damage, thus prolonging its service life.

LEDs are used to indicate availability of mains supply, battery supply status and occurrence of troubles – overheating, overload or output short-circuit. The troubles are also signaled acoustically. The alarm system is informed of any troubles by four OC type outputs. Changes in their status indicate excessive operating temperature, battery voltage drop below the permissible value, output overload or mains power loss.

- complies with requirements of **EN 50131-3** Grade 3
- complies with requirements of **EN 60950-1** security standard
- conforms to the level of conducted and radiated EMI according to **EN 55011** Class B
- high capacity 12 V DC switching mode power supply with active PFC, not requiring mains transformer
- total power supply output current of 6 A: 3 A (output) + 3 A (charging)
- short circuit and overload protection
- designed for use with sealed lead-acid batteries
- selectable battery charging current (1.5 A/3 A)
- battery deep discharge protection
- battery overheating protection
- 4 OC outputs for trouble signaling
- optical indication for mains, battery, overload and overheating status
- acoustic signaling of troubles
- special connector for use with SATEL devices: **INT-E**, **INT-O**, **INT-PP**, **INT-ADR**, **INT-ORS**, **INT-IORS**, **ACCO-NT**
- designed for mounting on 35 mm DIN rail and in **OPU-3 P** and **OMI-5** enclosures



**TECHNICAL DATA**

Environmental class	II
Enclosure dimensions	78 x 122 x 84 mm
Operating temperature range	-10...+55 °C
Supply voltage	195 - 265 V AC
Weight	525 g
Battery failure voltage threshold (±10%)	11,5 V
Battery cut-off voltage (±10%)	10,5 V
Security grade according to EN 50131	Grade 3
Energy efficiency	up to 90%
WS, WB, WP, WT outputs (OC type)	50 mA
Output current - supply	3 A
Output current - battery charging (selectable)	1,5 / 3 A
Actual output voltage	13,8 V DC
Nominal output voltage (according to IEC 38)	12 V DC
PF (Power Factor Correction)	up to 0,98
Power supply type (according to EN50131)	A