

Boxed Power Supply Units (EN54-4 and AOV)

The Advanced MXP-650 (2.5A) and MXP-651 (5.0A) power supply units can be used for any fire alarm system, including AOV systems. They are certified to EN54-4 by VdS and EN12101-10 by AFNOR, ensuring reliable and safe operation.

Suited for almost any application, the power supply unit and battery charger have been developed using the latest technology to provide a high-efficiency switch-mode power supply.

The units include intelligent battery charging technology, mains and battery monitoring including two independent volt-free outputs. In addition they also provide deep battery discharge protection in case of a prolonged mains failure.

The inclusion of LED indicators provides quick status diagnostics of the power supply.

These power supply units complement the MXP-549 1.5A

Applications

These power supply units can be used in any fire alarm installation requiring a 24volt supply for operation and which specifies EN54-4 power supplies (e.g. BS 5839 code of practice), EN12101 and AOV systems.

Ensuring reliable and safe operation, they are certified to EN54-4 and EN12101-10 by AFNOR and VdS (EN54-4 only).

NOTE: MXP-549, 1.5A PSE is available and is detailed in a separate datasheet.



Features

- A range of power supply equipment with power output options to suit most applications
- Universal AC input on the 2.5A and 5.0A versions
- Independently monitored dual outputs of 27.6Vdc
- High-efficiency switched mode power supplies
- Alternative enclosure sizes to support standby battery backup options
- Exterior status LEDs to support diagnostics
- Load-sharing, supporting either rapid charging or brief high-current peak-loads
- No output interruption during automatic switchover between mains and battery power
- Deep discharge protection disconnects battery from load when output voltage falls below 21.6V
- Self-resetting battery fuse protection

Approvals

Certified by VdS (VdS 2541) to:

- EN54-4/A2 - Fire Detection and Alarm Systems
- EN12101-10 "Smoke and Heat Control Systems"

Specification

Input Supply	MXP-650: 195V – 265V AC, 50Hz nominal
	MXP-651: 195V – 265V AC, 50Hz nominal
Output Voltage	21.6V DC (Umin)* – 28.8V DC (Umax) **
Output Current	MXP-650: 2.5A continuous load (ImaxB), 1.75A battery charge (ImaxA) - based on 17Ah batteries
	MXP-651: 5.7A continuous load (ImaxB), 4.0A battery charge (ImaxA) - based on 24Ah batteries
	Note: These values will vary depending on connected batteries and EN12101-10 functionality, refer to Install Manual for further information
Inrush current	25A max at 25 °C 230V ac for 10ms
Fuse (Mains)	MXP-650: T2.0 A 20mm, 250V ac HRC (IEC 60127-2 type)
	MXP-651: T3.15 A 20mm 250V ac HRC (IEC 60127-2 type)
Dimensions (HxWxD)	420 x 400 x 80 mm - large enclosure, space for up to 2 x 17Ah batteries
	420 x 420 x 180 mm - deep enclosure, space for 2 x 24Ah or 38Ah batteries
	Recommended battery manufacturers: Powersonic, Yuasa, Interlogix, Europa
Weight	Large enclosure = 5.8kg excl. batteries / 18kg incl. batteries
	Deep enclosure = 9.7kg excl. batteries / 28kg or 40kg incl. batteries (dependent on battery size)
Material / Colour	1.2 mm steel / RAL7035
Environment	Indoor use only - IP30
Temperature	Operational: -10°C to 40°C at 95% RH / Storage: -20 to +80°C
Fault Output	Volt-free change-over contacts (SPDT) rated 1A @ 30V DC (all models)
Status Indication	Mains, Battery Fault, PSU Fault, Diagnostic, Output 1 & Output 2

* Umin / Umax / Un = maximum / minimum

** Umax elevated by approximately +1% of Un when connecting the battery. Umax = 28.8V at all other times.

Further specification information can be found in the respective Install Manuals

Order Codes and Options

MXP-650	2.5A 24V PSE & Battery Charger Large Enclosure
MXP-650/D	2.5A 24V PSE & Battery Charger Deep Enclosure
MXP-651	5.0A 24V PSE & Battery Charger Large Enclosure
MXP-651/D	5.0A 24V PSE & Battery Charger Deep Enclosure

NOTE: MXP-549, 1.5A PSE is available and is detailed in a separate datasheet.

[Check if this document is up to date](#) | [Give us feedback](#)

Advanced, The Bridges, Balliol Business Park, Newcastle upon Tyne, NE12 8EW, UK **T:** +44 (0)345 894 7000, **E:** enquiries@advancedco.com,
W: www.advancedco.com

As our policy is one of constant product improvement the right is therefore reserved to modify product specifications without prior notice.