

STX2405-E

EN 54-4 Approved, 24 V 5 A + 0.85 A Intelligent Power Supply

The Product

The STX2405-E is a fully featured EN54-4 approved power supply ideal for use in fire system applications. It features intelligent battery charging, monitoring and signaling. Regulated 27.6 VDC output will source up to 5 A into the load as well as providing up to 0.85 A for charging the standby batteries.

Maximum battery life is assured through continuous active battery monitoring and 2 different charge levels: bulk (fast charge) and temperature compensated final float. Once fully charged the product operates in Eco power saving mode, whereby the batteries are charged for 4 hours in every 24 hour period while still being continuously monitored. Deep discharge protection prevents premature battery failure when operating from standby for extended periods.

Inside the unit, a diagnostic led with various flash patterns, ensure accurate diagnostics when the unit is in fault.

Installer friendly

A STX2405-E power supply is supplied in a self-contained, wall mount housing that can also house up to 17 Ah batteries (not included). The housing has a metal construction, and is white of color. The housing features a center keyhole on the back for initial fixing to the wall, which is supported by 4 additional mounting holes.

A potential-free contact is used to signal faults due to output failure, battery fault, charger fault or internal fault. A second potential-free contact signals the loss of mains power. These ensure any fault conditions are reported to the monitoring equipment, and that appropriate action is taken in the event of loss of mains power

The battery charging circuit is energised only when a battery is correctly connected and the battery voltage is greater than 14 V.

A green and a yellow LED that are visible when the box is closed, indicates mains present and faults. An orange diagnostics LED inside the unit, distinguish between various faults by way of various flash patterns. These ensure that the fault condition can be correctly identified on the spot and appropriate action take to rectify the cause.



Details

- Approved to EN54-4 / CPR
- Self contained box houses up to 17 Ah batteries
- Deep battery discharge protection
- Mains & Fault LED indicators
- Fault diagnostics led, inside of unit
- 2 x Relay outputs: Fault & Mains Fault
- Temperature compensated charging
- Wide input voltage range
- EcoCharge technology which reduces current consumption
- Battery monitor - battery missing, low battery, short-circuit, reverse connection & circuit impedance error
- Electronic overload protection shuts down output until overload or short circuit is removed

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Technical specifications

Output

Output Current	5 A
Voltage	27.0 - 28.3 VDC with mains 20.3 - 26.0 VDC on battery standby
Ripple	100 mV max
Continuous current output	
- With 2.1Ah batteries	5.0 A non-charging / 5.0 A charging
- With 7Ah batteries	5.0 A non-charging / 5.0 A charging
- With 17Ah batteries	5.0 A non-charging / 5.0 A charging
Fuse - load	5 A
Fuse - battery	5 A
Constant current charge	0.8 A

Standby battery

Battery capacity (in housing)	Up to 2 x 17 Ah
Battery charging	Constant current charge to 80% in 24 H Float charging to 100% in 48 H
Deep discharge protection	Battery disconnect at 21 V
Low battery threshold	23 V

Physical

Physical dimensions	400 x 420 x 80 mm
Net weight	5.9 kg (without batteries)
Colour	White
Material	Steel

Environmental

Operating temperature	-10 to +40°C
Storage temperature	-20 to +80°C
Relative humidity	75% noncondensing

Input

Rated range	110 - 240 VAC, 50 Hz - 60 Hz
Operating range	90VAC to 264 VAC
Current	<2 A maximum at full load

Local indicators

On the front of the unit	Green LED - power Yellow LED - fault
Inside the unit	Orange LED - fault diagnostics

Signalling output

Fault relay	100 mA @ 60 VDC N/C contacts
Mains fault relay	100 mA @ 60 VDC N/C contacts

Mechanical

Size	400 x 420 x 80 mm
Weight	5.9 kg (excluding batteries) 18.5 kg (including 17 Ah batteries)
Temperature	-10 to +40 °C (operating) -20 to +80°C (storage)
Humidity	75% RH non-condensing
Material	1.2 mm steel
Color	White