

# ST.5000 POWER SUPPLIES

## Data sheet & Installation Instructions

### Introduction:

The “ ST” is a range of Linear Power Supplies designed to power equipment used in the Security, Fire, CCTV and Access Control industries. They are certified to EN.60950 (European Safety Standard). The power supplies, which cover a range of 1, 1.5, 2, 3, 5, 6 and 8 Amp versions, are available in either 12 or 24 volt models and supplied in a selection of housing options (Vertical - pictured, Large or Chassis-mounted). They may also have optional multi fused outputs. The ST.5000 is designed to give an output of 5 Amp at 12 volts DC nominal. which includes recharging a suitable Sealed Lead Acid battery via the flying leads provided. It has three external LED indicators, a Mains Fail warning Relay Output, an Over-voltage cut-off and a Manual Battery Test facility.

### Specification

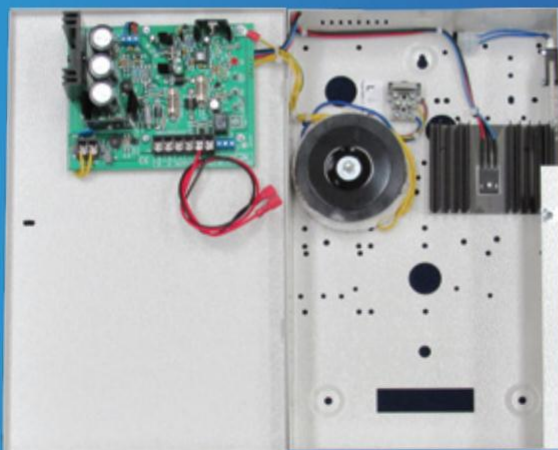
|                            |   |
|----------------------------|---|
| <b>Mains Input</b>         | <b>230V AC @ 50 Hz, 5 Amp.max.</b>        |
| <b>ST. 5000 output</b>     | <b>5 Amp @ 13.8 volts DC, off load.</b>   |
| <b>Ripple</b>              | <b>&lt; 0.1 volt peak to peak</b>         |
| <b>Battery recommended</b> | <b>2 x 12 volt, 7 amp/hour</b>            |
| <b>Battery recharge</b>    | <b>24 hours (80% in 14 hours)</b>         |
| <b>Environment Range</b>   | <b>-10 to + 40 deg. C.</b>                |
| <b>Dimensions</b>          | <b>see brochure for enclosure options</b> |

### Indications

|                             |  |
|-----------------------------|--|
| <b>LED – Green</b>          | <b>Mains present when on.</b>                    |
| <b>LED – Red</b>            | <b>DC output fuse blown when on</b>              |
| <b>LED – Yellow</b>         | <b>Indicates Battery Fault on Manual Test.</b>   |
| <b>LED – Red (Internal)</b> | <b>Over-voltage warning indication – (30V +)</b> |
| <b>Relay Output</b>         | <b>Mains Fail Relay Output (FailSafe/ NC)</b>    |

### Fuses

|                               |   |
|-------------------------------|---|
| <b>Mains Safety Fuseblock</b> | <b>5 Amp, Ceramic, F, 250V, (20 x 5 mm)</b> |
| <b>Load Output Fuse</b>       | <b>5 Amp, L, F, 250V, (20 x 5 mm)</b>       |





*"Powering the International Security Industry"*

## INSTALLATION NOTES

Box should be fitted to wall horizontally so that front decal is upright.

Secure box to wall and connect Mains using suitable 3 core 0.75 Cable via anti-strain gland to correct terminals at 230V Input Fuse-block observing polarities.

Mains cable should be routed away from other low voltage circuitry in box.

220-240 Volt Mains should be provided via an un-switched fused spur point, with integral fuse (rated at 3.15 amp, 250 volt, Ceramic) .

Prior to service the fuse in this spur point should be removed and the internal battery disconnected in order to completely power down the unit.

Where identification of the Neutral in the Mains Supply is not possible, an additional readily accessible 2 pole disconnect device must be provided in the building installation.

Connect output load, observing correct polarity, at DC terminals on PCB. Attach Battery link lead then main Battery spade leads, Red and Blue, observing correct polarity.

Apply 220-240 volts Mains and observe that Green LED illuminates.

Remove DC output fuse to check that Red LED illuminates. Replace fuse and ensure that Red LED extinguishes.

Cable ties should be applied to Mains inputs, DC outputs and Battery Leads. If applicable, wire tamper circuit (low voltage only), through Micro-switch.

