**LED Details.** Note: SLOW Flash = 1 pulse/sec. FAST Flash = 4 pulses/sec.

**PSU Conn Fault** ON: An output on the PSU connection (P2) is turned off.

RED (L3) This will possibly be due to excessive load or a short circuit.

When excess load is removed, O/P will reset after a short delay.

**Batt Chrg** OFF: No Battery is connected. ON: Battery fully charged.

GREEN (L4) SLOW Flash: Charging. FAST Flash: Battery discharging.

Batt Fault ON: Battery Missing, Low Voltage or Failed Test.

RED (L2) SLOW Flash: Battery Test in progress.

FAST Flash: Battery Test Failed.

(See "T4" details on p2)

**AC OK** ON: AC Input is present.

GREEN (L1)

**V+ Fault** ON: V+ output and the PSU connection (P2) outputs are turned off.

RED (L5) This will possibly be due to excessive load or a short circuit.

When excessive load is removed, O/P will reset after a short delay.

#### **Fuses:**

NOTE: V+ (T3) and the three 13.75V outputs provided on the "PSU" connector (P2) are individually protected by electronic fuses. If activated, removing the excess load or short circuit from the relevant output will restore the O/P to normal operation.

F1 Mains Input Fuse. See note below.

F2 Battery Safety Fuse. See note below.

**NOTE:** F1 & F2 are NOT User Servicable. If blown, return unit to supplier for repair.

## **Integriti Smart Power Supply Monitoring and Reporting:**

Integriti Modules that support the 10-way "External Power" connector, also provide System Inputs for monitoring and/or reporting any Smart Power Supply problems. The following System Inputs are provided:

• AC fail

LAN Fuse

Low Volts

- Low Battery/No Battery
- Detector Fuse
- PS Fail

• Battery Test Fail

See the Integriti Programming manual for details.

**Disclaimer:** While every effort has been made to ensure the accuracy of this manual, the manufacturer and/or its agents assume no responsibility or liability for any errors or omissions. Due to ongoing development, this manual is subject to change without notice.

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# Integriti

# 8A Smart Power Supply. P/N: 996092 INSTALLATION MANUAL

#### Overview

The Integriti 8A Smart Power Supply is designed primarily for use as a battery-backed supply for Integriti Modules that support the 10-way "External Power" bus connection. e.g. Integriti ILAM, SLAM, 8 Zone Expander Module, etc.

When used with these Modules, connection is made via the 10-way cable provided. Power supply and Battery status may be monitored and/or reported via dedicated System Inputs on the host Module. *See p4 for details*.

It can also be used as a general purpose, battery-backed, 13.75V supply to power legacy or 3rd party equipment via the plug-on screw terminals.

The product is supplied as an assembled, enclosed unit for use in larger Integriti enclosures and does not require installers to be specially certified. It features a high reliability design that offers exceptional stability when used with the recommended battery type and is also compatible with Proximity type reader heads.

### **Specifications**

Input Voltage / Frequency: 200 to 275V AC / 50Hz +/-5%

Input Current. 0.7 Amps.

Output Voltage: 13.75V DC up to 8A. (Battery fully charged)

Maximum O/P Current. V+: 6.5A nominal. 8.0A continuous max.

Batt Charger: 1.5A nominal. 2.0A maximum.

**NOTE:** When running from the AC Supply, the total of all long-term loads must not exceed 8.0 Amps. Short-term loads of up to 10A total are supported by drawing current from the Battery for a period limited by Battery capacity and charge state.

Output Ripple: 50 mV RMS max. @ Iout = 6.5A.

Load Regulation: +0.75% (100mV) / -1.5% (200mV) @ Iout = 0.1A to 6.5A

Battery Type & Capacity: 12V Sealed Lead Acid Battery. 6.5 to 18 AH Dimensions: L: 274mm. W: 100mm. H: 64mm.

Weight: 1.1 kg

Operating Temperature: 0° to 40° Celsius (Ambient)

Humidity: 15% to 85% Relative humidity (non-condensing)

#### **Parts List**

- Integriti 8A Smart Power Supply unit.
- Installation Guide. (This document)

- Installation Kit containing:

- 1 x Chassis Earth Cable. - 4 x M4 x 5mm screws.

- 1 x Integriti 10-Way PSU Cable. 430mm.

- 5 x M4 Shakeproof Washers.

- 1 x IEC Mains Cable.

- 1 x Integriti Heavy Duty (18AH) Battery Cable.

- 1 x M4 Hex Nut

- 1 x Integriti Standard (7AH) Battery Cable.

- 1 x M4 Bolt

#### **Mounting the Unit**

If not already mounted in an Integriti enclosure, position the unit to align with the matching set of mounting holes in the chassis, ensuring that there is adequate space for the Mains lead to be fitted.

Secure the unit to the chassis using the four M4 Screws and Shakeproof Washers supplied.

#### **Connections**

IEC 230V AC Mains power socket. Do not connect until all other wiring is complete.

Earth. If the Chassis Earth Cable is not already installed, connect the QC spade to the QC lug on the Power Supply, then secure the eyelet to the threaded stud provided on the chassis using a Shakeproof Washer and M4 Nut.

If the chassis does not have a threaded stud, fix the eyelet to the chassis using the M4 Bolt, Shakeproof Washer and M4 Nut provided to ensure a reliable electrical connection.

- P2 Direct connection to compatible Integriti Modules using the supplied Integriti PSU cable. Provides all power, monitoring and control connections required.
- T3 13.75V Generic DC Power Supply Output. Can be used simultaneously with P2, providing the combined nominal current does not exceed 6.5A.
- T4 I/O for low-level monitoring and control in legacy or 3rd party systems.

  BATTFAIL: Low Battery indicator Open Collector Output. See Note 1 below.

ACFAIL: AC Fail indicator Open Collector Output. See Note 1 below.

BTEST: Battery Charger control input. See Note 2 below.

Switch to 0V to perform Battery Testing.

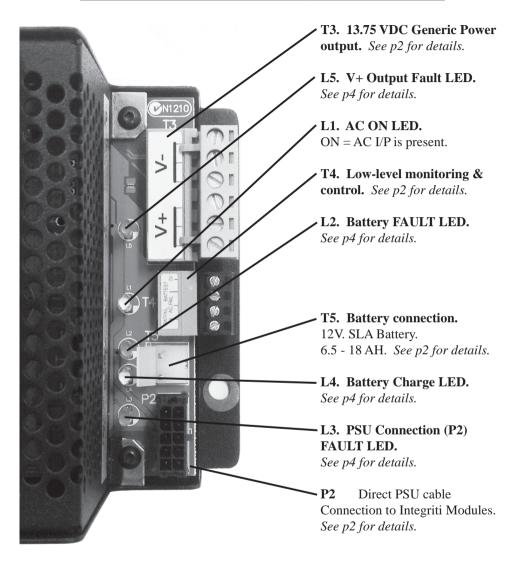
0V: Common 0V connection for FAIL outputs and "BATTEST" input.

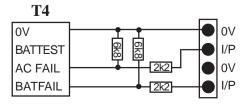
T5 Keyed 12V terminals for SLA Battery. 6.5 - 18 AH. Use Battery cable supplied.

#### **IMPORTANT NOTES:**

- 1) BATTFAIL and ACFAIL are Open Collector outputs that can switch up to 100mA. Both outputs are ON (switched to 0V) for OK, and OFF (open circuit) to indicate a fault. This allows connection to Zone Inputs using EOL Resistors. *See diagram on p3*.
- 2) T4 "BATTEST" Input must not be used if the Power Supply is connected to an Integriti Module using the Integriti PSU cable via P2.

#### INTEGRITI 8A POWER SUPPLY CONNECTIONS.





Zone Inputs.

Concept EOL values shown as example. *See details on p2*.