



Installation Manual for D1503 SM-P Low Emissions Type A Power Supply Module

D1503SM - Series	
D1503SM-P	3A PCB-only, Power Supply Module
D1503SM-X8	3A Module supplied with an 8-way output splitter

INSTALLATION

Connect the Live, Earth and Neutral terminals to an un-switched fused spur.

Connect the tamper outputs to a control panel or a suitable communications device as appropriate (see your control panel manuals for details).

Connect the 12v power output to the system. Fit the battery.

Switch on the AC supply and confirm that the LED marked "230Vac 'ON'" is lit.

External power supply (AC supply)

The power supply has a three-way terminal block for Live, Earth and Neutral connections, and is protected by a replaceable 20mm anti-surge fuse. Mains earth is isolated from the 0V output, although, when supplied boxed, mains earth is connected to the metal enclosure.

Tamper output

This voltage-free output is connected to the tamper switch. These terminals will be shorted when the tamper switch is closed.

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12V power output

Terminal blocks are provided to connect to the system.

Auxiliary power supply (batteries)

This power supply has a 250mA constant-current battery charging output which is compatible with 7AH or 8AH Sealed Lead Acid or Gel batteries, these need to be connected to the "BATT" terminals.

If two batteries are used, they must be connected in parallel.

Battery protection

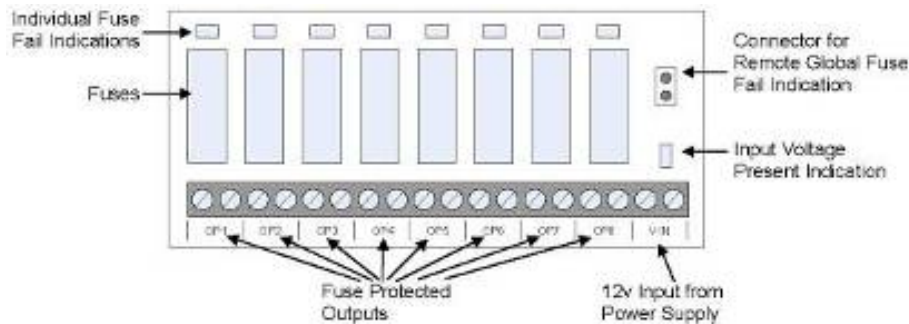
The batteries and electronic circuitry are protected against reverse polarity connection by a self resetting electronic fuse.

Optional D15X8 output splitter

An optional D15X8 is available and can be connected to any Dycon D1503SM ungraded power supply to provide up to 8 individually fused outputs. The D15X8 is supplied fitted with 8 fuses rated at ½ Amp, plus 2 fuses rated at 1 Amp in a spares bag. The installer may fit any combination of fuses, provided that the overall load does not exceed the 3 Amps provided by the power supply.

Example: a D1503SM could support outputs 1 to 6 = ½ A (3A in total)

A red LED is provided for each output, which lights if the relevant fuse ruptures. In addition, a 9th LED is provided which lights when the input voltage is present. A 2-way Molex connector is provided for an LED visible from outside the housing to indicate if ANY fuse fails.



Maintenance

This D1503SM-P unit is only to be used by qualified service personnel; there are no user serviceable parts other than the 230Vac input fuse. No maintenance is required other than routine periodic testing and replacement of the standby batteries. For further information on routine battery replacement, please contact your battery supplier or manufacturer.

Specifications

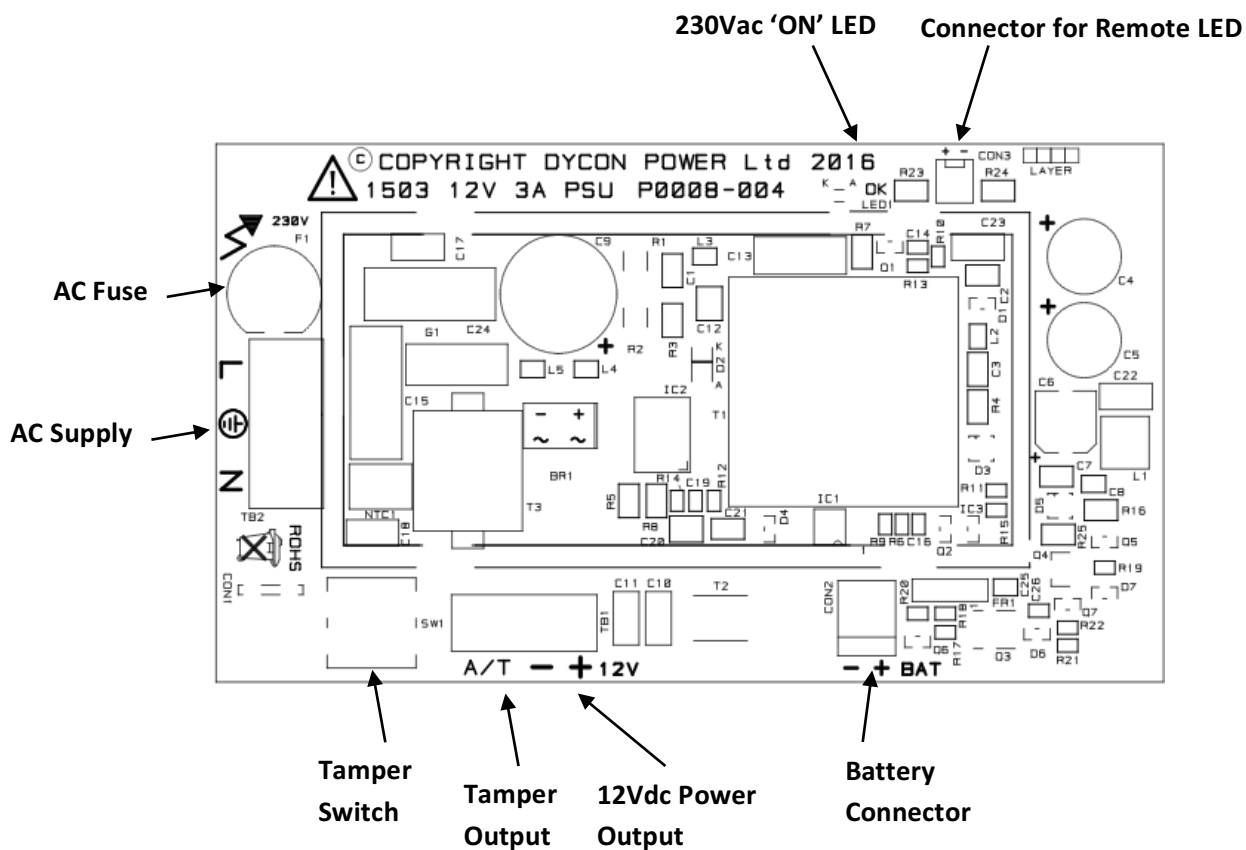
Power supply	Type A, ungraded, Environmental Class 2
AC input voltage	230Vac +10% -15%, 50Hz ± 15%
Output voltage	13.7Vdc nominal
Output ripple	Less than 100mV (less than 0.7% @ 13.7v)
Battery recharge time	Less than 30 hours
Operating temperature range	-10°C to +40°C

Product Details

Part No.	Description	PCB Size (h x w x d) mm	Weight (kg)
D1503SM-P	PCB-only, Low-emissions, 12Vdc 3A switched-mode power supply with 250mA constant current battery charging	130 x 73 x 41	0.19

The D1503SM is fused in the 230V AC supply, this fuse is a replaceable 3.15A FAST, 250V, 20mm, Ceramic, 1500A break unit. **DO NOT USE ANY DIFFERENT VALUE FUSES!**

Layout – D1503SM



In case of problems, telephone Dycon Technical Support on +44 (0)1443 471 900, or email technical@dyconpower.com.