

Model SLA1500PCB Battery Charger

General Specification

The two models of SLA1500PCB chargers for cyclic or standby mode charging of sealed lead acid batteries are user selectable as follows: **6/12 model** (6V or 12V) ; **12/24 model**: (12V or 24V) operation. They can be configured for 115V or 230V operation via series or parallel connection of the transformer primary. Both models may also be used as current limited power supplies.

Model	SLA1500PCB6/12	SLA1500PCB12/24
Battery Voltage	6V or 12V (links + trimmer)	12V or 24V (links + trimmer)
Max Output	1500mA	1000mA
Output Voltage	6.0-9.5V (in 6V mode)	12.0-15.5V (in 12V mode)
Input Voltage	100-130V or 200-265Vac, 50/60Hz	100-130V or 200-265Vac, 50/60Hz
Led Indicators	None	None
Size	160 x 100 x 45mm	160 x 100 x 45mm
Mass	0.8kg	0.8kg

Installation: Ensure correct input voltage. The unit is preset to operate on a 230V supply in the 12V (model 6/12) or 24V (model 12/24) standby charge mode. Observe output polarity when making battery connection. Sealed lead acid batteries require a controlled constant voltage current limited charge for optimum operating life.

Standby Mode:

Charge voltage per cell: 2.25-2.3V (@20°C)

6V operation: 6.75-6.9V

12V operation: 13.5-13.8V

24V operation: 27.0-27.6V

Cyclic Mode:

Charge voltage per cell: 2.35-2.5V (@20°C)

6V operation: 7.2-7.5V

12V operation: 14.4-15.0V

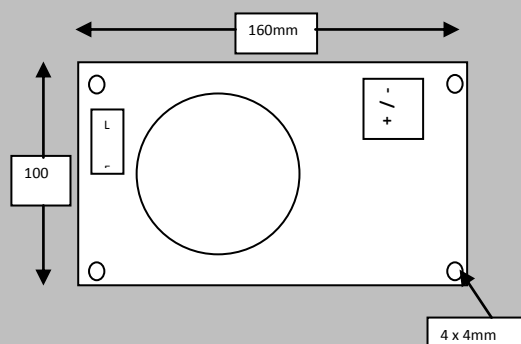
24V operation: 28.8-30.0V

To modify for 115V operation, unsolder transformer lead in S2 and resolder in hole adjacent to S1. Similarly, unsolder lead in F1 and resolder in lead adjacent to F2. The transformer windings are now connected in parallel for 115V operation.

Mounting:

The unit may be rack mounted or secured using the four corner holes. Open pcb's are designed for indoor use unless protected inside suitable housing. It is the responsibility of the system integrator to meet all safety and functional requirements.

Note: The card must be mounted to provide adequate insulation requirements for the application. Under no circumstances should both ends of the toroid mounting screw contact a metal chassis as this would constitute a shorted turn, causing irreparable damage. Attention should be paid to allowing sufficient cooling/ ventilation around the pcb in all eventualities of operation. The heatsink can get very hot.



User Adjustments:

Charger Output Voltage:

Before proceeding, ensure that both jumper links are set to the required voltage range.

Connect 100R (model 6/12) or 220R (model 12/24) 3W resistor across battery screw terminal connector and adjust preset VR1 until voltage across the resistor is within limits specified above. If the battery is to operate continuously above or below 20°C, the voltage should be adjusted as follows:

Standby:- -3mV/°C/cell Cyclic:- -4mV/°C/cell

Power Supply Mode:

The SLA1500PCB may be used as a regulated current limited power supply.

Output regulation: <50mV (0.1-1.0A for 6/12 model; 0.1-0.5A for 12/24 model)

Output ripple: <5mV @1.0A for 6/12 model; @0.5A for 12/24 model

Non-Earthed Operation:

The unit provides suitable creepage/ clearance for non-earthed 'double insulated' application if mounted in a suitable housing with suitable mounting insulation. Input/Output pcb creepage≥8mm, clearance≥5mm.

Refer to applicable standards for your product type (e.g. EN60950).