

Charging Indicators

-  **Green Flashing** - Pre-charge inspection stage
-  **Red Light ON** - Charging in progress
-  **Green light ON** - Fully charged

Charging Indicator light

Label and charger specifications

Cooling fan

Negative (-) and Positive (+) M8 terminal rings

Mains plug

Product Specification

Model	STS1500
Battery Chemistry	LiFePO4
Voltage	12V
Output Votage	14.4V
Output Current	40 ± 0.2A
Input Voltage	180 ~ 260 Vac

Input Characteristics

Rated Input Voltage	220 Vac
Input Voltage Range	180 ~ 260Vac
AC Input Voltage Frequency	50~ 60 Hz

Charge Stages

Battery Voltage	Output
Below 10V	8A
10V - 11.7V	26.6A
11.7V - 13.3V	40A
13.3V - 14V	33.3A
14V - 14.4V	33.3A - 0A LINEAR DECREASE

Product Characteristics

Size	230 (L) x 114 (W) x 73 (H) mm
Material	Aluminium
Input Socket	AC line - 1.3m
Output Socket	DC line - 0.85m
Net Weight	2.3KG

Health and Safety

Electric Strength Test	Input - Output	1500Vac/ 1min $\leq$ 10mA	Withstand DC voltage of 1500V, 1 minute, leakage current $\leq$ 5mA, no breakdown or arcing.
	Input - Earth		
Isolation Resistance	Input - Output	$\geq$ 10M Ω @500Vac	Input to output, input to housing 500VDC & normal air pressure, relative humidity 90%.
	Input - Earth		

Environmental Conditions

Operation Temperature	-30 ~ +45°C
Humidity	5 ~ 95%
Storage temperature	-40 ~ +70°C
Cooling	Fan
Altitude	0 ~ 3000m



Protection Characteristics

	Over Voltage Protection	Shuts down the supply when the voltage exceeds the pre-set level.
	Software Over Voltage Protection	Charger software limits the maximum output voltage to a level suitable for the battery system.
	Thermal Protection	Aluminium shell inside temp $>65^{\circ}\text{C}$ (Automatic shutdown) Transformer temperature $>110^{\circ}\text{C}$ (Automatic shutdown)
	Current Limiting Protection	If maximum current is achieved, the charger will restrict the flow to protect the system.
	Short Circuit Protection	Operational protection against excessive currents or current beyond the acceptable current rating of equipment.
	Reverse Polarity Protection	When output wires are reversely connected, the unit will not operate. Always connect the battery to the charger first, then connect the charger to the mains.