

HDM's SC-512E-9A Solar Charger incorporates an advanced MPPT technology to optimize power harvesting during various weather conditions. 9ADC solar charger converts solar energy into electricity and rapidly recharges the batteries while extending battery life. Utilizing an intelligent microprocessor, the charger allows a high rate of charge to the battery without overheating the battery, thereby significantly reducing charge time.



ELECTRICAL	CHARGE METHOD	TRICKLE CHARGE WITH TEMPERATURE DERATED CHARGE FOR AGM FLOAT: CONSTANT FLOAT VOLTAGE OF 13.5VDC WITH LOAD CURRENT ON DEMAND.
	INPUT VOLTAGE RANGE	5 ~ 8.5VDC
	MAXIMUM PV OPEN CIRCUIT VOLTAGE ¹	8.5VDC
	MAXIMUM PV CURRENT	18.6ADC
	INPUT UNDER-VOLTAGE PROTECTION	< 4.5VDC
	INPUT OVER-VOLTAGE PROTECTION	> 9.5VDC
	MINIMUM OUTPUT OPERATING VOLTAGE	10VDC
	MAXIMUM CHARGE CURRENT	9ADC
	CURRENT LIMITING RANGE	9ADC
	REGULATION VOLTAGE	7 ~ 14.2VDC
	STANDBY POWER	< 0.1W
	INPUT FUSE	30ADC
	OUTPUT FUSE	20ADC
	OUTPUT MAXIMUM VOLTAGE	14.2VDC
MECH	OUTPUT OVER-VOLTAGE PROTECTION	> 14.5VDC
	OVERLOAD PROTECTION	EXTERNAL FUSE
INTERF	SHORT CIRCUIT PROTECTION	EXTERNAL FUSE
	TEMPERATURE DERATED CHARGE	T _{THERMIST} ≥ +75(±15%)°C
ENVIRON	AUTO MAINTENANCE MODE	FLOAT CHARGE @ 13.5VDC
	EFFICIENCY	91% TYP
	DIMENSIONS	125 x 78 x 39mm (LxWxH)
MECH	WEIGHT	0.8 LB
	CONSTRUCTION	ALUMINUM ENCLOSURE IN BLACK ANODIZED FINISH
INTERF	SOLAR INPUT	36-FT PAIR 8AWG CABLES (UNTERMINATED)
	DC OUTPUT	26-IN PAIR 12AWG CABLES WITH 3/8 RING TERMINALS
	LED	36-IN PAIR 16AWG CABLES WITH PHILLIPS 1-2267 FEMALE CONNECTOR
ENVIRON	COOLING	NATURAL CONVECTION
	OPERATING TEMPERATURE	-40 ~ +50°C
	STORAGE TEMPERATURE	-40 ~ +85°C
	WARRANTY	1 YR

STANDARD FEATURES

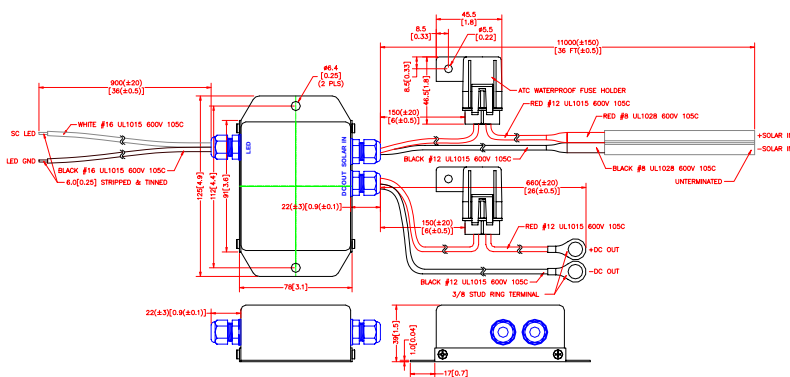
- ♦ 9ADC MAXIMUM OUTPUT CURRENT
- ♦ CONSTANT CURRENT/CONSTANT VOLTAGE
- ♦ TRICKLE CHARGING METHOD
- ♦ AUTO-RESTART MODE
- ♦ INPUT UNDER-VOLTAGE PROTECTION
- ♦ INPUT OVER-VOLTAGE PROTECTION
- ♦ CURRENT LIMITING
- ♦ OVERLOAD PROTECTION
- ♦ OUTPUT SHORT CIRCUIT PROTECTION
- ♦ TEMPERATURE DERATED CHARGE
- ♦ AUTO MAINTENANCE MODE
- ♦ MPPT (MAXIMUM POWER POINT TRACKING)
- ♦ LED STATUS INDICATOR

MODE	LED	LED INDICATOR	CONDITION
OFF		Blank	1) Disconnected from Batteries -or- 2) Input Low Voltage Shutdown
Bulk Charge		Blink Green 1 sec ON / 1 sec OFF	Maximum Charge Current 9ADC
Absorption Charge		Blink Green 2 sec ON / 1 sec OFF	Maximum Charge Voltage 14.2VDC
Float Charge		Steady Green	Constant Float Voltage 13.5VDC
Input Over Voltage Auto Shutdown ²		Blink Green 2 Fast ON / 1 sec OFF	PV Voltage >9.5VDC
Output Over Voltage Auto Shutdown ²		Blink Green 3 Fast ON / 1 sec OFF	Battery Voltage >14.5VDC
Output Over Current Auto Shutdown ²		Blink Green 4 Fast ON / 1 sec OFF	Charge Current >11ADC

Specifications typical at 25°C unless otherwise stated and are subject to change without notice.

¹ Battery voltage must be greater than PV voltage.

² SC-512E-9A solar charger will auto-recover and restart when parameters are within operating limits and LED will return to blink Green.



Connection Block Diagram for SC-512E-9A

MODEL	CHARGE VOLTAGE / CURRENT	DESCRIPTION
SC-512E-9A	13.5VDC / 9ADC	ENCAPSULATED
ADD SUFFIX AFTER MODEL NAME FOR OPTIONAL FEATURES AND ACCESSORIES.		
MPPT	MPPT (MAXIMUM POWER POINT TRACKING)	
LRV	LOW REGULATION VOLTAGE (7VDC MINIMUM)	

All dimensions in millimeters [inches] unless otherwise specified.