



HLCC35MT PWM SOLAR CHARGE CONTROLLER

board dimension 67X69 MM

HLCC35MT is Solar Charge Controller kit with shunt regulation. Its control circuitry is extremely efficient. It not only charges the battery from solar panel in the optimum way using the fullest power without loss but maintains the highest SOC of the battery under charge. Input losses are practically negligible due to high efficiency charging in shunt mode.

Similarly battery loss in load circuit is less than 3% making it better than 97% efficient. Battery charging with temperature compensation is available as optional. Quiescent current is less than 1mA to meet stringent requirements for better life of battery. Kit comes with terminals on board for connections to panel, battery and load. Provision of presets for setting HVD and LVD which are set to default values but can be changed by user.

It comes with indicator leds for charging and bat low in relimate cable assembly to directly plug in. Additional input is provided on board to connect to mains charging by an optional compatible charger unit. During times when solar power is not available, charging from grid power can be implemented easily.

The kit comes in ready to use form for OEM purpose.

Salient Specifications:

SYSTEM:	12V
CAPACITY:	Panel 40Wp Max, Load 2.5 A Max
REGULATION:	LOW LOSS, SHUNT TYPE
NLC:	No Load Current/Quiescent current < 1mA
OVD:	Output Voltage Drop < 300mV at 2.5 A load
IVD:	Input Voltage Drop < 300mV at 2.5 A charge
LVD:	Low Voltage Disconnect, 11.0V
HVD:	High Voltage Disconnect, 14.4V
LVR:	Low Voltage Reconnect, 12.5V
HVR:	High Voltage Reconnect, 14.35V

PROTECTIONS: Reverse polarity of Battery and Panel
Reverse current flow from battery to panel
(Note: External fuse in series with battery is must to protect from overload/short at load terminals or over current from the panels)

APPLICATION: IN DOOR USE ONLY. FOR OEMs
AMBIENCE: Operating Temp 0 to 50 Deg C, 90% RH
DIMENSIONS: 67mm x 69 mm

Indicators and Controls:

CHRG : Green LED. 1. Green: When panel is connected properly and voltage is more than 12V. .
2. Green flickering: Battery voltage has reached HVD and PWM absorption started.

BTLO : Red LED. When battery voltage is less than LVD level, it turns on and disconnects the supply to the load. It will be on only when battery is charged above LVR level.

6-WAY TERMINAL STRIP: Marked with PV+, PV-, BT+, BT-, LD+, LD- for connections to respective inputs and outputs.

AUX IN: A two-way relimate base for giving input from compatible mains charger unit (optional).

(Only specially designed mains charger from us can be connected as it is built with isolation and protection for shunt regulation purpose. No other mains charging unit is recommended as it may damage the kit.)

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