

Hybrid Solar - Grid Charge Controller

The Hybrid Charger is capable of charging battery from PV panel and/ or Grid ac supply.

It monitors the incident Solar energy, Grid voltage & Battery charge level and optimally selects the charging mode. Solar charger takes priority over Grid charger.

In case of partial Solar, it can automatically charge from both Solar and Grid. Both Polly and Mono Crystalline panel can be used.

It can be configured for Dusk to Dawn or Continuous output.

Typical applications are Street lighting, Yard Lighting, Security camera, communication equipment etc.



TECHNICAL SPECIFICATION

Parameter	DC1B-200MG	DC2B-400MG
Nominal DC voltage	12V	24V
Grid input voltage range	150 to 280V, 50Hz ac	
Grid charger type	SMPS	
Grid charging current	8+/- 1Amps	6+/- 1Amps
PV array capacity (max)	200Wp	400Wp
Isc of array (max)	15 Amps	15 Amps
Voc of array (standard)	23V DC	45V DC
MPPT range	17-20.5V	34-41V
Idle power (max)	1W	1W
Solar charger type	MPPT	
Temperature compensation	Provided for lead acid and LFP battery	
Solar array type	Mono/ Polly crystalline	
Charge voltage LA/ LFP	14.2/ 14.0 +/- 0.2V	28.4/ 28.0 +/- 0.2V
Float voltage LA/ LFP	13.8/ 14.0 +/- 0.2V	27.6/ 28.0 +/- 0.2V
Max charging current	15A	15A
Load switching rating (max)	150W	300W
Low battery cutoff LA/ LFP	11.0/ 11.9 +/- 0.2V	22.0/ 23.8 +/- 0.2V
Battery reconnect LA/ LFP	12.0/ 12.5 +/- 0.2V	24.0/ 25.0 +/- 0.2V
Enclosure	IP65 class power coated pole/ panel mountable MS cabinet	
Cooling	Internal forced	
Protection	1. Battery reverse 2. PV array reverse	3. Grid input surge up to 440V ac 4. SMPS over temperature
Termination	1. PV & battery - terminal strip	2. Grid ac input - IEC standard inlet
Weight	3 Kg approx	
Size	260x250x90 mm	
LED display	PV charging/ Grid charging/ Output ON	

*Note: Specification may change as result of continuous improvement of the product. Contact factory for latest update. Picture shown is that of the PCB. Actual model will come in enclosure as specified.