

**Go Power!**[®]

20 Amp MPPT Solar Controller



INCREASES BATTERY LIFE BY PREVENTING OVERCHARGING



Maximum efficiency solar charge controller built for harsh industrial environments

The GP-MPPT-85/20 ensures maximum performance and yield from all types of PV systems year-round and in any environment.

The GP-MPPT-85/20 is an industrial Maximum Power Point Tracking (MPPT) charge controller featuring a robust, fully-sealed (IP68) housing that resists vibration as well as dust-, insect- and water ingress.

- IP68 rated waterproof protection with MC4 solar connections and Delphi battery connections
- Up to 98% power conversion efficiency
- 3-stage I/U curve sweep algorithm increases battery lifespan
- Anodized aluminum extrusion with built-in heat dissipation
- Fully encapsulated design prevents damage from water, corrosion, insects and/or dust
- Works with 12 or 24V battery systems (automatic battery voltage detection)
- Compatible with 60-cell modules
- Converts excess array voltage into additional charging current
- Allows up to 50% oversized array power for adding additional capacity in low-insolation months
- 5 year warranty

SPECIFICATIONS

Nominal System Voltage	12V/24V
Max Solar Array Current	20A
Battery Voltage Range	9V – 15.5V (12V system), 18 – 31V (24V system)
Max. Solar panel input voltage	85V
Operating Consumption	<10 mA
Temp. Compensation	-25mV / K (12V systems), -50mV/K (24V Systems)
Operating Temperature	-40 to 60°C
Humidity	99% N.C.
Dimensions (H x W x D):	3.5in (88.5mm) x 4.4in (112mm) x 1.6in (41.4mm)
Weight	1.38 lbs (360g)
Warranty	5 years
Protection	Battery Reverse Polarity, Solar Array Reverse Polarity, Over temperature, Over Current, PV Short Circuit, Battery Short Circuit, Over Current

BATTERY CHARGING PROFILE	SEALED/GEL	AGM	FLOODED
Bulk Charge Voltage Set Point	14.1V	14.4V	14.4V
Absorption Charge Voltage (30 min / day)	14.1V	14.4V	14.4V
Max. Power Boost Charge Voltage: Automatic (2h if V < 12.3V)	14.1V	14.4V	14.4V
Max. Power Boost Charge Voltage: Manual (2h if activated)	14.4V	14.4V	14.4V
Float Charge Voltage	13.8V	13.8V	13.8V
Equalize Charge Voltage (2h / 28 days or after V < 12.1V)	Disabled	Disabled	14.8V

AUTHORIZED DEALER:

Specifications may be subject to change. Product may not be exactly as shown.
Specifications subject to local environmental conditions.