MPPT 60 150 Solar Charge Controller

The MPPT 60 150 is a photovoltaic (PV) charge controller that tracks the maximum power point of a PV array to deliver the maximum available current for charging batteries. When charging, the MPPT 60 150 regulates battery voltage and output current based on the amount of energy available from the PV array and state of charge of the battery.

The MMPT 60 150 can be a part of any solar system. It is one of the components in the Conext™ XW Series which has a wide range of applications including grid-tie, off-grid, and backup power. It is comprised of manageable building blocks for single- or three-phase systems ranging from 4 kW to 36 kW.

> Features:

Expertly designed

- Maximum power point tracking (MPPT) provides the maximum power available from the PV array
- Large, aluminum, die-cast heat sink allows full output current up to 45 °C without thermal derating
- Convection-cooled design does not require a cooling fan
- Integrated PV ground-fault protection for negative grounded arrays
- Input overvoltage and undervoltage protection, output overcurrent and back-feed protection

Flexible

- Compatible with 12, 24, 36, 48, and 60 V battery systems
  - Maximum array size
    - 12 V: 900 watts
    - 24 V: 800 watts
    - 36 V: 2,700 watts
    - 48 V: 3,600 watts
    - 60 V: 4,500 watts
- Can charge a lower nominal-voltage battery from a higher nominal-voltage array
- Selectable two- or three-stage charging algorithms with manual equalization to maximize system performance and improve battery life
- Configurable auxiliary output
- Battery Temperature Sensor (BTS) automatically provides temperature-compensated battery charging
- Network communication capability with Conext XW Inverter/Charger, System Control Panel (SCP), Automatic Generator Start (AGS), and other MPPT solar charge controllers
- Remote monitoring and protocol conversion is available
- Five-year standard warranty

[Typical system configuration]

MPPT 60 150

Device short name	MPPT 60 150
Electrical specifications	
Nominal battery voltage	12, 24, 36, 48, 60 V
Max. PV array voltage (operating)	140 V
Max. PV array open-circuit voltage	150 V including temperature correction factor
Max. array short-circuit current	60 A (48 A @ STC)
Max. charge current	60 A
Max. and min. wire size in conduit	#6 AWG to #14 AWG (13.5 to 2.5 mm^2)
Charger regulation method	Three-stage (bulk, absorption, float) plus manual equalization Two-stage (bulk, absorption) plus manual equalization
General specifications	
Power consumption, night time	2.5 W
Enclosure material	Indoor, ventilated, sheet metal chassis with 2.2 cm and 2.8 cm (7/8 in and 1 in) knock-outs and aluminum heat sink
Product weight	4.8 kg (10.75 lb)
Shipping weight	8 kg (17.6 lb)
Product dimensions (H x W x D)	36.8 x 14.6 x 13.8 cm (14.5 × 5.75 × 5.5 in)
Shipping dimensions (H x W x D)	48.3 x 22.9 x 35 cm (19 × 9 × 9.75 in)
Device mounting	Vertical wall mount
Ambient air temperature for operation (full power)	-20 °C to 45 °C (-4 °F to 113 °F)
Storage temperature range	-40 °C to 85 °C (-40 °F to 185 °F)
Operating altitude	Sea level to 2,000 m (6,562 ft)
Warranty	Five-year standard
Part number	RNW86510301
Features and options	
Display type	LCD, 2 lines 16 digits
Regulatory approvals	
Safety	CSA certified (UL 1741, CSA 107.1) and CE marked for the Low-Voltage Directive (EN 50178)
EMC	FCC and Industry Canada (Class B) and CE marked for the EMC Directive (EN 61000-6-1, -6-3)

Specifications are subject to change without notice.

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