

KEYFEATURES

Solar charger, -48 VDC, 3000 W

- High efficiency above 96% reduces power consumption for lower operating costs
- Full power output up to +55°C and continued operation up to +75°C lowers operating cost
- High power density (39 W/in³) – reduced footprint allows installation in short-depth racks and cabinets
- Wide input voltage range to operate in the most demanding environments
- Hot pluggable – facilitates future expansions and easy maintenance
- Compliant with global standards – delivers quality, performance and reliability no matter what the application or location demands

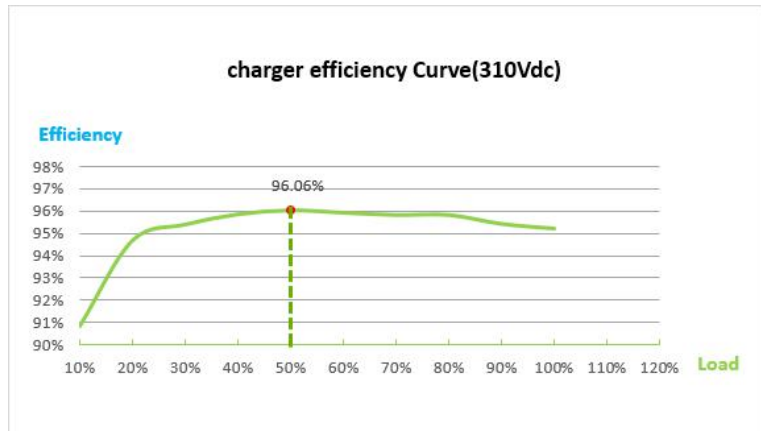
In addition to reducing power consumption and lowering operating cost, high-efficiency rectifiers offer superior performance and uncompromised reliability.

Description

The 3000W high-efficiency solar charger (model MS483000HG1) is designed to convert PV supply voltages into stable nominal -48 V DC voltage that is adjustable to application needs. The MS483000HG1 is a constant solar charger designed with the latest patented switch mode technology, using DSP (Digital Signaling Processor) functionality for efficiency operation.

This 3000W high density rectifier is ideal for outdoor enclosures and small cell applications where space is at a premium. At 39 W/in³ and only 286 mm deep, the MS483000HG1 fits into tight spaces where other rectifiers cannot.

For higher load capacities rectifiers can be connected in parallel, and intelligent control can be added with the help of a separate controller.



MS483000HG Solar Charger

Technical Specifications

PV INPUT

Input Voltage, Nominal	120 VDC to 340 VDC
Input Voltage, Permitted Variation	120 VDC to 420 VDC
Max Input Current	17 A
Max Input Voltage	450VDC

DC OUTPUT

Output Voltage, Adjustment Range	-42 VDC to -58 VDC
Output Power	3000 W maximum
Output Power, Derated for Input Voltage	See diagram
Output Current	62.5 A @ -48 VDC
Output Current Limit Set Point	0 to 62.5 A
Peak Efficiency	96.1%

CONTROL AND MONITORING

Rectifier Alarm and Signaling	Alarm and status reported via CAN bus to system controller
Visual Indications	Green LED: Normal Operation
	Yellow LED: Alarm
	Red LED: Failure

ENVIRONMENTAL

Temperature Range, Operating	-40°C to +75°C / -40°F to +167°F (see diagram for derating)
Temperature Range, Storage	-40°C to +70°C / -40°F to +158°F
Relative Humidity	0 to 95%
Altitude	2000 m / 6560 ft at full power
EMC	ETSI EN300 386: 2005, Class B. Other than telecom centers. FCC CFR 47 Part 15, Class B conducted and radiated EN55022, Class B conducted and radiated CISPR22, Class B conducted and radiated Telcordia GR-1089-CORE issue 6
ROHS 6, REACH, WEEE	Compliance
Safety	UL 60950-1; EN60950-1; IEC60950

MECHANICS

Dimensions (H x W x D)	41.5 x 106.5 x 286 (mm)
Weight	1.83kg

Ordering Information

MS483000HG1

