

EPW-T250P6-US Three-phase 25 kW Solar Inverter

[Energy Source] [Applications]



EOW-MBX03-US (Required)

For High Voltage Grid-tied Utility Systems

Space-saving inverter for distributed generation.

Simple to install and maintain, and allows for detailed monitoring.

- 1 6 MPPT Input Strings – Max. 4.4 kW usable input DC/DC Converter x 6 Strings
- 2 98.5% (CEC 97.5%) Efficiency – SiC Power Diode and 3 Level Inverter
- 3 Three-phase 480 V AC Output – Lower BOS cost
- 4 Highly corrosion-resistant enclosure
- 5 Eliminates the need for combiner boxes – All PV module strings terminate at the Inverter
- 6 Monitoring and parameter setting via Master Box

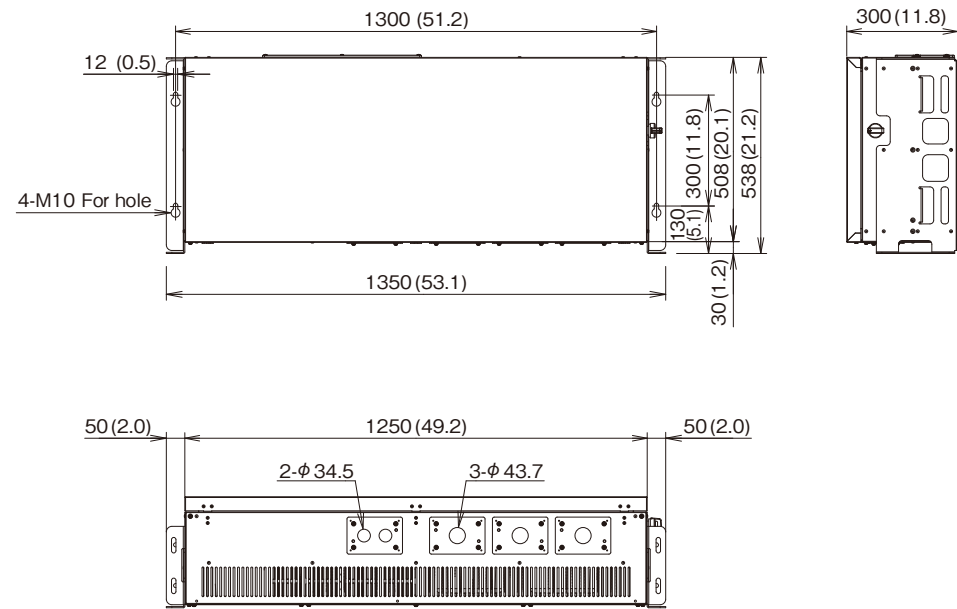
Specifications

Input (DC)	
Usable input power per string	Rated: 4200 W, Max: 4400 W
Max. input voltage	1000 V
Operation voltage range/rated input voltage	140 to 880 V/700 V
MPPT voltage range	500 to 800 V
Min. input voltage/start voltage	140 V/200 V
Number of MPPT inputs	6
Max. input operating current per string	10 A
Output (AC: Grid connected)	
Grid connection type	Three-phase, 4-wire + Ground
Conversion method	Vector modulation method
Rated output power**	25000 W
Rated AC voltage	480 V (277 V WYE)
Nominal AC voltage range	422.4 to 528 V
Rated grid frequency/Range	60 Hz/59.5 to 60.5 Hz
Output current	Rated: 30 A, Max: 31 A
Power factor at rated output power	≥ 0.99
Distortion rate of the output current	Total: less than 5%
Efficiency	
Efficiency	Max. 98.5% (DC700 V, 50% output), Typ. 97.7%/CEC 97.5%
Protection	
Islanding operation detection: Passive	Frequency change detective method
Islanding operation detection: Active	Frequency shifting method
General Data	
Dimensions (W/H/D)	1350/538/300 mm (53.1/21.2/11.8 in)
Weight	90.5 kg (199 lb)
Installation location	Outdoor
Operating temperature range	-20°C to +50°C (-4°F to +122°F)/Rated output until +40°C (+104°F)
Noise emission (typical)	≤ 50 dB (for reference)
Internal consumption (night)	< 12 W
Topology	Transformer-less
Cooling concept	Internal air circulation
Enclosure rating	Type 3R
Features	
Constant power factor control	80% to 100%
DC terminal	Terminal block (+, -) × 6
AC terminal	Terminal block (L ₁ , L ₂ , L ₃ , N)
Grounding terminal	Terminal block (3 poles)
Contact point output circuit	Yes
Controller	Master Box (Required)
Master Box for output control	EOW-MBX03-US
Interface	RS-485
Certification	ETL (UL1741/1699B, CSA C22.2 No. 107.1-01, IEEE1547a, CEC), FCC class A

** When the Power factor is 100% during inverter operation.

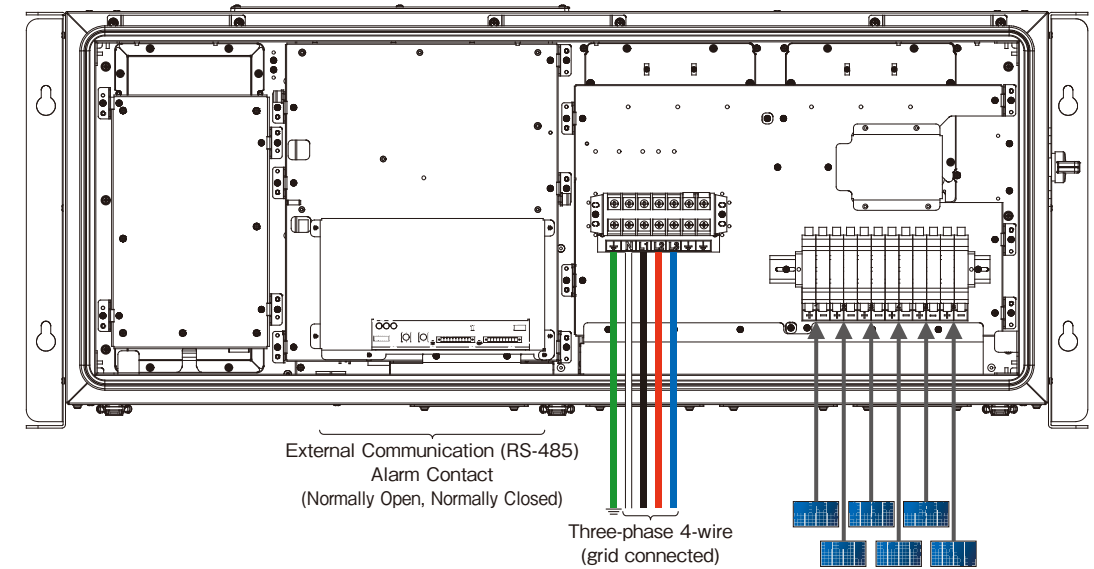
Dimensions

Unit: mm (in)



Installation Diagram

Please refer to the Installation Manual for further details.



Block Diagram

