



Product Datasheet

Version 0.1

Photovoltaic Power Optimizer FR-PVMB-C Series



Scan code to learn more

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Key Features

- PV module rapid shutdown meets NEC 2017 & 2020 (690.12) requirements
- Integrated the PV module level MPPT
- High operating voltage support to 70 V
- decrease working mode
- Bidirectional PLC communication
- Up to 25 years designed lifetime
- Suitable for the PV modules with STC 650W and below
- Rapid shutdown: Initiated within 30 seconds after the monitor loses power or the control switch manually turns off.
- Module level data monitoring: five big data including voltage, current, power generation, power generation operating point, temperature, and in the way of snapshot collection
- Arc fault detection and protection (To Be Determined)

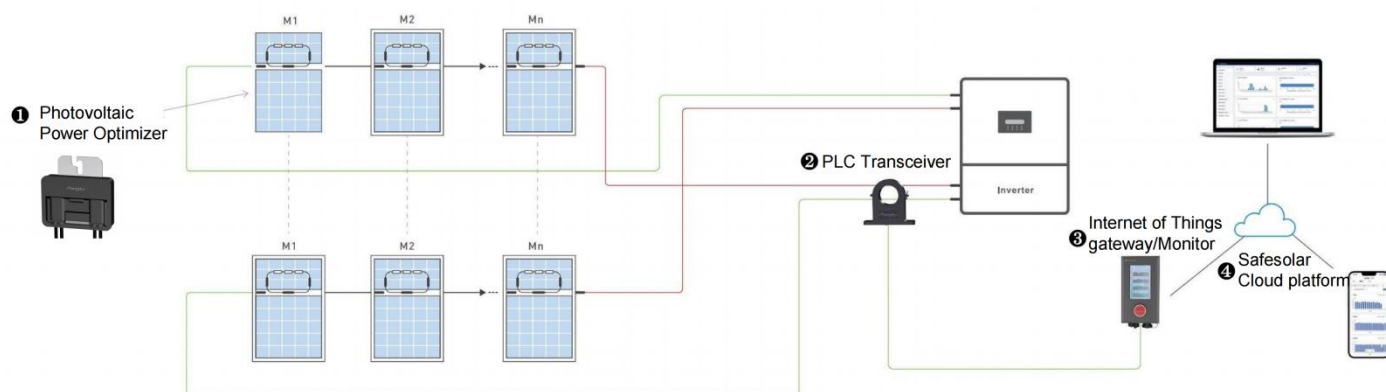


Specifications

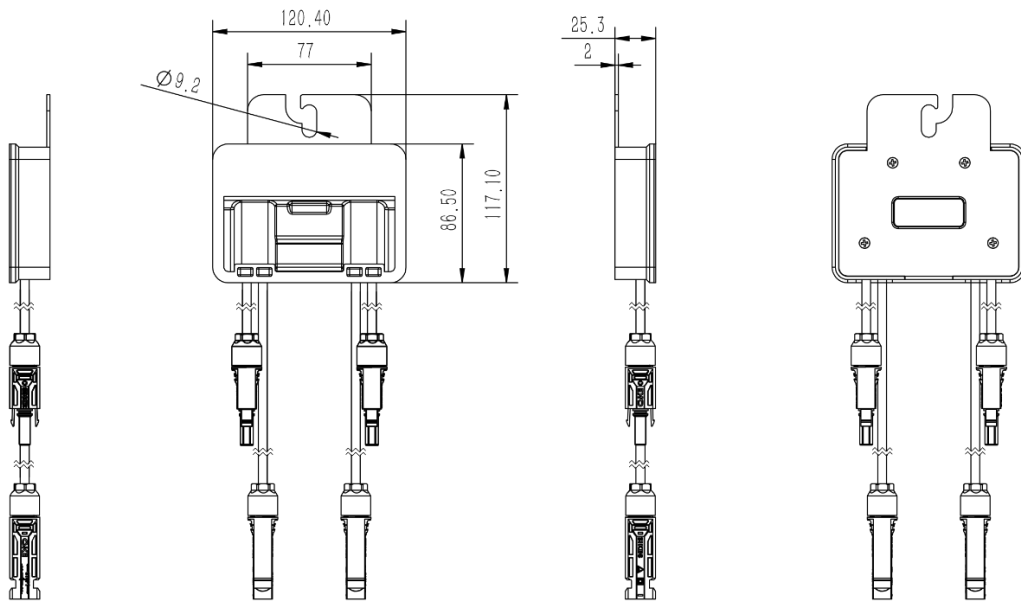
Item	Specification	Unit	Comment
Model number	FR-PVMB-C65C		
Electrical Data			
Rated input power	650	W	Ambient temperature below 25°C
Max input power	700	W	Temperature coefficient-0.3%
Max input voltage	70	Vdc	
Max continuous input current	15	Adc	
Range of input MPPT voltage	15~70	Vdc	
Max output operating voltage	60	Vdc	
Max continuous output current	15	Adc	
Minimum starting voltage	22	Adc	
Maximum conversion efficiency	99.5	%	
Weighted conversion efficiency	99.2	%	
Mechanical Data			
Dimensions (without bracket, cable & connectors)	120.4 x 117.1 x 25.3	mm	
Cable length	Input 1200/300, output 1200/200	mm	customize
Connector	MC4 compatible		customize

Weight (with bracket, cable & connectors)	600 ± 20	g	
Way to install	PV module frame, Photovoltaic rail		
Environmental Data			
Pollution degree	PD3		
Operating ambient temperature range	-30~70	℃	
Relative humidity range	0~100	%	
Ingress protection	IP66		
Anti-lightning protection	have		
PLC Communication Performance Data			
Communication	Power Line Carrier Communication		
Max cable loop length	1600	m	
Compliance			
Communication compliance	PLC		
Satisfying criteria	IEC62109-1, IEC61000-6-1 IEC61000-6-3, NB/T 42143		
Safety compliance	NEC 2017 & 2020 (690.12); UL1741; CSA C22.2 No. 330-17; IEC/EN62109-1		
EMC	EN IEC 61000-6-1:2019 EN IEC 61000-6-3:2021 EN IEC 61000-6-8:2020		

Typical application wiring diagram



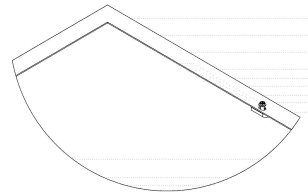
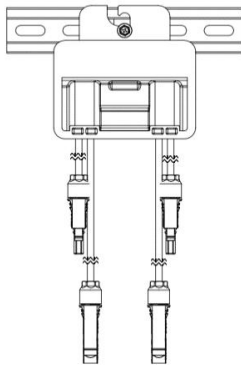
Mechanical Drawing



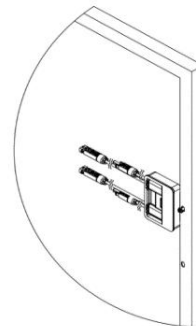
Way to install



PV module frame



Photovoltaic rail



Contact us

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