



All new generation 2020

# **Solar Smart Micro Inverter**

MODEL: MI-1200 / MI-1400

### MI-1200/MI-1400 MICRO INVERTER

MI-1200/MI-1400 micro inverter with Aluminum alloy shell & IP65 & waterproof streamline design, built-in high-performance Maximum Power Point Tracking (MPPT) function, more better to track change on solar luminosity and control different output power, effectively capture and collect sunlight. AC electric power transmission based on advanced reverse transmission technology which is one of our patented technologies, load priority and the rest electricity to the grid, high electricity transmission efficiency up to 99%. Excellent stability, reliability, safety and heat dissipation. Perfect communication solution of 2.4G wireless between micro inverter and collector, RS232 or wifi communication between collector and PC / mobile client. Intelligent monitoring system, the collector is able to collect / track real-time data on each PV module and transmit to PC, user can easily control micro inverter's startup / shutdown / power regulation by software. Ingenious and modular connection accessories(cable and connector) for micro inverter cluster to ensure economy, easy installation and safety. 1-Phase output, flexible 2-Phase/3-Phase PV system.

#### High performance micro inverter

- Input / output isolated to protect safety
- Rapid MPPT tracking technology
- Superior PV energy harvest
- Excellent thermal performance
- High overload capacity

#### Easy and afford to install

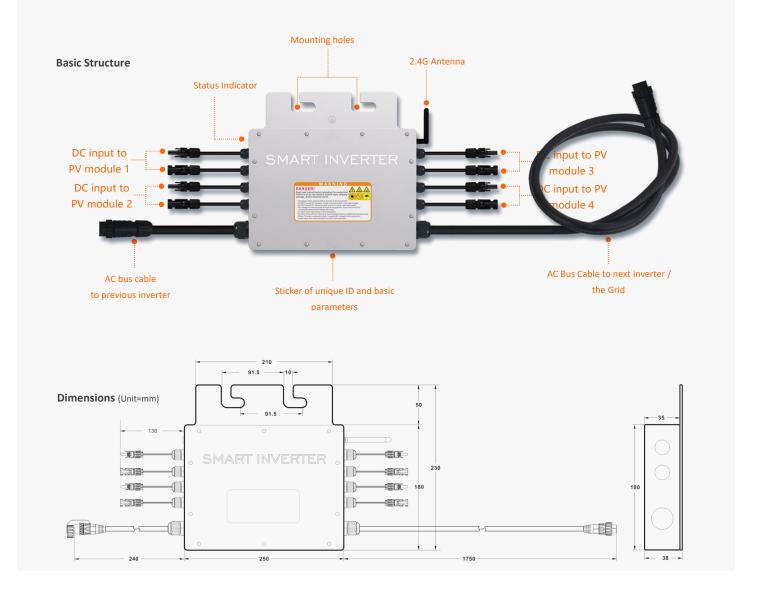
- Lightweight and compact size
- Outdoor application with firm IP65
- Ingenious and modular end connection
- Reverse connection prevention design
- Flexible installation

#### Data transmission & communication

- Intelligent remote monitoring system
- Real-time data for each PV module
- 2.4G / wireless 433MHz communication
- RS232 or wifi interface
- LED indication implies system status

#### Cost advantages

- Wide input voltage for solar PV modules
- Higher performance-to-price-ratio
- Low transport cost by small size design
- Low maintenance expense



## **MI-1200/MI-1400** MICRO INVERTER

INPUT DATA	MI-1200		MI-1400	
Number of input PV module	4 × 300Watt		4 × 350Watt	
MPPT voltage range	24-40VDC		24-40VDC	
Operation voltage range	18-50VDC		18-50VDC	
Maximum input current	4×12A		4 × 14A	
	MI 1200		MI 1400	
OUTPUT DATA	MI-1200	0220146	MI-1400	02201/46
	@120VAC	@230VAC	@120VAC	@230VAC
Peak output power	1200Watt	1200Watt	1400Watt	1400Watt
Rated output power	1150Watt	1150Watt	1350Watt	1350Watt
Rated output current	9.58A	5.0A	11.25A	5.86A
Rated voltage range*	80-160VAC	180-260VAC	80-160VAC	180-260VAC
Rated frequency range*	50-60Hz	50-60Hz	50-60Hz	50-60Hz
Power factor (cos φ)	> 99%	> 99%	> 99%	> 99%
Maximum units per subcircuit	4pcs (Single-phase)	8pcs (Single-phase)	3pcs (Single-phase)	6pcs (Single-phase)
OUTPUT EFFICIENCY	MI-1200/MI-1400 (120VAC / 230VAC)			
Static MPPT efficiency	99.5%			
Maximum output efficiency	95%			
Consumption at night	<50mW Max			
THD	< 3%			
OPERATING CONDITIONS / DIMENSIONS	MI-1200/MI-1400 (120VAC / 230VAC)			
/ APPLICATIONS				
Environment temperature	-40°C ~ +65°C			
Operating temperature (Inside inverter)	-40℃~+85℃			
Electrical isolation	Transformer, Galvanically isolated			
Cooling concept	Self - cooling			
Degree of protection (Waterproof)	IP65			
Communication mode	2.4G wireless, RS232 / wifi interface			
Power transmission mode	Reverse transfer, load priority			
Integrated ground	Equipment ground is provided by PE in AC cable, no additional ground is required			
Protection functions	Isolated island protection, voltage protection, frequency protection, temperature protection, current			
	protection, etc.			
Maximum current of AC bus cable	40A			
AC cable length	1.99m			
	250mm × 230mm × 38mm			
Dimensions (W×H×D mm)	2.5Kg			
Dimensions (W×H×D mm)  Net weight (Kg)	2.5Kg			
		004:2013, EN61000-3-2, EN	62109, VDE0126, UL1741, e	etc.
Net weight (Kg)	NB/T32004:2013, NB/T32	004:2013, EN61000-3-2, EN		etc.

Page 2 of 2 www.topraysol.com