



*All new generation 2020*

## **Solar Smart Micro Inverter**

**MODEL: MI-400 / MI-450 / MI-500**

# MI-400/MI-450/MI-500 MICRO INVERTER

**MI-400/MI-450/MI-500** 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

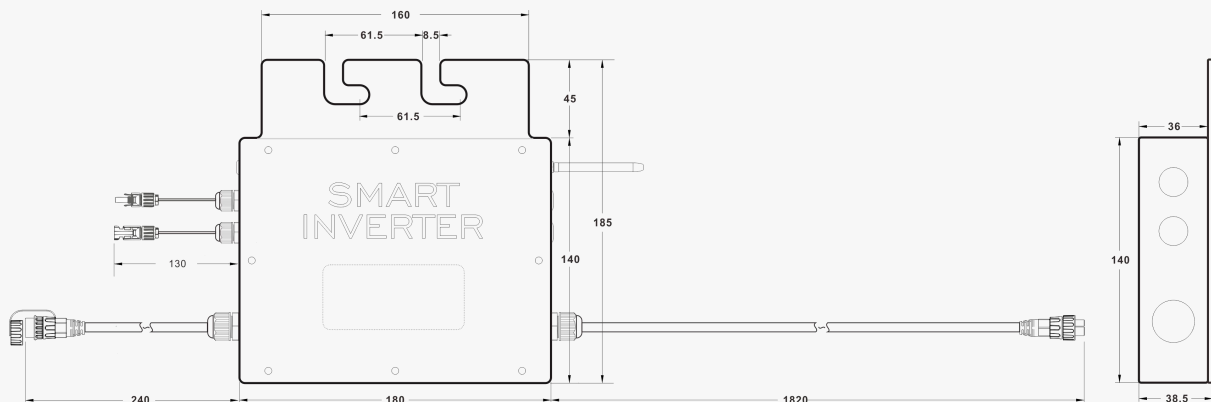
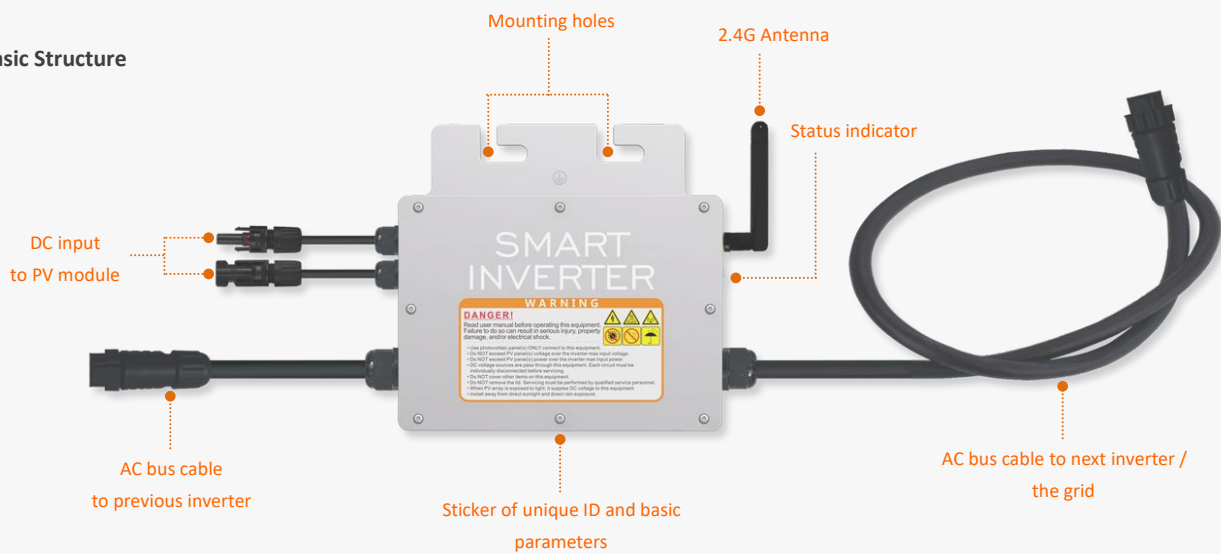
## Data transmission & communication

- 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

## Basic Structure



# MI-400/MI-450/MI-500 MICRO INVERTER

INPUT DATA	MI-400		MI-450		MI-500	
Number of input PV module	1 × 400Watt		1 × 450Watt		1 × 500Watt	
MPPT voltage range	24-40VDC		24-40VDC		24-40VDC	
Operation voltage range	18-50VDC		18-50VDC		18-50VDC	
Maximum input current	16A		18A		20A	
OUTPUT DATA	MI-400		MI-450		MI-500	
	@120VAC	@230VAC	@120VAC	@230VAC	@120VAC	@230VAC
Peak output power	400Watt	400Watt	450Watt	450Watt	500Watt	500Watt
Rated output power	395Watt	395Watt	445Watt	445Watt	495Watt	495Watt
Rated output current	3.33A	1.73A	3.75A	1.95A	4.16A	2.17A
Rated voltage range*	80-160VAC	180-260VAC	80-160VAC	180-260VAC	80-160VAC	180-260VAC
Rated frequency range*	50-60Hz	50-60Hz	50-60Hz	50-60Hz	50-60Hz	50-60Hz
Power factor (cos φ)	> 99%	> 99%	> 99%	> 99%	> 99%	> 99%
Maximum units per subcircuit	6pcs (Single-phase)	11pcs (Single-phase)	5pcs (Single-phase)	10pcs (Single-phase)	5pcs (Single-phase)	9pcs (Single-phase)
OUTPUT EFFICIENCY	MI-400/MI-450/MI-500 (120VAC / 230VAC)					
Static MPPT efficiency	99.5%					
Maximum output efficiency	95%					
Consumption at night	<50mW Max					
THD	< 3%					
OPERATING CONDITIONS / DIMENSIONS / APPLICATIONS	MI-400/MI-450/MI-500 (120VAC / 230VAC)					
Environment temperature	-40°C ~ +65°C					
Operating temperature (Inside)	-40°C ~ +85°C					
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	20A					
AC cable length	1.0m					
Dimensions (W×H×D mm)	185mm × 180mm × 38.5mm					
Net weight (Kg)	1.5Kg					
Design Compliance	NB/T32004:2013, NB/T32004:2013, EN61000-3-2, EN62109, VDE0126, UL1741, etc.					
Warranty	5 years materials and workmanship, 25 years extended warranty.					
* AC rated voltage range and frequency range depend on local standards.						