

ATMOCE

[Data Sheet](#)

MI Series Microinverter
MI-600



Key Features

Ultimate Safety

- No DC arc
- Rapid shut down
- Safety DC voltage
- No need of AFCI

Higher Reliability

- 25-year warranty
- Lightweight to 1.3 kg
- Plastic housing
- IP67 ingress protection

Maximum Electricity

- Module level management and optimization
- Peak efficiency: 97.4 %
- EU efficiency: 97.0 %
- MPPT efficiency: 99.9 %

Flexibility & Intelligence

- All-in-one solution
- One SKU for all 1-phase & 3-phase installation
- Supports all common PV modules up to 700W
- Grid Forming

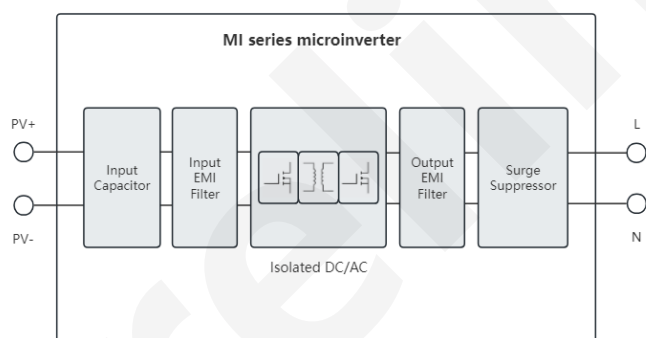


Model		MI-600
Input parameters		
Max. power of compatible PV modules	P_{dcmaxr} W	700
Min./Max. input voltage	U_{dcmin}/U_{dcmaxr} V	16 to 60
Peak power tracking voltage range	$U_{mppmin}/U_{mppmaxr}$ V	39 to 55
MPPT voltage range	U_{mppt} V	16 to 60
Nominal input voltage	U_{dcnomr} V	42
Start-up input voltage	$U_{dcstart}$ V	22
Max. continuous input current	I_{dcmaxr} A	16
Max. input short-circuit current	I_{scmaxr} A	20
DC port overvoltage class		II
DC port backfeed current	A	0
PV array configuration		1 x 1 ungrounded array
Output parameters		
Nominal voltage	U_{acnomr} V	220/230
Voltage range	U_{acmin}/U_{acmaxr} V	184 to 276
Nominal output power	P_{acnomr} W	600
Max. apparent power	S_{acmaxr} VA	600
Nominal output current	I_{acnomr} A	2.61A@230V / 2.73A@220V
Max. output current	I_{acmaxr} A	2.74A@230V / 2.86A@220V
Nominal frequency	f_{nomr} Hz	50/60
Extended frequency range	f_{min}/f_{maxr} Hz	45 to 65
Max. microinverters / 20A branch circuit		6
Max. microinverters / 25A branch circuit		8
Power consumption at night	mW	0 ^a
AC port overvoltage class		III
Power factor setting	cosphi	>0.99
Power factor (adjustable)		0.8 leading ... 0.8 lagging
Total harmonic distortion	THDi	<3%
AC surge protection		TYPE II
Efficiency parameters		
Peak efficiency	η_{maxr} %	97.4
EU efficiency	η_{EUr} %	97.0
MPPT efficiency	η_{MPPTr} %	99.9
Mechanical parameters		
Ambient temperature range	°C	-40 to 65
Storage temperature range	°C	-40 to 85
Relative humidity range	%	4 to 100, condensing
DC connector type		Stäubli MC4
Number of DC connectors		1 pair

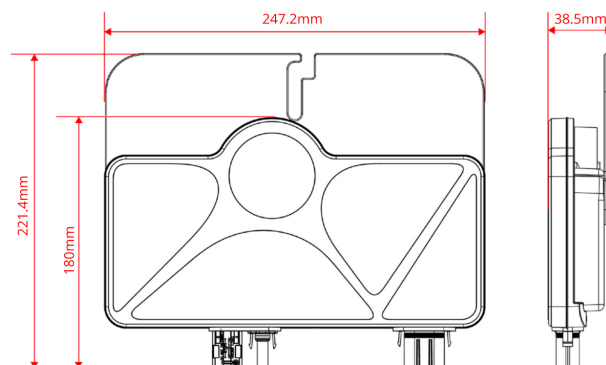
a. The value is tested with M-Relay or M-Combiner.

Model	MI-600	
AC connector type	MT-02502-A ^b	
Number of AC connectors	1 pair	
Dimensions (without bracket)	mm	247.2 × 180 × 38.5 (W x H x D)
Weight (without bracket)	kg	1.3
Cooling	Natural convection	
Approved for wet locations	Yes	
Pollution degree	III	
Topology	Isolated	
Enclosure protection class	Class II double-insulated	
Environmental category	Outdoor - IP67	
Altitude	m	3000
Noise	dB	<25
Features		
Communication	PLC	
Indicator	1 × LED	
Compliance		
Safety	IEC 62109-1/-2	
EMC	IEC 61000-6-1/-2/-3/-4, EN 62920	
Grid compliance	VDE 0124, VDE 4105, UTE 0126, EN 50549, EN 50530	

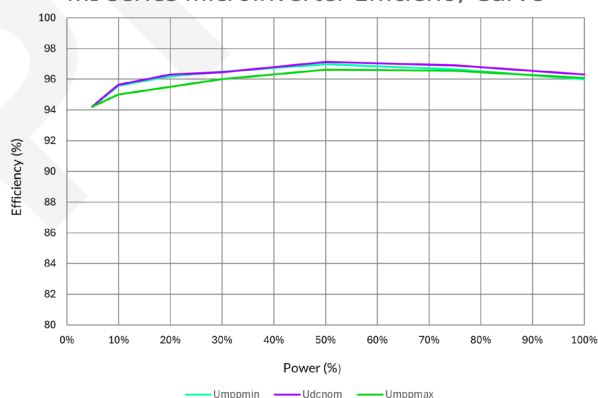
MI-series Microinverter Electrical Topology



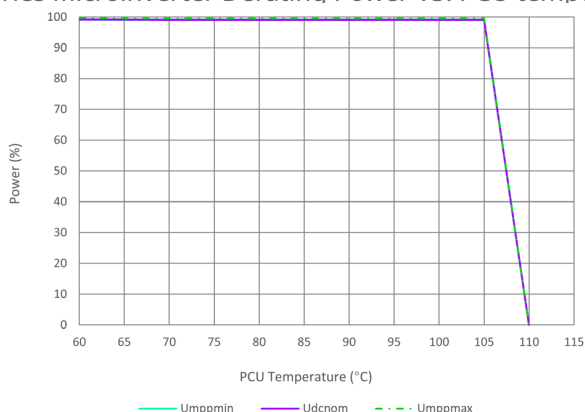
MI-series Microinverter Dimension in mm



MI-series Microinverter Efficiency Curve



MI Series Microinverter Derating Power VS. PCU temperature



b. The AC connector must be used with MW-Cables.