

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



Input parameters

Max. power of compatible PV modules	P_{dcmax} , W	700
Min./Max. input voltage	U_{dcmin}/U_{dcmax} , V	16 to 60
Peak power tracking voltage range	U_{mppmin}/U_{mppmax} , V	39 to 55
MPPT voltage range	U_{mppt} , V	16 to 60
Nominal input voltage	U_{dcnom} , V	42
Start-up input voltage	$U_{dcstart}$, V	22
Max. continuous input current	I_{dcmax} , A	16
Max. input short-circuit current	I_{scmax} , 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_{acnom} , V	220/230
Voltage range	U_{acmin}/U_{acmax} , V	184 to 276
Nominal output power	P_{acnom} , W	600
Max. apparent power	S_{acmax} , VA	600
Nominal output current	I_{acnom} , A	2.61A@230V / 2.73A@220V
Max. output current	I_{acmax} , A	2.74A@230V / 2.86A@220V
Nominal frequency	f_{nom} , Hz	50/60
Extended frequency range	f_{min}/f_{max} , 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_{max} , %	97.4
EU efficiency	η_{EU} , %	97.0
MPPT efficiency	η_{MPPT} , %	99.9

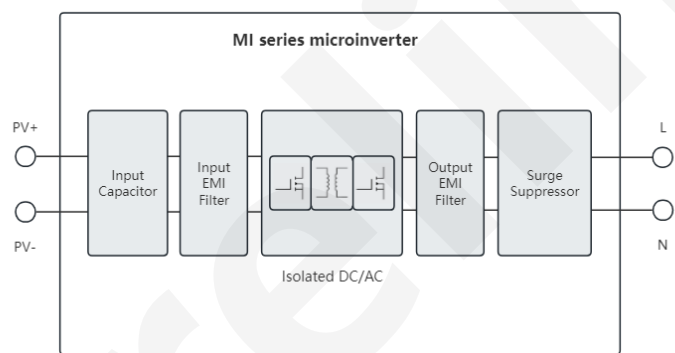
Mechanical parameters

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

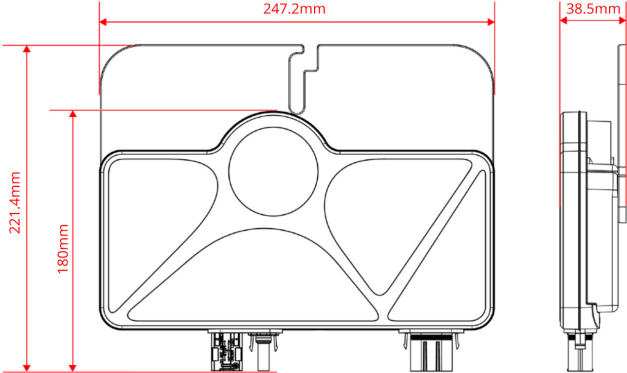
a. The value is tested with M-Relay or M-Combiner.

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

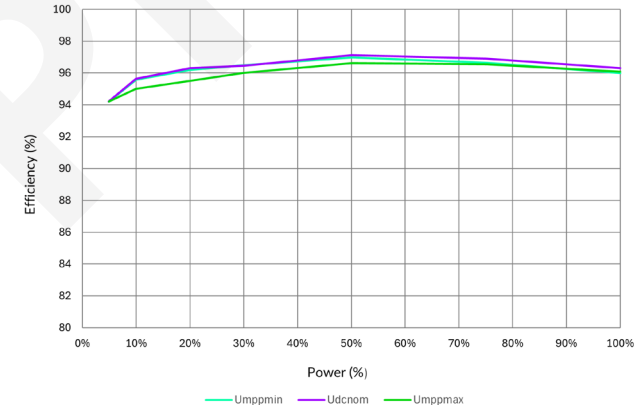
MI-series Microinverter Electrical Topology



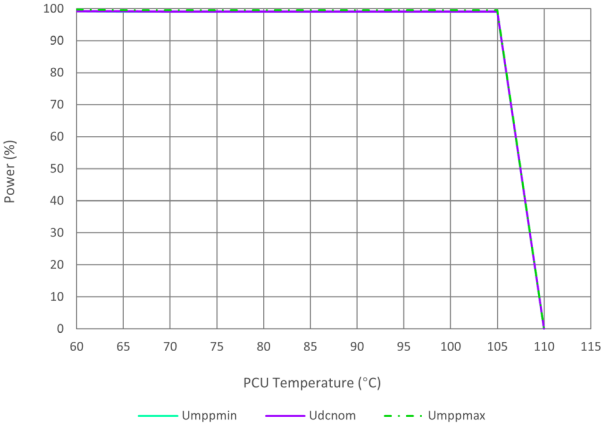
MI-series Microinverter Dimension in mm



MI-series Microinverter Efficiency Curve



MI Series Microinverter Derating Power VS. PCU temperature



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