

ATMOCE

Data Sheet

MI-series Microinverter

MI-1200-2M/ MI-1000-2M / MI-900-2M/ MI-800-2M



Key Features

Reliability

- Up to 25-year warranty
- 350m PLC communication range
- No single point of failure
- Natural cooling & IP67 protection rating

Efficiency

- 98.2% peak efficiency and 97.7% EU efficiency
- 1250 W maximum output power
- Up to 50% higher energy yield
- Wide MPPT voltage range for flexible system design
- MLPE architecture eliminates system bottlenecks

Safety

- <60Vdc human-operation-safety voltage
- Zero DC arc risk
- Module-level rapid shutdown

Scalability

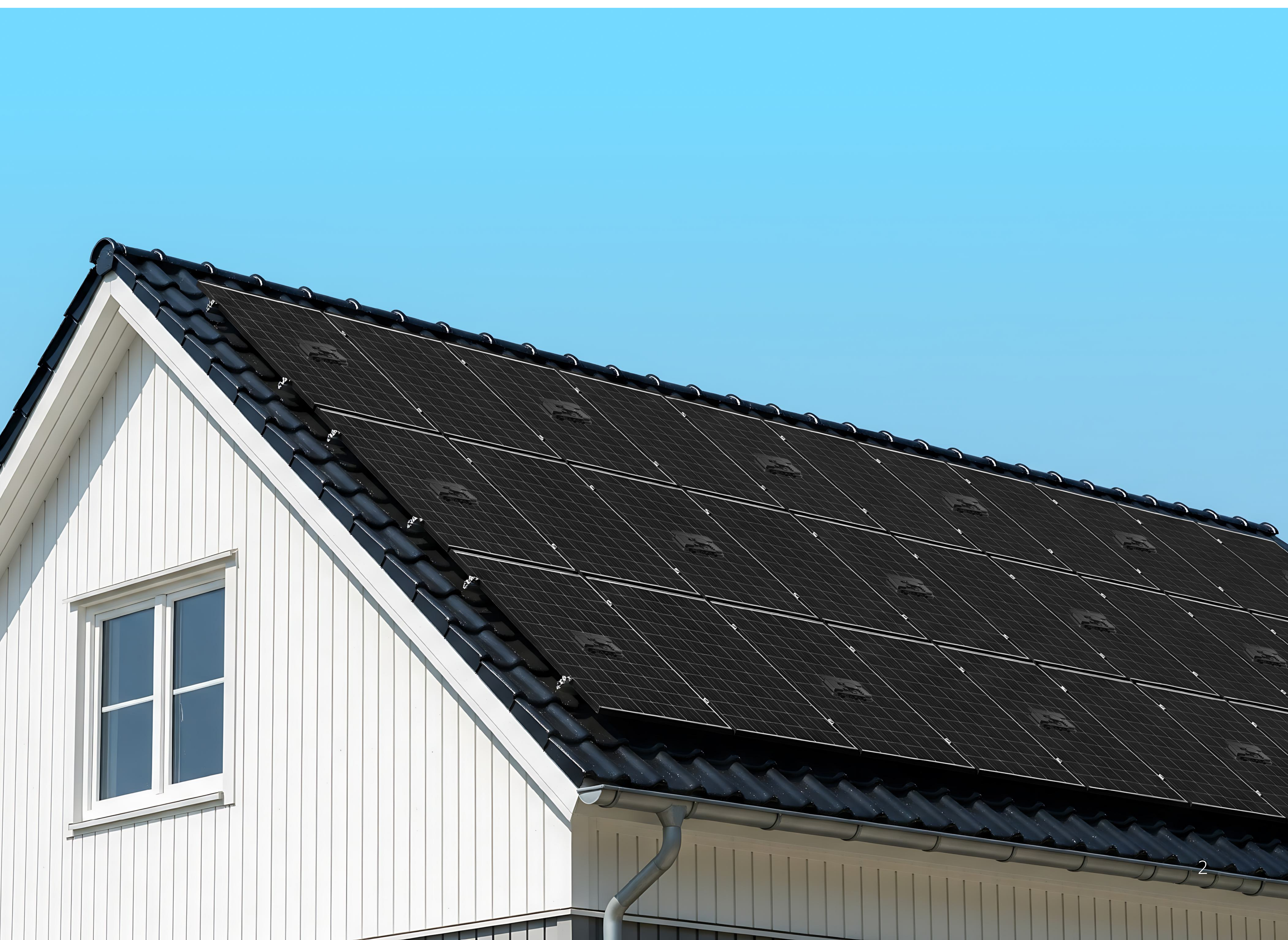
- One SKU for all scenarios
- Flexible expansion up to MW scale
- Lightweight design for faster installation & easier O&M

Smart

- 5-min commissioning
- Module-level diagnosis, control and intelligence
- AI-driven O&M for all components
- PV array layout generated from photos

Scenario-based

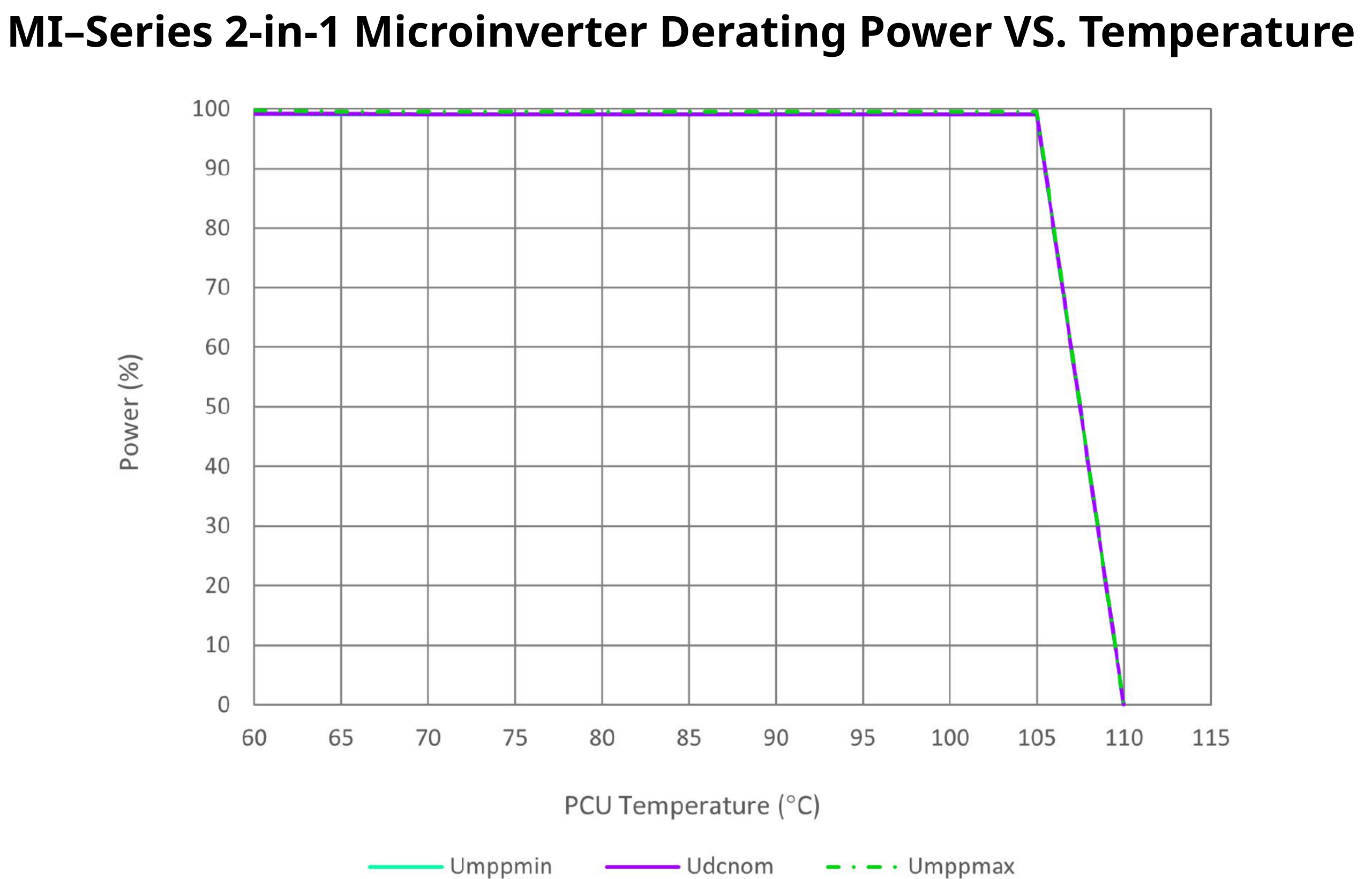
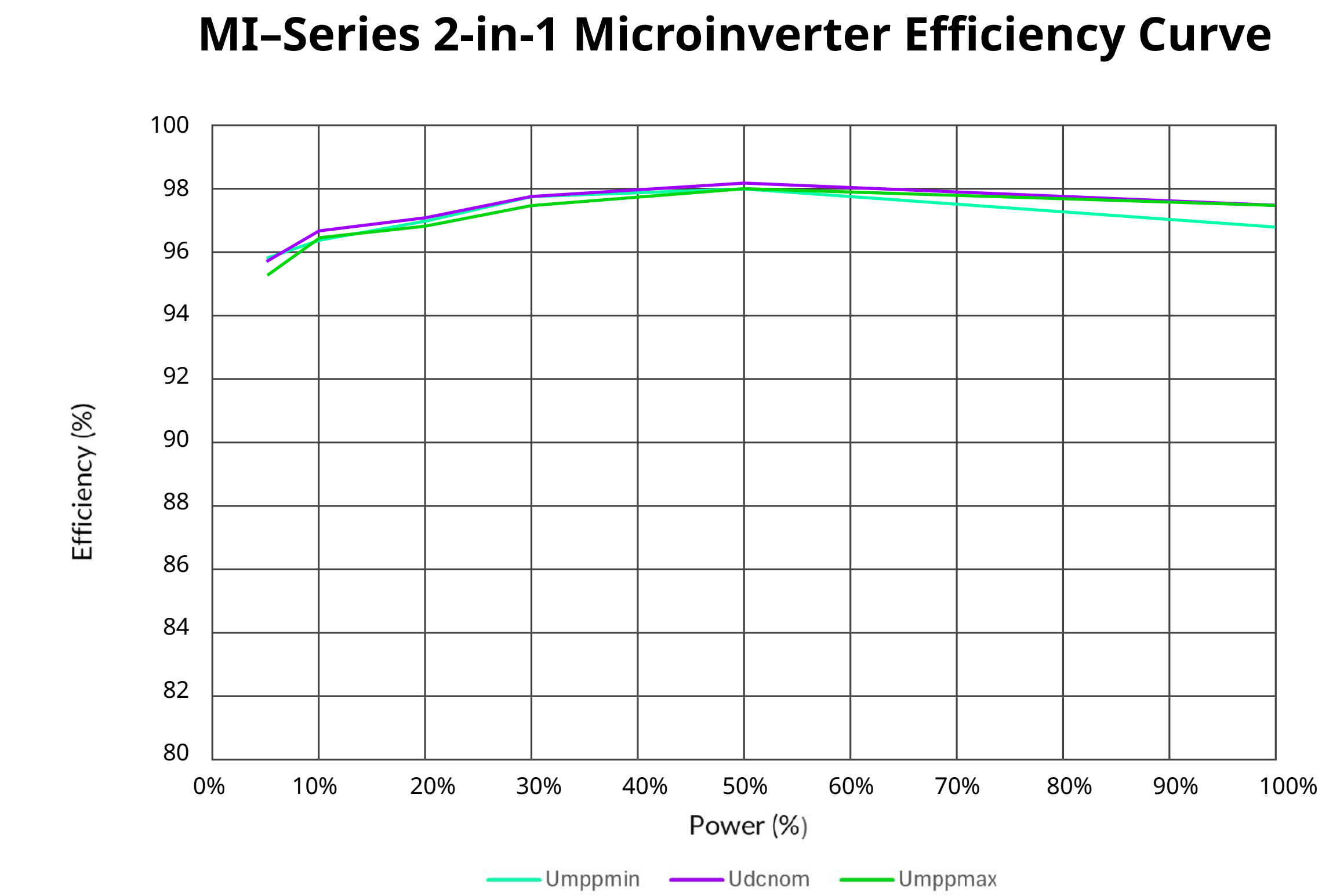
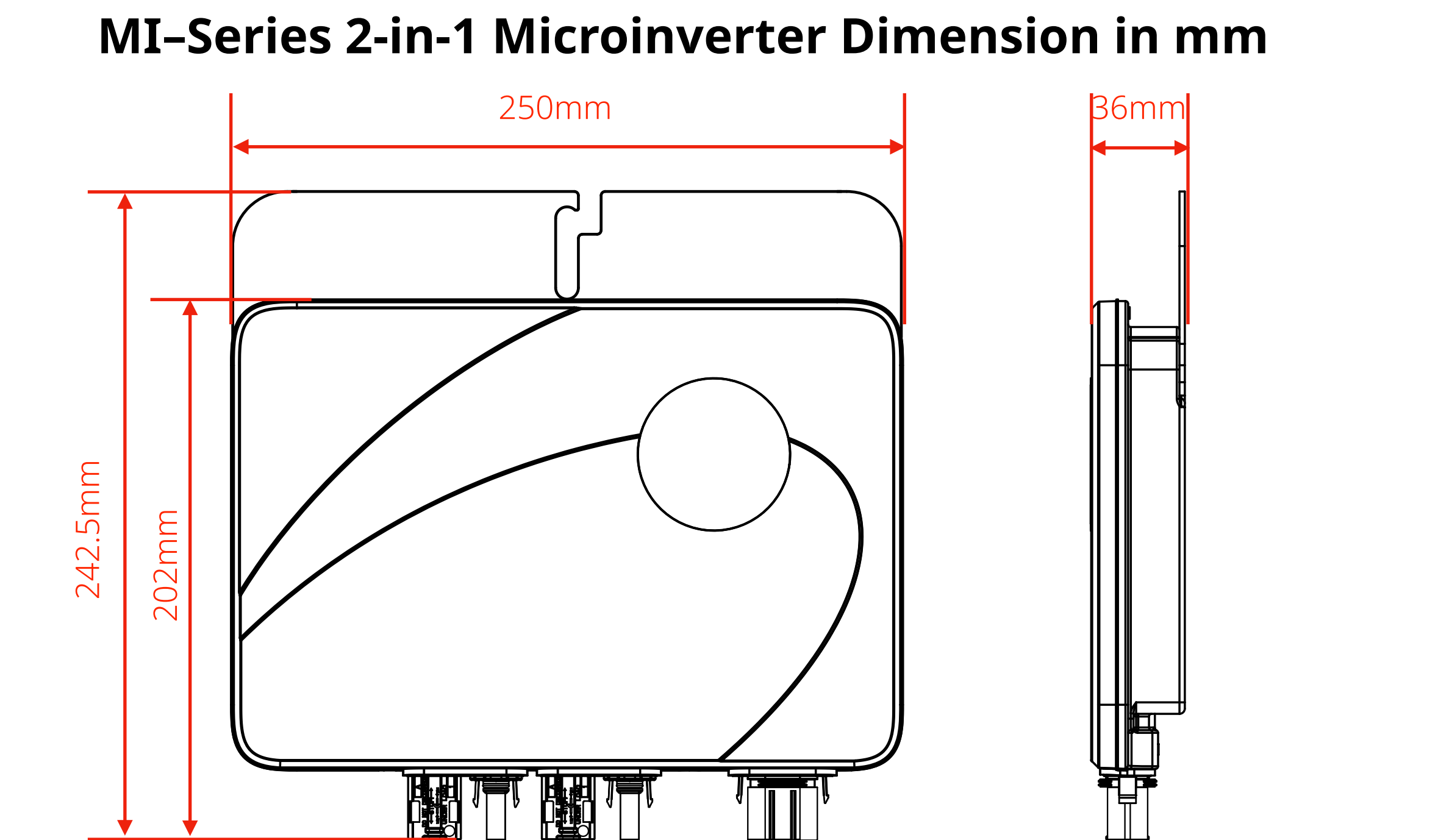
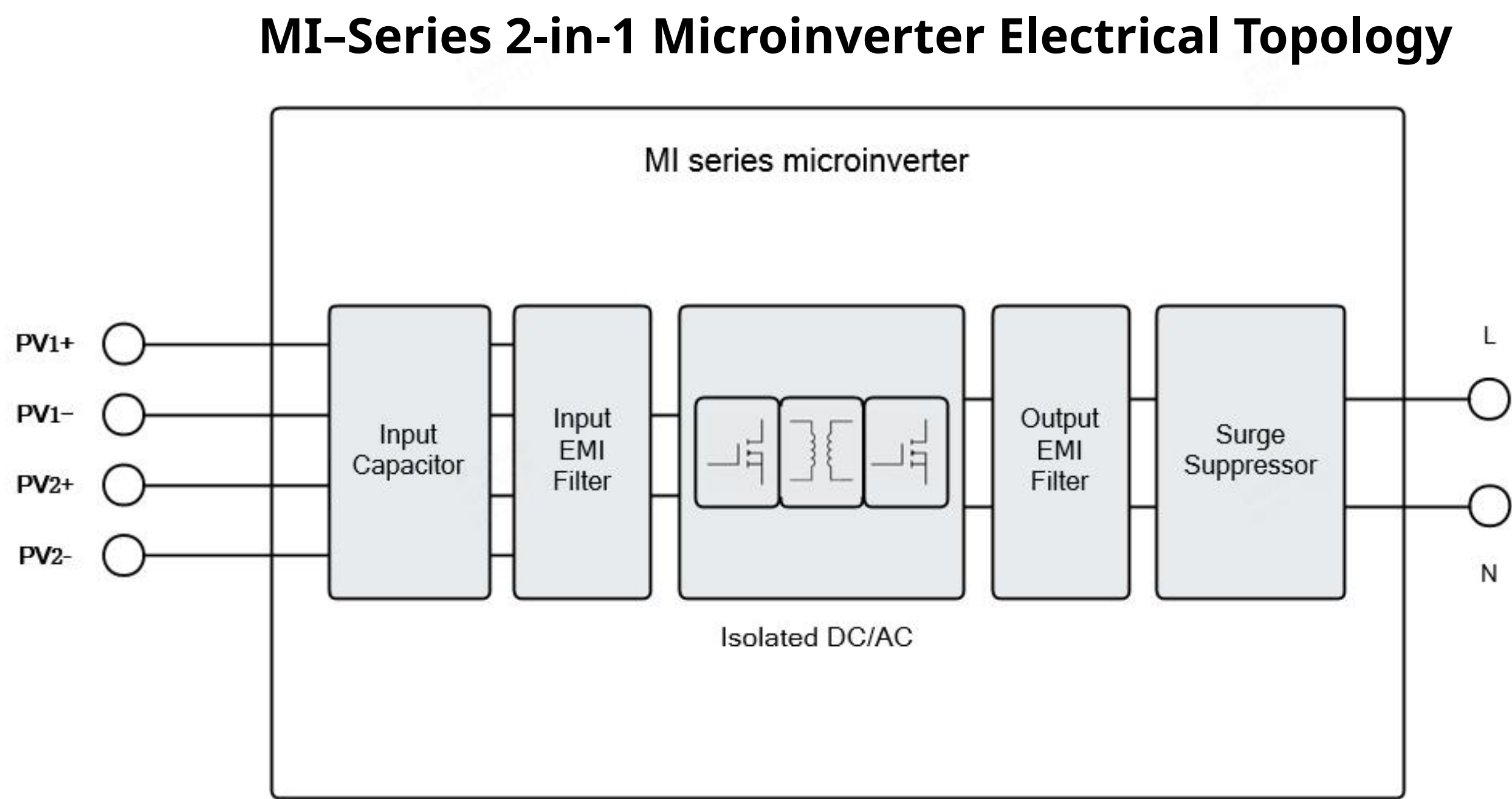
- Grid-to-module power transfer
- Active snow removal technology
- Matrix phase configuration



Model	Unit	MI-1200-2M	MI-1000-2M	MI-900-2M	MI-800-2M
Input parameters					
PV module compatibility		54-cell/108 half-cell, 60-cell/120 half-cell, 66-cell/132 half-cell and 72-cell/144 half-cell			
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	33 to 55	30 to 55	28 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 (per PV module)	I _{dcmax} , A		20		
Max. input short-circuit current (per PV module)	I _{scmax} , A		25		
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		220/230/240		
Voltage range	U _{acmin} /U _{acmax} , V		176 to 276		
Nominal output power	P _{acnom} , W	1200	1000	900	800
Max. apparent power	S _{acmax} , VA	1200	1000	900	800
Nominal output current @220Va.c.	I _{acnom} , A	5.45	4.55	4.09	3.64
Nominal output current @230Va.c.	I _{acnom} , A	5.22	4.35	3.91	3.48
Nominal output current @240Va.c.	I _{acnom} , A	5.00	4.17	3.75	3.33
Max. output current @220Va.c.	I _{acmax} , A	5.73	4.77	4.30	3.82
Max. output current @230Va.c.	I _{acmax} , A	5.48	4.57	4.11	3.65
Max. output current @240Va.c.	I _{acmax} , A	5.25	4.38	3.94	3.50
Max. microinverters / 20A branch circuit		3	3	4	4
Max. microinverters / 25A branch circuit		3	4	5	5
Max. microinverters / 32A branch circuit		4	5	6	7
Nominal frequency	f _{nom} , Hz		50/60		
Extended frequency range	f _{min} /f _{max} , Hz		45 to 65		
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		<1.5%		
AC surge protection			TYPE II		
Efficiency parameters					
Peak efficiency	η _{max} , %		98.2		
EU efficiency	η _{EU} , %		97.7		
MPPT efficiency	η _{MPPT} , %		99.9		

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

Model	Unit	MI-1200-2M	MI-1000-2M	MI-900-2M	MI-800-2M
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			2 pairs		
AC connector type			MT-02502-A ^b		
Number of AC connectors			1 pair		
Dimensions (without bracket)	mm		250 × 202 × 36 (W x H x D)		
Weight (without bracket)	kg		2.1		
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					
Indicator			1 × LED		
Communication			PLC		
Anti-islanding protection			Yes		
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		



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