

MI1kW1P Microinverter



The 2x500W is a high power, ultracompact microinverter for solar system application:

- Max PV input power 600W
- Max. Efficiency 96.4%
- Form factor 224 x 255 x 60.5 mm
- Full featured protection
- Remote/On-site monitoring

Easy Setup & Installation

Wide operating ranges for solar system application flexibility. IP67 rating.

High Performance

Isolated topology with peak efficiency up to 96.4% and MPPT efficiency >99%.

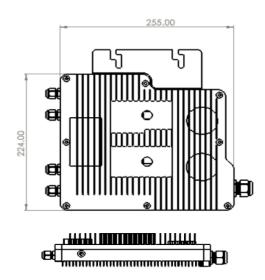
Remote/On-site Monitoring

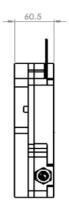
Remote monitoring with Wi-Fi IoT communication.

Product Specification				
PV Input (DC)				
PV Max Input Power	600 W			
Max. PV Input Voltage	60 V			
Start-up Voltage	20 V			
MPPT Voltage Range	22 V – 50 V			
Rated PV Input Voltage	42.5 V			
Max. Operating PV Input Current	16 A x 2			
Max. Input Short Circuit Current	21 A x 2			
No. of MPP Trackers				
Output (AC)				
Rated AC Output Active Power	1000 W			
Max. AC Output Apparent Power	1000 W			
Rated AC Output Current	4.5 A			
Max. AC Output Current	4.5 A			
Rated Output Voltage	220 V			
Output Voltage Range	198 V – 242 V			
Grid Connection Form	L/N/PE			
Rated Output Grid Frequency	50/60 Hz			
Output Grid Frequency Range	45 – 55 Hz / 55 – 65 Hz			
Max. Unit per Branch	TBD			
Power Factor Adjustment Range	0.85 leading - 0.85 lagging			
Total Current Harmonic Distortion THDi	< 4 % @ Rated input voltage & > 50 % Rated output power			
Efficiency				
Max. Efficiency	96.40 %			
Euro Efficiency	94.40 %			
MPPT Efficiency	> 99 %			
Equipment Protection				
AC Output Overcurrent Protection	Yes			
AC Output Overvoltage Protection	Yes Yes			
Thermal Protection	Yes			
Overvoltage Load Drop Protection	Yes			
General Data				
Operating Temperature Range	-40°C to +65°C, Derating at 45°C and above			
Permissible Ambient Humidity	0 – 100 %			

Permissible Altitude	2000 m
Noise	≤ 25 dB
Ingress Protection (IP) Rating	IP 67
Inverter Topology	Isolated
Communication	Wi-Fi
Cabinet Size (W x H x D)	224 mm x 255 mm x 60.5 mm (Excluding Connectors and Brackets)
Weight	4.2 kg
Type of Cooling	Natural Cooling
Mounting method	Bracket mounted

Dimension





Efficiency

		Vin					
		34	36	38	40	42	
AC output power	5%	78.2%	76.9%	77.0%	77.4%	75.2%	
	10%	86.8%	87.0%	87.2%	85.9%	85.7%	
	20%	93.4%	93.4%	93.2%	92.9%	92.8%	
	30%	95.0%	95.0%	95.1%	94.8%	94.7%	
	40%	96.0%	96.1%	95.9%	95.8%	95.6%	
	50%	96.4%	96.4%	96,4%	96.3%	96.3%	
	60%	96.4%	96,4%	96,4%	96.4%	96.4%	
	70%	96.0%	96.3%	96,4%	96.4%	96,4%	
	80%	95.7%	96.2%	96.2%	96.3%	96.4%	
	90%	95.5%	96.0%	96.1%	96.2%	96.2%	
	100%		95.8%	95.8%	96.0%	96.0%	