

# MMB SOLARIX 10.0 T4 GRID INVERTER



## Grid Inverter

MMB Solarix 10.0 T4 is a four-wire grid inverter which allows operation with an unbalanced load. Product dedicated to home photovoltaic micro installations. The use of silicon carbide transistors provides high quality and efficiency of the energy conversion. Additional optimization and functionality allow maximization of the energy produced for personal use, thus reducing the return on investment time.

## Features:

- High efficiency of energy conversion with new generation SiC power semiconductors,
- Construction allowing for work with unsymmetrical load,
- Passive cooling system,
- Smaller dimensions, Lower weight,
- All components of the "Automotive grade" class,
- Reactive power compensation option using an additional energy meter.

## Benefits for Investor:

- Reduced total system cost
- Increased ROI Return On Investment,
- Increased system lifetime performance,
- Improved system reliability.

The new inverters were designed using silicon carbide transistors. The use of this technology allows a significant reduction in power losses, dimensions and weight of devices.

Devices based on silicon carbide semiconductors are characterized by:

- reduced losses during energy conversion by about 70% \*,
- reduced weight and dimensions of the device by approx. 40% \*,
- increased reliability and lifetime of the device by approx. 30% \*.

*\* compared to devices using technology IGBT*



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DC INPUT DATA	10.0 T4
MPPT Trackers	2
MPP Tracker voltage range	150 - 750V
MPP Tracker Max. current	10 A
Max. input voltage	1000 V
MPP Tracker Max. connection power	6 kWp
AC OUTPUT DATA	
Nominal power	10 000 W
Nominal power on single phase	3 700 W
Maximal output power	10 000 VA
Maximal current power on single phase	16 A
Grid voltage range	3~NPE 400 V / 230 V or 3~NPE 480 V (+20 % / -30
Frequency range	50 Hz/ 60Hz (45-65 Hz)
Harmonics - THD	< 5 %
Power factor (cos $\phi_{ac,r}$ )	0.8 - 1 ind. / cap.
Number of phases	3 + 1N
GENERAL DATA	
Dimensions (H x L x D)	415 x 313x 157 mm
Weight	16 kg
IP protection level	IP66
Operating temperature	-20 to +55°C
Noise level	0 dB(A)
Humidity level	0 - 100%
Protection class	1
Overvoltage category - DC / AC	2 / 2
Inverter topology	Two-Level, Four-Wire / Transformerless
Cooling	Passive Cooling
Power consumption in standby mode	<1W
EFFICIENCY	
Max. efficiency	98,6 %
European factor $\eta_{EU}$	98,4 %
PROTECTION DEVICES	
RCMU device	Yes
Insulation measurement	Yes
Anti-islnld Protection	Yes
INTERFACES	
RS485 – MODBUS RTU	2
Wireless Wi -Fi	Yes
Certificates and Compliance with Standards	
	PN-EN 50438, IEC 62109-1/-2, IEC 62116, IEC 61727