

Hybrid Solar Inverter

Three Phase - IP65 - High Frequency

Model: MR-MPH50K WP

FEATURES

- IP65 waterproof and dustproof makes the inverter available for various working conditions
- Built-in WiFi for mobile monitoring (App is available)
- Generator input compatible
- User-adjustable charging current up to 65A
- Wide battery input range
- Built-in communication port for BMS (RS-485 and CAN)
- 5 years warranty
- Parallel operation up to 4 units



SPECIFICATION

MODEL	MR-MPH50K WP
MAXIMUM PV INPUT POWER	65kW
RATED OUTPUT POWER	50kW
MAXIMUM CHARGING POWER	50kW
GRID-TIE OPERATION	
PV INPUT (DC)	
Nominal DC Voltage / Maximum DC Voltage	720VDC / 1000VDC
Start-up Voltage / Initial Feeding Voltage	320VDC / 350VDC
MPP Voltage Range	350VDC – 900VDC
Full MPP Voltage Range	420VDC – 900VDC
Number of MPP Trackers / Maximum Input Current	4 / A: 32A, B: 32A, C: 32A, D: 32A
GRID OUTPUT (AC)	
Nominal Output Voltage	230VAC (P-N) / 400VAC (P-P)
Output Voltage Range	184VAC – 265VAC* per phase
Nominal Output Current	47.5 – 51.5 Hz or 59.3 – 60.5 Hz
Power Factor range	0.9 lag – 0.9 lead
EFFICIENCY	
Maximum Conversion Efficiency (DC/AC)	>96.5%
European Efficiency@ Vnominal	>96%
OFF-GRID OPERATION	
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	120VAC – 140VAC per phase / 180VAC per phase
Acceptable Input Voltage Range	170VAC – 280VAC per phase
Maximum AC Input Current	83A
PV INPUT (DC)	
Maximum DC Voltage	1000VDC
MPP Voltage Range	350VDC – 900VDC
Full MPP Voltage Range	420VDC – 900VDC
Number of MPP Trackers / Maximum Input Current	4 / A: 32A, B: 32A, C: 32A, D: 32A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	230VAC (P-N) / 400VAC (P-P)
Output Waveform	Pure sine wave
Efficiency (DC to AC)	>97%

 These figures are based on VDE-4105 standard. All figures may vary depending on different AC voltage and country requirements.
Power derating 1% every 100 m when altitude is over 1000m
Specifications are subject to change without notice, all product drawings are for reference only.

MODEL	MR-MPH50K WP
MAXIMUM PV INPUT POWER	65kW
RATED OUTPUT POWER	50kW
MAXIMUM CHARGING POWER	50kW
HYBRID OPERATION	
PV INPUT (DC)	
Maximum DC Voltage	1000VDC
Start-up Voltage / Initial Feeding Voltage	320VDC / 350VDC
MPP Voltage Range	350VDC – 900VDC
Full MPP Voltage Range	420VDC – 900VDC
Number of MPP Trackers / Maximum Input Current	4 / A: 32A, B: 32A, C: 32A, D: 32A
GRID OUTPUT (AC)	
Nominal Output Voltage	230VAC (P-N) / 400VAC (P-P)
Output Voltage Range	184VAC – 265VAC* per phase
Nominal Output Current	73A per phase
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	120VAC – 140VAC per phase / 180VAC per phase
Acceptable Input Voltage Range	170VAC – 280VAC per phase
Maximum AC Input Current	83A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	230VAC (P-N) / 400VAC (P-P)
Efficiency (DC to AC)	>97%
BATTERY & CHARGER	
Battery Voltage Range	500VDC – 800VDC
Maximum Discharging Current	100A
Maximum Charging Current	60A
GENERAL	
PHYSICAL	
Dimension, D x W x H (mm)	255 × 660 × 750
Net Weight (kgs)	110
INTERFACE	
Communication Port	RS-232, USB, DRY CONTACT, RS-485 and Wi-Fi
Intelligent Slot	Optional SNMP, MODBUS and GPRS
ENVIRONMENT	
Humidity	0 – 100% RH (Non-condensing)
Operating Temperature	-25 to 60°C (>45°C De-rating)
Altitude	0 – 1000 m**
PROTECTION & CERTIFICATE	
Safety	IEC 61000, EN 62960, IEC 62109, IEC 62477
Grid Connection Standard	NRS097-2-1:2017, VDE-AR-N4105, IEC 61683, IEC 61727, IEC 62116, G99

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