

# Hybrid Solar Inverter

## Three Phase - IP65 - High Frequency

Model: MR-SPH15K-LP3-TL65E


### FEATURES

- IP65 waterproof and dustproof makes rating
- Built-in WiFi for mobile monitoring (App is available)
- 150% unbalanced load support
- 26A Maximum PV input current
- Dual outputs for smart load management
- User-adjustable charging current
- Reserved communication port for BMS (RS485)
- Parallel operation up to 6 units




## SPECIFICATION

<b>MODEL</b>	<b>MR-SPH15K-LP3-TL65E</b>
<b>MAXIMUM PV INPUT POWER</b>	22.5kW
<b>RATED OUTPUT POWER</b>	15kW
<b>MAXIMUM CHARGING POWER</b>	15kW
<b>GRID-TIE OPERATION</b>	
<b>PV INPUT (DC)</b>	
Nominal DC Voltage / Maximum DC Voltage	720VDC / 1000VDC
Start-up Voltage / Initial Feeding Voltage	320VDC / 350VDC
MPP Voltage Range	350VDC – 950VDC
Full MPP Voltage Range	420VDC – 950VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 26A, B: 26A
<b>GRID OUTPUT (AC)</b>	
Nominal Output Voltage	230VAC (P-N) / 400VAC (P-P)
Output Voltage Range	184VAC – 265VAC* per phase
Nominal Output Current	21.7A per phase
Power Factor range	0.9 lag – 0.9 lead
<b>EFFICIENCY</b>	
Maximum Conversion Efficiency (DC/AC)	>96%
European Efficiency@ Vnominal	>95%
<b>OFF-GRID OPERATION</b>	
<b>AC INPUT</b>	
AC Start-up Voltage / Auto Restart Voltage	120VAC – 140VAC per phase / 180VAC per phase
Acceptable Input Voltage Range	170VAC – 290VAC per phase
Maximum AC Input Current	40A
<b>PV INPUT (DC)</b>	
Maximum DC Voltage	1000VDC
MPP Voltage Range	350VDC – 950VDC
Full MPP Voltage Range	420VDC – 950VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 26A, B: 26A
<b>BATTERY MODE OUTPUT (AC)</b>	
Nominal Output Voltage	230VAC (P-N) / 400VAC (P-P)
Output Waveform	Pure sine wave
Efficiency (DC to AC)	>91%

 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.

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<b>RATED OUTPUT POWER</b>	15kW
<b>MAXIMUM CHARGING POWER</b>	15kW
<b>HYBRID OPERATION</b>	
<b>PV INPUT (DC)</b>	
Maximum DC Voltage	1000 VDC
Start-up Voltage / Initial Feeding Voltage	320VDC / 350VDC
MPP Voltage Range	350VDC – 950VDC
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Nominal Output Voltage	230VAC (P-N) / 400VAC (P-P)
Efficiency (DC to AC)	>91%
<b>BATTERY &amp; CHARGER</b>	
Battery Voltage Range	40VDC – 62VDC
Maximum Discharging Current	300A
Maximum Charging Current	200A
<b>GENERAL</b>	
<b>PHYSICAL</b>	
Dimension, D x W x H (mm)	247 × 500 × 650
Net Weight (kgs)	78
<b>INTERFACE</b>	
Communication Port	RS-232, RS-485, USB, CAN and Wi-Fi
Intelligent Slot	Optional for SNMP and Modbus cards
<b>ENVIRONMENT</b>	
Humidity	0 – 100% RH (Non-condensing)
Operating Temperature	-25 to 60°C, > 45°C power derating
Altitude	0 – 1000 m**
<b>PROTECTION &amp; CERTIFICATE</b>	
Safety	IEC 62109, IEC 62116, IEC 61727, IEC 61683
Grid Connection Standard	NRS097-2-1:2017, VDE-AR-N4105

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