

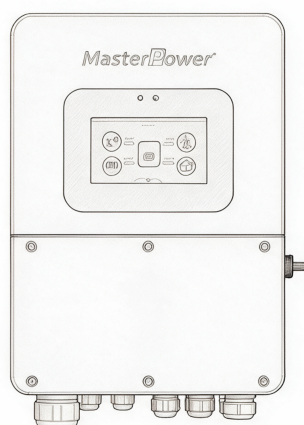
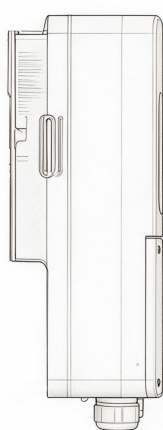


MF-RHO-SP SERIES

Hybrid inverter 6 / 8 / 10 kW

Product overview

Single-phase and split-phase hybrid inverter for grid connection, energy storage or Off-grid operation, available in 6, 8 and 10 kW.



MasterPower

MF-RHO-6K-SP
MF-RHO-8K-SP
MF-RHO-10K-SP

Features



Wide DC voltage range and 4 independent MPPTs.



Up to 7 intelligent operating modes.



Up to 98 % conversion efficiency.



Enclosure suitable for indoor or outdoor installation.



Grid connection, energy storage or Off-grid mode.



Colour LCD touchscreen, 4.3" or 7".



Remote monitoring and management from mobile or PC, with automatic battery management.



Compatible with lithium and lead-acid batteries.



Standard 5-year warranty, extendable up to 10 years.

DENOMINATION	MF-RHO-6K-SP	MF-RHO-8K-SP	MF-RHO-10K-SP
DC INPUT (PHOTOVOLTAIC)			
Max. connectable PV power	12 kW	16 kW	20 kW
Max. PV input power	9.6 kW	12.8 kW	16 kW
Max. PV input voltage		600 V	
Nominal input voltage		360 V	
MPPT operating voltage range		80 V - 500 V	
No. of independent MPPTs / strings per MPPT	2/1	4/1	4/1
Max. current per MPPT	2 x 20 A	4 x 20 A	4 x 20 A
Start-up voltage		100 V	
AC OUTPUT / INPUT (GRID)			
Nominal apparent power	6 kW	8 kW	10 kW
Max. apparent power	6.6 kVA	8.8 kVA	11 kVA
Nominal voltage		120 V / 240 V	
Nominal frequency		60 Hz	
Nominal current	25 A	33.3 A	41.6 A
Max. current	27.5 A	36.6 A	45.7 A
Power factor		-0.8 ~ +0.8 (adjustable)	
THDi		< 3 % (at rated power)	
Grid configuration		Split-phase, 2/3 phases, single-phase	
Max. AC current from the grid		100 A	
AC OUTPUT (BACK-UP)			
Nominal apparent output power	6 kVA	8 kVA	10 kVA
Max. apparent output power	6.6 kVA	8.8 kVA	11 kVA
Nominal output voltage		120 V / 240 V	
Nominal output frequency		60 Hz	
Output THDv		3 %	
Automatic transfer time		< 10 ms	
BATTERY INPUT DATA			
Battery type		Lithium (Li-Ion) / lead-acid	
Battery voltage range		40 V - 60 V	
Max. charge / discharge current	135 A	190 A	210 A
Charging strategy for lithium battery		BMS self-adaptation	

EFFICIENCY

Max. efficiency	99.9 %
European efficiency	97.5 %
Max. battery-to-load efficiency	94.5 %

PROTECTIONS

Anti-islanding protection	Yes
Insulation impedance protection	Yes
Residual current detection (RCD)	Yes
PV reverse polarity protection	Yes
Output overvoltage protection	Yes
Output overcurrent protection	Yes

GENERAL DATA

Dimensions (L/W/H) in mm	425 / 290 / 660
Weight	40 kg
Operating temperature range	-25 °C ~ +60 °C
Cooling system	Intelligent cooling
NEMA enclosure	Type 4
Maximum altitude	4,000 m
Night self-consumption	< 3 W
Topology	Transformerless

FEATURES

LCD display	Yes
Communication interfaces	WiFi / 4G / USB / CAN / RS485
Standards	UL 1741, IEEE 1547.1, SRD V2.0, FCC, RETIE