

Triple Phase Hybrid Inverter

Merc-20/25/29.9/30/
35/40/50/60G1-HE



Product Features

- High PV input current up to 18A
- High battery charging/discharging current up to 120A
- Support on/off-grid mode switch, EPS output
- Colorful touch LCD, IP65 protection degree
- Support battery charging/discharging according to the time setting
- Independent AC input port for diesel generator
- Support storing energy from diesel generator
- Up to 20 PCS inverters parallel for off-grid operation

Technical Data

Model	Merc-20G1 -HE	Merc-25G1 -HE	Merc-29.9G1 -HE	Merc-30G1 -HE	Merc-35G1 -HE	Merc-40G1 -HE	Merc-50G1 -HE	Merc-60G1 -HE
Battery Input								
Battery Type					Lead-acid or Li-ion			
Battery Voltage Range (V)					160~800			
Max. Charging/Discharging Current (A)					60+60			
Max. Charging/Discharging Power (kW)	22	27.5	29.9	33	38.5	44	55	62.5
Charging Curve					3 Stages/Equalization			
Number of Battery input					2			
Charging Strategy for Li-Ion Battery					Self-Adaption to BMS			
PV String Input								
Max. DC Input Power (kW)	30	37.5	44.85	45	52.5	60	75	90
PV Input Voltage (V)					600(150~900)			
MPPT Range (V)					150~850			
Start-up Voltage (V)					180			
PV Input Current (A)			3*36			4*36	5*36	
Max. PV Isc (A)			3*55			4*55	5*55	
No. of MPPT Trackers			3			4	5	
No. of Strings per MPPT Trackers			2/2/2			2/2/2/2	2/2/2/2/2	
AC Output								
Rated AC Output and UPS Power (kW)	20	25	29.9	30	35	40	50	60
Max. AC Output Power (kW)	22	27.5	29.9	33	38.5	44	55	66
Peak Power(off grid)(kW)					1.5 times of rated power, 10s			
AC Output Rated Current (A)	30.3/29.0	37.9/36.2	45.4/43.4	45.5/43.5	53.1/50.8	60.7/50.8	75.8/72.5	90.9/87.0
Max. AC Current (A)	33.3/31.9	41.7/39.8	45.4/43.4	50/47.9	58.4/55.8	66.7/63.6	83.4/79.8	100/95.8
Max. Continuous AC Passthrough (A)	100					200		
Output Frequency and Voltage (V)					50/60Hz, 230/400Vac, 220/380			
Grid Type					Three phase			
Current Harmonic Distortion					THD< 3%			
Efficiency								
Max. Efficiency					97.60%			
Euro Efficiency					97.00%			
MPPT Efficiency					>99%			
Protection								
Integrated	PV Input Lightning Protection, Anti-Islanding Protection,PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection							
PV ARC Fault Detection					Optional			
Output Over Voltage Protection					DC Type II/AC Type III			
Certifications and Standards								
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699,C10-11							
Safety Regulation	IEC/EN62109-1, IEC/EN62109-2							
EMC	IEC/EN 61000-6-1,IEC/EN 61000-6-2, IEC/EN 61000-6-3, IEC/EN 61000-6-4							
General Data								
Operating Temperature Range (°C)					-45~60, >45 Derating			
Cooling					Smart Cooling			
Noise (dB)					≤65			
Communication with BMS					CAN, RS485			
Weight (kg)					109.3			
Dimensions (mm)					976W×665H×371D			
Protection Degree					IP65			
Installation Style					Wall-mounted			