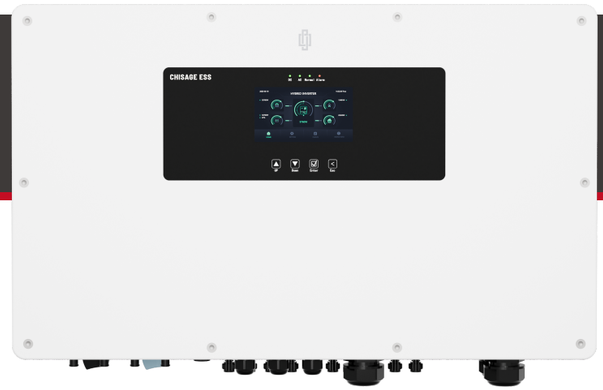
Triple Phase Hybrid Inverter

Merc-20/25/29.9/30/35/40/50/60G1A-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-20G1A -HE	Merc-25G1A -HE	Merc-29.9G1A -HE	Merc-30G1A -HE	Merc-35G1A -HE	Merc-40G1A -HE	Merc-50G1A -HE	Merc-60G1A -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 (℃)	-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							