

SINGLE PHASE HYBRID INVERTER

Alpha 6KW

FEATURES



COLORFUL TOUCH LCD, IP65 PROTECTION DEGREE



AC COUPLING TO RETROFIT EXISTING SOLAR SYSTEM Double output



MAX. 16 PCS PARALLEL FOR ON-GRID AND OFF-GRID OPERATION; SUPPORT MULTIPLE BATTERIES PARALLEL



MAX. CHARGING/DISCHARGING CURRENT OF 135A



6 TIME PERIODS FOR BATTERY CHARGING/DISCHARGING



SUPPORT STORING ENERGY FROM DIESEL GENERATOR



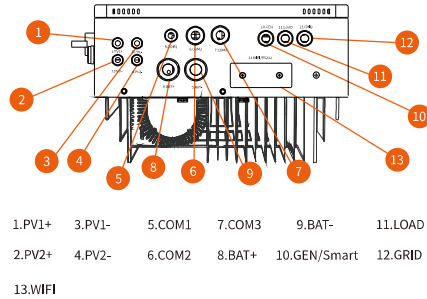
SMART LOAD



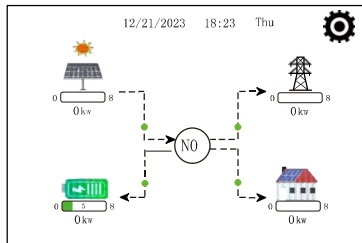
CERTIFICATIONS



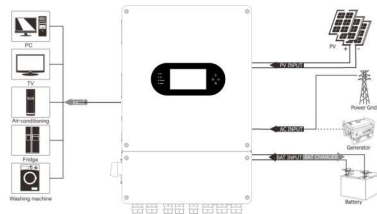
PRODUCT CHARACTERISTICS



LCD DISPLAY ICONS



BASIC SYSTEM ARCHITECTURE



Data Sheet

Model	Alpha 6KW
PV String Input Data	
Max. DC Input Power (W)	7800
Rated PV Input Voltage (V)	370 (125~500)
Start-up Voltage (V)	125
MPPT Voltage Range (V)	150~430
Full Load MPPT Voltage Range (V)	300~430
Max. DC Input Current(A)	20+20
Max. DC Short Circuit Current(A)	22+22
No.of MPPT Trackers	2
No.of Strings per MPPT Tracker	1+1
AC Output Data	
Rated AC Output Power (W)	6000
Max AC Output Power (W)	6600
AC Output Rated Current (A)	27.3
Max AC Output Current (A)	30
Max.Continuous AC Passthrough (A)	40
Peak Power (off grid)	2 times of rated power, 10 S
Power Factor	0.8 leading ~ 0.8 lagging
AC Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac
Grid Type	Single Phase
Total Harmonic Distortion (THDI)	<3% (of nominal power)
DC Current Injection	<0.5% (Rated Current)
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40~60
Max. Charging Current (A)	135
Max. Discharging Current (A)	135
External Temperature Sensor	Yes
Charging Curve	3 Stages / Equalization
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	96.50%
MPPT Efficiency	99.90%
Protection	
Anti-islanding Protection	Yes
PV String Input Reverse Polarity Protection	Yes
Insulation Resistor Detection	Yes
Residual Current Monitoring Unit	Yes
Output Over Current Protection	Yes
Output Shorted Protection	Yes
Surge Protection	DC Type II/AC Type III
Over Voltage Protection	Yes
Certifications and Standards	
Grid Regulation	IEC61727/EN50549-1
Safety EMC / Standard	IEC/EN 61000-6/2/4, IEC/EN 62109-1, IEC/EN 62109-2
General Data	
Operating Temperature Range (°C)	-40~60°C, >45°C Derating
Cooling	Smart Cooling
Noise (dB)	≤50 dB
Communication with BMS	RS485; CAN
Monitoring mode	WIFI, APP
Weight (kg)	24
Size (W x H x D mm)	580x330x252mm
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 Years (10Years Optional)