

Alpha Series 1Phase IGBT Solar Power Inverter

Features

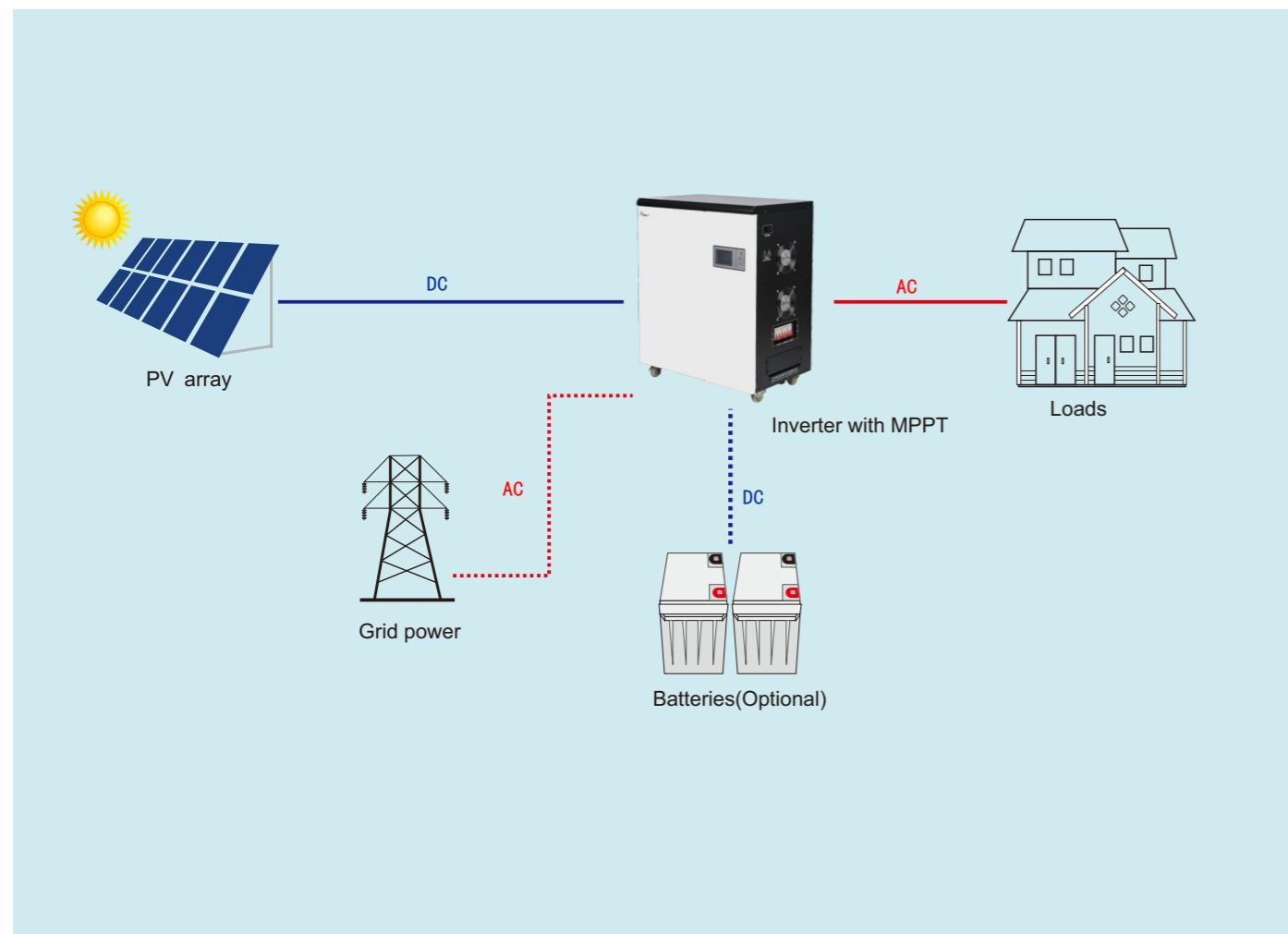
- IGBT design, pure sine wave
- Can work without battery bank
- Strong overload and impact resistance
- High efficiency, low noise, ECO friendly
- PV+AC to run loads(PV priority, AC for backup)
- Stable performance, safe and reliable, long lifespan
- 3 times PV power input as rated power and wide PV input voltage
- Resistive /inductive /capacitive load or mixed load are compatible
- Protection:
Input low/over voltage, output low/over voltage,
overload, short circuit, over- temp. and etc



Application



Application diagram



Technical Parameters

Inverter with MPPT	Alpha 10K	Alpha 20K	Alpha 30K
Rated power	10KW	20KW	30KW
Battery voltage		192V	
Size (L*W*Hmm)	580*370*730		740*400*930
package size (L*W*Hmm)	650*420*840		820*480*1050
N.W. (KG)	71	111	151
G.W.(KG)	88	131	171

AC Input

Phase	L+N+G
AC input range	110V:85-138VAC; 220V:170-275VAC
Input frequency	45Hz~55Hz or 55Hz~65Hz

AC Output

Output voltage	inverter mode: 110VAC/220V±5%; AC mode: 110VAC/220VAC±10%;
Frequency range (AC mode)	Auto-detect
Frequency range (inverter mode)	50Hz/60Hz±1%
Over load capacity	AC mode:(100%~110%:10min; 110%~130%:1min;>130%:1s); inverter mode:(100%~110%:30s; 110%~130%:10s;>130%:1s);
Crest ratio	3:1max
Transfer time	<10ms(Typical loads)
Waveform	Pure sine wave
Efficiency	>85%(80% resistive loads)
Protection functions	Battery overvoltage protection, battery undervoltage protection, overload protection, short circuit protection, overtemperature protection, etc.

Built in MPPT (Mosfet based)

Max charge current	50A
Battery voltage	192V
PV input voltage range(VOC)	200-390Vdc
Max PV input	30KW(10KW for MPPT charger) 60KW(10KW for MPPT charger) 90KW(10KW for MPPT charger)
Cooling method	Fans cooling

Environmental conditions

Operating temperature	(Battery life decreases at ambient temperatures above 25 degrees Celsius)
Operation humidity	<95% (without condensing)
Operating altitude	<1000m (with increase of 100m, it will reduce output of 1%) max5000m
Noise	<58dB(distance to machine 1m)

Management

Display	LED+Touch Screen
Communication	RS485(Optional)

*The specifications, dimensions and materials are subject to change without further notice.