



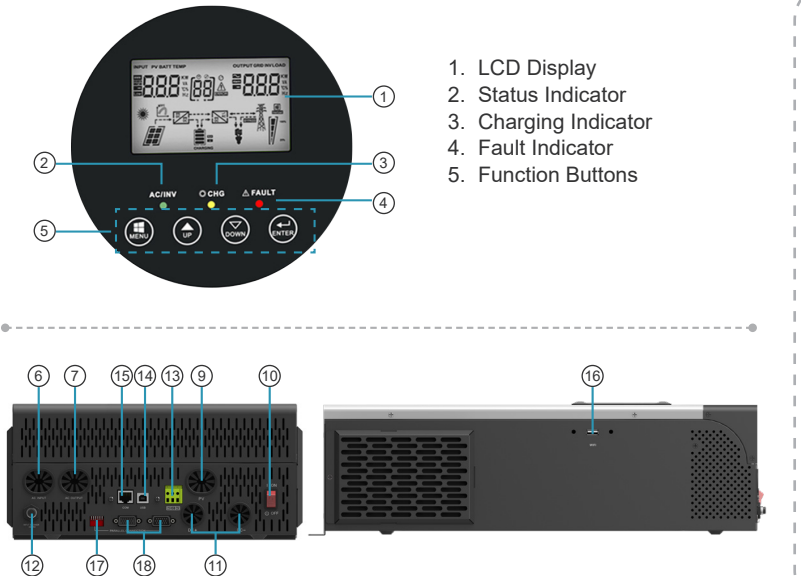
Features

- Pure sine wave output
- Smart LCD setting (Working modes, Charge Current, Charge Voltage, etc).
- Built-in MPPT solar charge controller
- MAX PV Array Open Circuit Voltage: 450V
- Can provide the power to the load without battery
- Combining solar system, AC utility, and battery power source to supply continuous power
- Overload, short circuit and Deep discharge protection
- Cold start function
- Support USB, RS485 monitoring function
- Parallel operation with up to 3 units
- WIFI remote monitoring (optional)

Introduction

ES-PRO is a multi-function inverter/charger, combining functions of inverter, MPPT solar charger and battery charger to offer uninterruptible power support in portable size. ES-PRO Series can run without battery. The Maximum PV array open circuit voltage can reach 450V and MPPT voltage is 150~430Vdc, which Can help customers make full use of solar energy.

Back panel printing description



1. LCD Display

2. Status Indicator

3. Charging Indicator

4. Fault Indicator

5. Function Buttons

6. AC Input

7. AC Output

8. FAN

9. PV Input

10.Power On/Off Switch

11.Battery Input

12.Circuit breaker

13.Dry Contact

14.USB

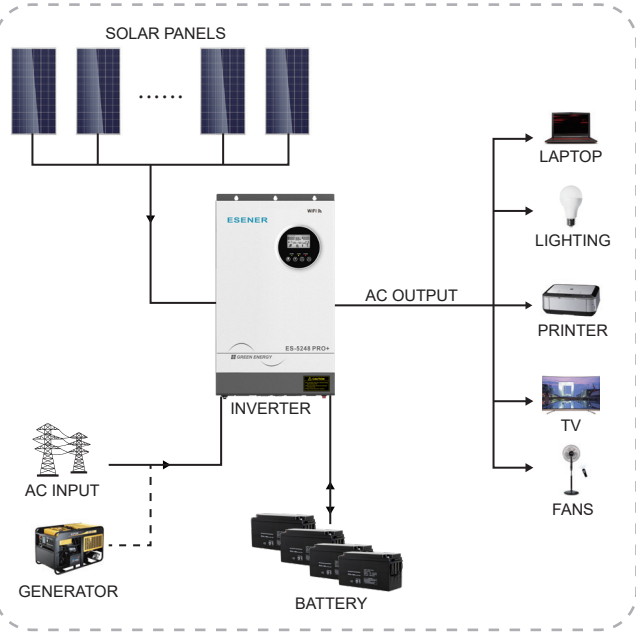
15.RS-485/CAN Communication port

16.USB WiFi

17.parallel Switch (only for parallel model)

18.parallel communication port (only for parallel model)

Solar system connection



Specification

MODEL		ES-5248 PRO+	
Nominal Battery System Voltage		48VDC	
INVERTER OUTPUT	Rated Power	5200VA / 5200W	
	Surge Power	10400W	
	Waveform	Pure sine wave	
	AC Voltage Regulation (Batt.Mode)	230VAC±5%(Setting)	
	Inverter Efficiency(Peak)	90%	
	Transfer Time	10ms (UPS / VDE4105) / 20ms (APL)	
AC INPUT	Voltage	230VAC±5%	
	Selectable Voltage Range	170~280VAC(UPS) / 90~280VAC(APL) / 184~253VAC(VED4105)	
	Frequency Range	50Hz / 60Hz(Auto sensing)	
BATTERY	Normal voltage	48VDC	
	Floating Charge Voltage	54.8VDC	
	Overcharge Protection	60VDC	
SOLAR CHARGER & AC CHARGER	Maximum PV Array Open Circuit Voltage	450VDC	
	Charging Algorithm	3-Step (Flooded Battery, AGM / GEL / LEAD Battery), 4-Step (Li)	
	Maximum PV Array Power	5000W	6000W
	PV Array MPPT Voltage Range	150~430 VDC	
	PV Max Input Current	27A	
	Maximum Solar Charge Current	80A	100A
	Maximum AC Charge Current	60A	80A
	Maximum Charge Current	80A	100A
MECHANICAL SPECIFICATIONS	Machine Dimensions (W*H*D)(mm)	309*505*147	
	Package Dimensions (W*H*D)(mm)	375*655*269	
	Net Weight(kg)	14	
	Gross Weight(kg)	16.4	
OTHER	Humidity	5% to 95% Relative humidity (Non-condensing)	
	Operating Temperature	0°C~50°C	
	Storage Temperature	-15°C ~60°C	