

ON/OFF GRID HYBRID SOLAR INVERTER

ES-HY12KW-48 Series

12KW | PV500V | 120A~150A | Dual output

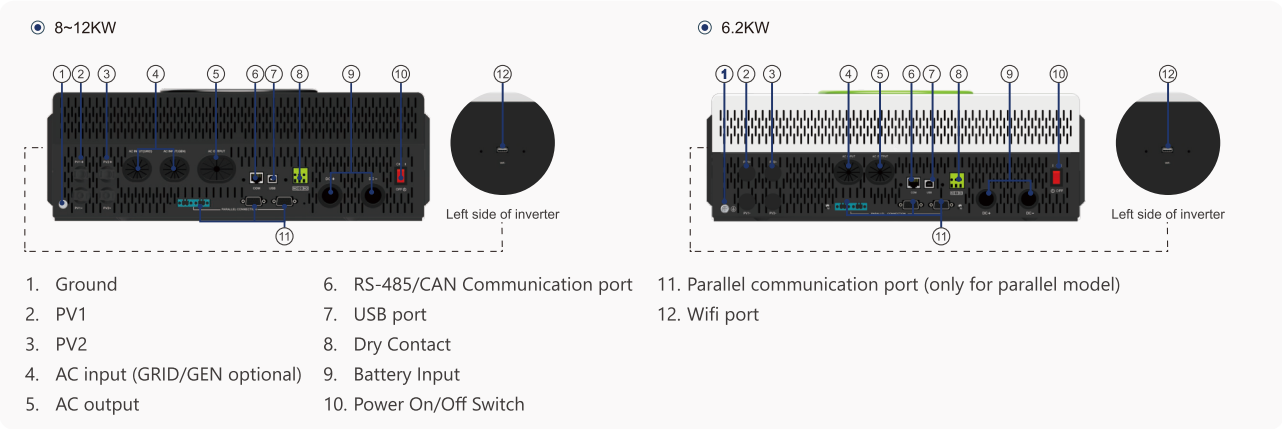
ES-HY12KW-48 is a multi-function inverter/charger, combining functions of inverter, MPPT solar charger and battery charger to offer uninterruptible power support in portable size. PH1900 EXP Series can run without battery. The Maximum PV input voltage can reach 500V and MPPT voltage range is 90~450Vdc, built-in two MPPTs solar charge controller, which can help customers make full use of solar energy.



- Dual output for smart load management
- Smart color LCD setting (Working modes, Charge Current, Charge Voltage, etc).
- Built-in Two MPPTs solar charge controller
- Wide MPPT voltage range is 90~450V, the maximum PV input voltage can reach 500V (450V for parallel)
- 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
- With BMS lithium battery communication function
- With AC/PV lithium battery activation function
- Support USB, RS485 monitoring function
- Parallel operation up to 6 units
- WIFI remote monitoring



Back panel description



Solar system connection



MODEL		ES-HY12KW-48
Default Battery System Voltage		48VDC
INVERTER OUTPUT		
Rated Power		12000VA/12000W
Surge Power		24000W
Waveform		Pure Sine Wave
AC Voltage Regulation (Batt.Mode)		230VAC±5%(Setting)
Inverter Efficiency(Peak)		92%
Transfer Time		10ms(UPS / VDE4105) / 20ms(APL)
AC INPUT		
Voltage		230VAC
Max AC Input Voltage		300VAC
Selectable Voltage Range		170~280VAC(UPS) / 90~280VAC(APL) / 184~253VAC(VDE)
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		500VDC (450V for parallel)
Charging Algorithm		3-Step (Flooded Battery, AGM / GEL / LEAD Battery), 4-Step (Li)
Maximum PV Array Power		6000W*2
Maximum PV Input Current		27A*2(40A max)
PV Array MPPT Voltage Range		90~450VDC (90~430VDC for parallel)
Min Battery Voltage For PV charge		
Maximum Solar Charge Current		150A
Maximum AC Charge Current		150A
Maximum Charge Current		150A
MECHANICAL SPECIFICATIONS		
Machine Dimension (W*H*D)		425*527*145mm
Package Dimension (W*H*D)		/
N.W (kg)		17.6
G.W (kg)		/
OTHER		
Humidity		5% to 95% Relativ Humidity (Non-condensing)
Operating Temperature Range		0°C~50°C
Storage Temperature Range		-15°C~60°C
Warranty		2 year
CERTIFICATION & STANDARDS		