

# ON/OFF GRID HYBRID SOLAR INVERTER

## PH1900 EXP Series

4~12KW | PV500V | Dual output | WiFi



### Smart Control

Delivers 4–12 kW output for both residential and commercial applications.

### Smart Load Management

Dual-output design for prioritized main and critical loads.

### High-Efficiency PV Performance

Dual MPPT with a 90–450V range and PV input up to 500V.

### Intuitive Monitoring & Control

Color LCD with USB/RS485/WiFi for full system visibility.

### Scalable & Fully Protected

Supports up to 6 units in parallel with overload, short-circuit, and deep-discharge protection.

### Advanced Lithium Integration

Supports BMS communication and AC/PV activation for safer, efficient battery operation.



### MAIN PARAMETER

MODEL	PH19-4024 EXP	PH19-6048 EXP	PH19-6248 EXP	PH19-8048 EXP	PH19-10048 EXP	PH19-11048 EXP	PH19-12048 EXP
Default Battery System Voltage	24VDC		48VDC				
<b>INVERTER OUTPUT</b>							
Rated Power	4000VA/4000W	6000VA/6000W	6200VA/6200W	8000VA/8000W	10000VA/10000W	11000VA/11000W	12000VA/12000W
Surge Power	8000W	12000W	12400W	16000W	20000W	22000W	24000W
Waveform	Pure sine wave						
AC Voltage Regulation (Batt.Mode)	230VAC±5%(Setting)						
Inverter Efficiency(Peak)	92%						
Transfer Time	10ms(UPS / VDE4105) / 20ms(APL)						
<b>AC INPUT</b>							
Voltage	230VAC						
Selectable Voltage Range	170~280VAC(UPS) / 90~280VAC(APL) / 184~253VAC(VDE)						
Frequency Range	50Hz / 60Hz (Auto sensing)						
<b>BATTERY</b>							
Normal voltage	24VDC		48VDC				
Floating Charge Voltage	27.4VDC		54.8VDC				
Overcharge Protection	30VDC		60VDC				
<b>SOLAR CHARGER &amp; AC CHARGER</b>							
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	5000W	6000W	4000W*2	4000W*2	5000W*2	5500W*2	6000W*2
Maximum PV Input Current	18A	27A	18A*2	18A*2	27A*2(40A max)	27A*2(40A max)	27A*2(40A max)
PV Array MPPT Voltage Range	90~430VDC	120~430VDC	90~450VDC (90~430VDC for parallel)				
Maximum Solar Charge Current	100A	120A	120A	120A	150A	150A	150A
Maximum AC Charge Current	80A	100A	100A	120A	150A	150A	150A
Maximum Charge Current	100A	120A	120A	120A	150A	150A	150A

### OTHER PARAMETER

MODEL	PH19-4024 EXP	PH19-6048 EXP	PH19-6248 EXP	PH19-8048 EXP	PH19-10048 EXP	PH19-11048 EXP	PH19-12048 EXP
<b>MECHANICAL SPECIFICATIONS</b>							
Machine Dimension (W*H*D) (mm)	322*486*134	309*505*147	425*455*147	425*527*145			
Package Dimension (W*H*D) (mm)	575*229*425	603*260*400	586*247*537	632*257*548			
N.W (kg)	9.5	12.5	13	18.0	18.0	18.1	18.1
G.W (kg)	12	13.8	15.6	20.6	20.6	20.7	20.7
<b>OTHER</b>							
Humidity	5% to 95% Relativ Humidity (Non-condensing)						
Operating Temperature Range	-10°C~50°C						
Storage Temperature Range	-15°C ~60°C						
Warranty	2 year						

### CERTIFICATION & STANDARDS

CE-EMC+LVD (EN6100-6-3:2007, EN6100-6-1:2017+EN IEC62109-1:2010, EN IEC62109-2:2011)  
 CE-LVD (IEC62109-1:2010, EN IEC62109-2:2011)  
 EN IEC62368-1:2018, EN IEC62109-1:2010, EN IEC62109-2:2011