

PHS PRO SERIES ON/OFF GRID HYBRID SOLAR INVERTER

4kW-6kW



Performance Characteristics

1. Pure sine wave solar inverter
2. Output power factor 1.0
3. Dual outputs for smart load management
4. Self-consumption and Feed-in to the grid
5. Programmable supply priority for PV, Battery or Grid
6. Reserve communication interface for BMS
7. Inverter can run without battery
8. One-key restoration to factory Settings
9. Built-in Lithium battery automatic activation
10. Built-in MPPT Solar Charger 140A for 4KW, 120A for 6KW
11. High PV input voltage range (60-500VDC)
12. Built-in anti-dust kit for harsh environment
13. WIFI & GPRS available for IOS and Android

PHS Pro Series On/Off Grid Solar Inverter (4kW-6kW) is a cutting-edge solution, providing a pure sine wave output with a power factor of 1.0. Its unique dual functionality on/off the grid and battery-free operation offer flexible energy management. Featuring user-friendly one-key restoration and built-in lithium battery activation, it ensures seamless operation. With a wide 60-500VDC PV input range, anti-dust kit, and dual output, the PHS Pro Series excels in reliability and high performance for diverse solar applications.

Application Diagram



Technical Specifications

Model	PHS4K-24L-PRO	PHS6K-48L-PRO
Maximum PV Input Power	6200W	6500W
Rated Output Power	4000W	6000W
GRID-TIE OPERATION		
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC	
Start-up Voltage/Initial Feeding Voltage	60VDC/90VDC	
MPPT Voltage Range	60~450VDC	
Number of MPPT Trackers/Maximum Input Current	1/18A	1/22A
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	190~253VAC	
Nominal Output Current	18.2A	27.0A
Power Factor	>0.99	
EFFICIENCY		
Maximum Conversion Efficiency(Solar to AC)	98%	
TWO LOAD OUTPUT POWER		
Maximum Main Load	4000W	6000W
Maximum Second Load(battery mode)	1400W	2067W
Main Load Cut Off Voltage	26VDC	52VDC
Main Load Return Voltage	27VDC	54VDC
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Frequency Range	49~51±1Hz	
Maximum AC Input Current	30A	40A
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
BATTERY MODE OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Waveform	Pure sine wave	
Efficiency(DC to AC)	94%	
BATTERY & CHARGER		
Nominal DC Voltage	24VDC	48VDC
Maximum Solar Charging Current	140A	120A
Maximum AC Charging Current	100A	100A
	140A	120A
HYBRID OPERATION		
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC	
Start-up Voltage /Initial Feeding Voltage	60VDC/120VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195.5~253VAC	
Nominal Output Current	18.2A	27.0A
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	100A	40A
Maximum AC Charging Current	100A	100A
GENERAL		
PHYSICAL		
Dimension,DxWxH(mm)	420X350X110	
Net Weight(kgs)	8.5	9
INTERFACE		
Communication Port	RS232/RS485/WIFI/GPRS/LITHIUM BATTERY	

PHS PRO SERIES ON/OFF GRID HYBRID SOLAR INVERTER

8kW-10kW

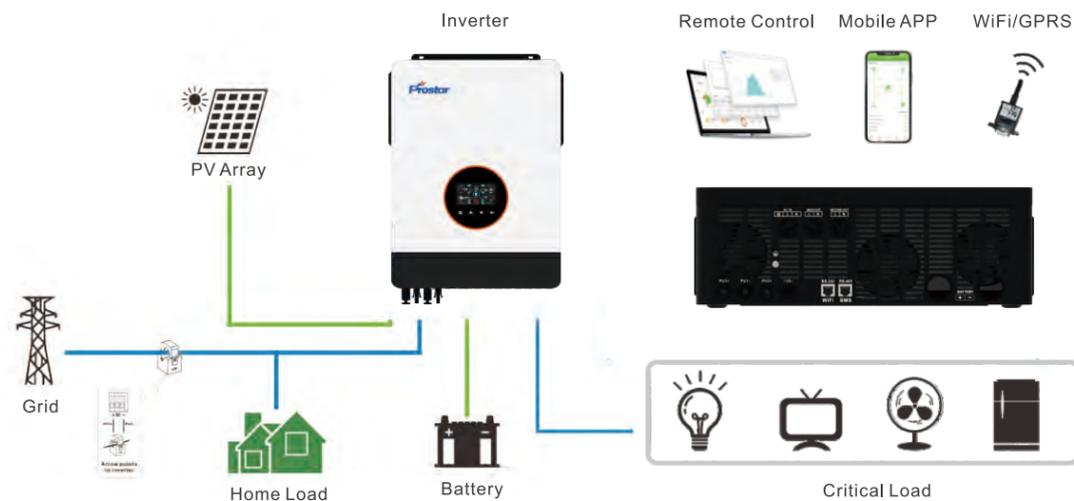


Performance Characteristics

1. Pure sine wave solar inverter
2. Output power factor 1.0
3. Dual outputs for smart load management
4. Self-consumption and Feed-in to the grid
5. Programmable supply priority for PV, Battery or Grid
6. Reserve communication interface for BMS
7. Inverter can run without battery
8. One-key restoration to factory Settings
9. Built-in Lithium battery automatic activation
10. Built-in 160A MPPT solar charger
11. High PV input voltage range (90-500VDC)
12. Built-in anti-dust kit for harsh environment
13. Touch button
14. WIFI& GPRS available for IOS and Android

PHS Pro Series On/Off Grid Solar Inverter (8kW-10kW) is providing a pure sine wave output with utility power factor. In on-grid mode, excess energy can be sold back to the grid, while in off-grid mode, it ensures self-sufficiency during power outages or in remote locations. It can work with lithium battery storage systems, enabling the capture and utilization of excess energy. With a wide 90-500VDC PV input range, anti-dust kit, and dual output, the PHS Pro Series excels in reliability and high performance for diverse solar applications. Stay connected to your energy system from anywhere using mobile app or web portal via WiFi module.

Application Diagram



Technical Specifications

Model	PHS8K-48L-PRO	PHS10K-48L-PRO
Maximum PV Input Power	5400W+5400W	5400W+5400W
Rated Output Power	8000W/8000VA	10000W/10000VA
GRID-TIE OPERATION		
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC	
Start-up Voltage/Initial Feeding Voltage	90VDC/ 120VDC	
MPPT Voltage Range	90~450VDC	
Number of MPPT Trackers/Maximum Input Current	2/18A	2/18A
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	190~253VAC	
Nominal Output Current	35.6A	44.3A
Power Factor	>0.99	
EFFICIENCY		
Maximum Conversion Efficiency(Solar to AC)	98%	
TWO LOAD OUTPUT POWER		
Maximum Main Load	8000W	10000W
Maximum Second Load(battery mode)	2733W	3400W
Main Load Cut Off Voltage	52VDC	
Main Load Return Voltage	54VDC	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Frequency Range	49~51±1Hz	
Maximum AC Input Current	40A	50A
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC	
MPPT Voltage Range	90~450VDC	
Maximum Input Current	2/18A	2/18A
BATTERY MODE OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Waveform	Pure sine wave	
Efficiency(DC to AC)	94%	
BATTERY & CHARGER		
Nominal DC Voltage	48VDC	
Maximum Solar Charging Current	160A	160A
Maximum AC Charging Current	140A	140A
Maximum Charging Current	160A	160A
HYBRID OPERATION		
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC	
Start-up Voltage /Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	90~450VDC	
Maximum Input Current	2/18A	2/18A
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	190~253VAC	
Nominal Output Current	35.6A	44.3A
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	40A	50A
Maximum AC Charging Current	140A	140A
GENERAL		
PHYSICAL		
Dimension,DxWxH(mm)	530X420X160	
Net Weight(kgs)	14.6	15
INTERFACE		
Communication Port	RS232/RS485/WIFI/GPRS/LITHIUM BATTERY	