



Off Grid Solar Inverter

Single Phase

5kW

6.5kW



PHOTON ULTRA



High Compatibility

33% more surge power has better protection function for special application scenarios such as refrigerator, air conditioner and water pump.

40~450VDC, Wider range, More power generation. Start earlier, stop later.



High Reliability

Enhanced safety with Built-in Transformer Isolation. provides added protection for users.

Built-in Powerful Optimizer effectively drives heavy home loads ensuring reliable performance for demanding appliances. (Support 300% Surge power)(Max Value).



More Convenient

27A I_{max}.PV current better for 210 panels.

160A Maximum charging Current, faster charging.



Cost-effective

38% increased rated power for PV, providing additional energy for battery charging while 100% full-load capacity.

PV efficiency up to 97%, ensures maximum energy conversion and enhances overall system performance.

Model	Photon Ultra 5KW	Photon Ultra 6.5KW
	Battery Data	
Battery Type	Lithium and Lead-acid	Lithium and Lead-acid
Rated Voltage	24V	48V
Battery Voltage Range	20-30V	40~60V
Max. Charge / Discharge Current	160A	120A
Communication Interface	CAN / RS485	CAN / RS485
Number of Battery Input	1	1
	PV Input	
Max. Input Power	9000 W	
Rated Input Voltage	500 VDC	
Start-up Input Voltage	90V	
MPPT Operating Voltage Range	40~450 V	60~450 V
Max. Input Current per MPPT	27A	
No.of MPP Trackers/No.of String Per MPP Tracker	1/1	
Number of PV inputs	1	
	Rated Output Power	
Rated Output Power	5000 W	6500 W
Rated Grid Voltage	230Vac	
Rated Grid Frequency	50Hz/ 60Hz±0.1%	
Selectable Voltage Range	170~280VAV (For Personal Computers) 90~280VAC (For Home Appliance)	
Surge Power	15000VA	16500VA
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Total Harmonic Distortion, THDi	<3 %	
Conversion time (bypass and inverter)	< 10ms	
	Parallel	
Permitted parallel number	/	1~9W
	Bypass	
Bypass Current	40A	
	Display parameter	
Display	3.5 inch Touch LCD	
	Efficiency	
Maximum DC battery to AC load Efficiency	>92.5%	>94%
MPPT Tracker Maximum Efficiency	>99.5%	
Min Peak PV to AC inversion Efficiency	>96%	
	General Data	
Installation	Wall-mounted	
Operation Temperature	-10 °C ~ +55°C	
Operation Humidity	5~95% RH, No Condensing	
Protection Degree	IP54	
Max. Operating Altitude	2000 m	
Cooling Method	Intelligent Air Cooling	
Noise Emission	< 55 dB	
Topology	Transformerless	
LED strip	RGB LED(Optional)	
Regulation	IEC/EN 62109-1, IEC/EN 62109-2	
Cabinet Size(DxWxH mm)	388x513x120	
Weight(kg)	13	