

## ON-GRID INVERTER

### PHT 3-6 KW

### SINGLE PHASE

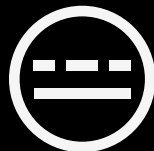


The PHOTON ON-GRID is a reliable and efficient solar inverter that's designed for residential solar energy systems. This inverter is known for its high efficiency and ease of use, and it's capable of converting up to 98.6 % of the DC electricity it receives into usable AC electricity.

### FEATURES



Peak Efficiency  
**98.6 %**



Max DC Overload  
**50 %**



Die Casting  
**Aluminium Alloy**

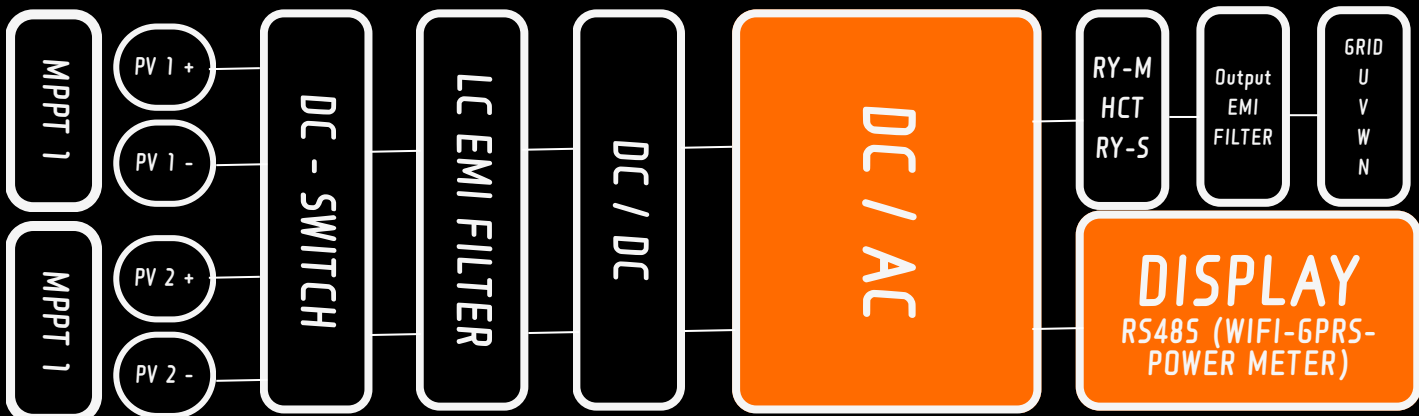


MES + FCT + CRM  
**Infrastructure**








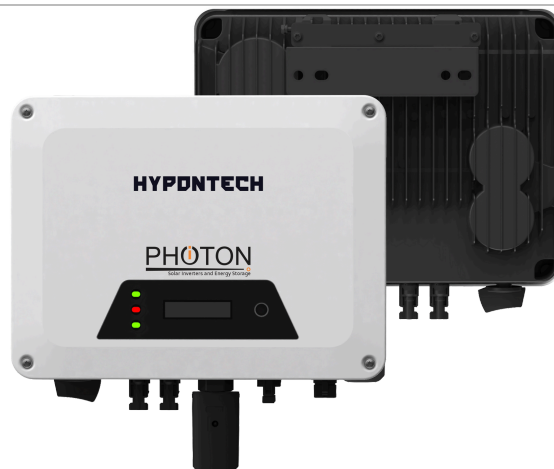
Protection Type  
**IP66**

### BLOCK DIAGRAM



## PHT Ongrid Series 3-6 KW

-  Converts up to 98.6% of DC electricity into usable AC electricity, ensuring optimal efficiency.
-  Built with an IP66-rated design, offering superior durability and protection against dust and water.
-  Features die-cast aluminum alloy infrastructure for enhanced heat dissipation and long-term reliability.
-  Equipped with advanced EMI filters for stable and interference-free power output.
-  Backed by a 10-year warranty, ensuring peace of mind and confidence in quality.



Parameter	PHT-3000P	PHT-6000P
<b>Input / DC</b>		
Max. PV Power (Wp)	4500	9000
Max. Input Voltage (V)	600	600
MPPT Voltage Range (V)	50-550	50-550
Min. DC Voltage (V)	50	50
Nominal DC-Input Voltage (V)	360	360
Max. Input Current (A)	16/16	16/16
Max. Short DC Current (A)	20/20	20/20
No. of Independent MPPT Inputs	2	2
No. of PV Strings Per MPPT	1	1
<b>Output / AC</b>		
Rated Power (W)	3000	6000
Max. Apparent AC Power (VA)	3300	6600
Rated Grid Voltage (Vac)	220/230/240	220/230/240
Rated Power Frequency (Hz)	50/60	50/60
Max. Output Current (A)	14.3	28.7
Displacement power factor	0.8 leading-0.8 lagging	0.8 leading-0.8 lagging
THDI at Rated Power	<3%	<3%
Grid Connection	L/N/PE	L/N/PE
<b>Efficiency</b>		
Max. Efficiency	98.1%	98.1%
MPPT Efficiency	99.9%	99.9%
Insulation Resistor Detection	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated
Surge Protection	Integrated, DC Type II / AC Type II	Integrated, DC Type II / AC Type II
<b>General Data</b>		
Dimensions (WHD mm)	366*276*133	366*276*133
Weight (Kg)	8.2	8.2
Noise Emission (Typical) db(A)	<45	<45
User Interface	LCD&LED or LED	LCD&LED or LED
Communication	RS485/Wi-Fi/GPRS(Optional)	RS485/Wi-Fi/GPRS(Optional)
Operating Ambient Temperature Range (°C)	-25°C to +60°C	-25°C to +60°C
Allowable Relative Humidity Range	0% - 100%	0% - 100%
Max. Operating Altitude (m)	3000(>3000 derating)	3000(>3000 derating)
Degree of Protection (IEC 60529)	IP66	IP66
Isolation Method	Transformerless	Transformerless
Power Loss in Night Mode (W)	<1W	<1W