



**POLYCAR**  
**SOLAR**

## **SOLAR GRID - TIE STRING INVERTER**



### **Leading Features**

- More Reliable & Efficient with World Class Components for 20 Years Design Life
- High Frequency Switching Technology
- Low Start-up Voltage & Ultra Wide MPPT Range for more Power Generation
- Multiple Protection Levels
- THDi < 1.5%
- Max. Efficiency 98.1%
- Built-in Export Power Management for Export Control
- IP65 for outdoor Installation
- Compact Size & Light Weight Design for single person easy installation
- RS-485; Wi-Fi/GPRS/LAN Interface (Optional)
- Remote Monitoring on Web Portal & Mobile App
- 5 Years Standard Warranty
- Extendable upto 20 years

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**POLYCAR**

CONTACT (Toll Free No.) 1800 267 0008

## TECHNICAL SPECIFICATIONS

MODEL	PSIS- 1K	PSIS- 1.5K	PSIS- 2K	PSIS- 3K	PSIS- 4K	PSIS- 5K
RATING	1 KW	1.5 KW	2 KW	3 KW	4 KW	5 KW
<b>INPUT DC</b>						
Max. DC Input Power (kW)	1.2	1.8	2.4	3.6	4.8	6
Max. DC Input Voltage (V)	600					
Start-Up Voltage (V)	60		90		120	
MPPT Voltage Range (V)	50 - 500		80 - 500		100 - 500	
Max. Input Current (A)	11			11 + 11		
MPPT Number / No. of Strings per MPPT	1 / 1			2 / 1		
<b>OUTPUT AC</b>						
Rated Output Power (kW)	1	1.5	2	3	4	5
Max. Apparent Output Power (kVA)	1.1	1.7	2.2	3.3	4.4	5.5
Max. Output Power (kW)	1.1	1.7	2.2	3.3	4.4	5.5
Rated Grid Voltage (V)	230					
Grid Voltage Range (V)	160 - 285 (Adjustable)					
Rated Grid Frequency (Hz)	50					
Grid Frequency Range (Hz)	47-52					
Operation Phase	Single					
Rated Grid Output Current (A)	4.3	6.5	8.7	13	17.4	21.7
Max. Output Current (A)	5.2	8.1	10.5	15.7	21	25
Power Factor (at rated output power)	0.8leading .. 1.. 0.8lagging					
THDi (at rated output power)	< 1.5 %					
DC Injection Current (mA)	< 20 mA					
<b>EFFICIENCY</b>						
Max. Efficiency	97.2%		97.5%		98.1%	
EU Efficiency	96.5%		96.8%		97.3%	
MPPT Efficiency	>99.5%					
<b>PROTECTIONS</b>						
Built-in Protections	DC Reverse Polarity, Short Circuit Protection, Output Over Current, Output Over Voltage, Insulation Resistance Monitoring, Residual Current Detection, MOVs for Surge Protection on DC & AC sides, Grid Monitoring, Islanding Protection, Temperature Protection					
<b>GENERAL DATA</b>						
Dimension (mm)	310W*373H*160D			310W*543H*160D		
Weight (kg)	7.4		7.7		11.5	
Topology	Transformerless					
Self Consumption (watt)	< 1 (Night)					
Operating Ambient Temperature Range	-25 ~ 60 °C					
Relative Humidity	0~100%					
Ingress Protection	IP65					
Noise Emission {typical}	<20 dBA			<30 dBA		
Cooling Concept	Natural Convection					
Max. Operation Altitude	4000m					
Design life	> 20 Years					
<b>FEATURES</b>						
DC Connection	MC-4 mateable					
AC Connection	IP 67 Rated Plug					
Display	LCD 2x20 Z					
Communication Connections	4 pin RS485 connector					
Monitoring	WiFi / GPRS / LAN					
Warranty	5 Years Standard (Extendable upto 20 years)					
<b>IEC CERTIFICATES</b>						
Grid Connection	IEC 61727					
Anti-Islanding Protection	IEC 62116					
Enviromental Testing	IEC 60068-2 (1-2-14-30)					
Safety	IEC 62109-1, IEC 62109-2					
EMC	IEC 61000, EN61000-6:2007, EN61000-6-3:2007					
Efficiency Measurement	IEC 61683					

Note: Specifications are subject to change

**Corporate Office:**

**POLYCAR INDIA LIMITED** (formerly known as 'Polycab Wires Limited')  
 Polycab house, 771 Mogul lane, Mahim (W), Mumbai 400 016.  
 Email: solar@polycab.com | Web: www.polycab.com

**For Consumer Complaint Contact : Officer, Consumer Care Cell**

Polycab House, 771, Mogul Lane, Mahim (W), Mumbai 400 016, Maharashtra, India.  
 Tel: 91-22-2432 7070 - 4,6735 1400 | Fax: 91-22-24327075  
 Email: customercare@polycab.com  
 Website: www.polycab.com | Toll Free No.: 1800 267 0008

**Solar Division Marketing Office:**

**POLYCAR INDIA LIMITED** (formerly known as 'Polycab Wires Limited')  
 Off. No. 34, Sangam Project Phase-2, Near RTO Pune,  
 Near Sangam Bridge, Opp. Air India Office, Pune- 411001.

Authorised Distributor / Dealer

