



## SOLAR GRID-TIE 50KW & 60KW STRING INVERTERS

*'Empowering Your Life'*



### **LEADING FEATURES**

- Transformerless Inverter
- Maximum Efficiency Over 98.9%, EU Efficiency Over 98.5%
- Wide MPPT Voltage Range with 4 MPPT Design and Precise MPPT Algorithm
- IP 65 Certified
- Low Harmonic Distortion, THDi < 3%
- Integrated DC Switch
- Intelligent Redundant Fan-Cooling
- 5 Years Standard Warranty With Extended Warranty Option
- Onboard SPDs For DC & AC Sides

Technical Brochure 2018-19

## TECHNICAL SPECIFICATIONS

MODEL	PSIT - 50K	PSIT - 60K
Rating	50 KW	60 KW
<b>INPUT SIDE (DC)</b>		
Max. DC Input Power (kW)	60	72
Max. DC Input Voltage (V)	1100	
Start-up Voltage (V)	200	
MPPT Voltage Range (V)	200-1000	
Max. Input Current (A)	28.5A+28.5A+28.5A+28.5A	
MPPT Number / No. of Strings per MPPT	4/3	
<b>OUTPUT SIDE (AC)</b>		
Rated Output Power (kW)	50	60
Max. Apparent Output Power (kVA)	55	66
Max. Output Power (kW)	55	66
Rated Grid Voltage (V)	400	400
Grid Voltage Range (V)	304-460	304-460
Rated Grid Frequency (Hz)	50	
Operation Phase	Three	
Rated Grid Output Current (A)	72.2	86.6
Max. Output Current (A)	83.3	100
Power Factor (at Rated Output power)	0.8...1...0.8	
THDi (at Rated Output Power)	<3%	
DC Injection Current	<0.5% In	
Grid Frequency Range (Hz)	47-52	
<b>EFFICIENCY</b>		
Max. Efficiency	98.80%	99.00%
EU Efficiency	98.40%	98.50%
MPPT Efficiency	99.90%	
<b>PROTECTIONS</b>		
Built-in Protections	DC Reverse-Polarity Protection, Short Circuit Protection, Output over Current Protection, Output Over Voltage Protection, Insulation Resistance Monitoring, Residual Current Detection, Surge Protection & Monitoring, Islanding Protection, Temperature Protection, surge protection through SPDs on both AC and DC sides, Grid Monitoring	
Integrated DC switch	YES	
<b>GENERAL DATA</b>		
Dimensions (mm)	630W*700H*357D (mm)	
Weight (kg)	63	69
Topology	Transformerless	
Self Consumption (Night)	<1W(Night)	
Operating Ambient Temperature Range	- 25° to 60° C	
Ingress Protection	IP 65	
Noise Remission {Typical}	<60 dBA	
Cooling Concept	Intelligent Redundant Fan-Cooling	
Max. Operation Altitude	4000m	
Design Life	>20Years	
Grid Connection Standard	EN50438, G59/3, AS4777, VDE0126-1-1, IEC61727	
Relative Humidity	0~100%	
Safety / EMC Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-3	
<b>FEATURES</b>		
DC Connection	MC-4Mateable	
AC Connection	OT Terminal Connectors	
Display	LCD,2×20 Z	
Communication Interface	4 Pins RS485 Connector, 2 RJ45 Connector, 2 Group of Terminal Block	
<b>CERTIFICATE</b>		
Grid Connection	IEC 61727	
Anti - Islanding Protection	IEC 62116	
Environmental Testing	IEC 60068-2 (1-2-14-30)	
Safety	IEC 62109 -1, IEC 62109-2	
EMC	IEC 61000, EN61000-6-1:2007, EN61000-6-3:2007	
Efficiency Measurement	IEC 61683	

Note: Specifications are subject to change

**POLYCAP INDIA LIMITED** (formerly known as Polycab Wires Limited)  
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