



# POLYCAB

Connection Zindagi Ka

SOLAR

## SOLAR GRID - TIE 80KW-100KW-110KW-5G STRING INVERTERS THREE PHASE



### LEADING FEATURES

- Maximum Efficiency 98.7%
- Wide Voltage range and low startup voltage
- Supports 50% DC overload, 9/10 MPPT design with precise MPPT algorithm
- THDi < 3%, Low Harmonic Distortion
- IP66 for outdoor Installation
- Anti-resonance, supporting over 6MW paralleled in one transformer
- Intelligent Fan Cooling
- High precision intelligent string monitoring
- Night SVG function
- Smart I-V Curve Diagnosis supported
- Fuse free design to avoid hazard
- Type II SPD for both DC and AC side
- Leakage current repression technology
- Volt-Watt work mode integrated
- DC input reverse alarm
- Integrated DC and AC (optional) disconnect switches
- RS-485, Ethernet; Wi-Fi/GPRS/LAN; PLC (optional) monitoring interface
- Support "Y" type connection in DC side
- Supports aluminium wire access to reduce cost
- Free remote monitoring on Web Portal and Mobile App
- 5 Years standard warranty, extendable upto 20 years



## TECHNICAL SPECIFICATIONS

MODEL	PSIT- 80K	PSIT- 100K	PSIT- 110K
Rating	80 KW	100 KW	110 KW
<b>INPUT DC</b>			
Max. DC Input Power (kW)	120	150	165
Max. DC Input Voltage (V)	1100		
Rated Voltage	600		
Start-Up Voltage (V)	195		
MPPT Voltage Range (V)	180 - 1000		
Max. Input Current (A)	9*26	10*26	
Max Short Circuit Current for each MPPT (A)	9*40	10*40	
MPPT Number / No.of Strings per MPPT	9/2	10/2	
<b>OUTPUT AC</b>			
Rated Output Power (kW)	80	100	110
Max. Apparent Output Power (kVA)	88	110	121
Max. Output Power (kW)	88	110	121
Rated Grid Voltage (V)	3/N/PE, 220/380, 230/400		
Grid Voltage Range (V)	304 - 460		
Rated Grid Frequency (Hz)	50/60		
Grid Frequency Range (Hz)	47 - 52 or 57 - 62		
Rated Grid Output Current (A)	121.6	152	167.1
Max. Output Current (A)	133.7	167.1	183.8
Power Factor (at rated output power)	> 0.99 (Adjustable 0.8 leading ..1.. 0.8 lagging )		
THDi (at rated output power)	< 3 %		
DC Injection Current (mA)	< 0.5 % In		
<b>EFFICIENCY</b>			
Max. Efficiency	98.7%		
EU Efficiency	98.3%		
MPPT Efficiency	> 99.5%		
<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, Islanding Protection, Temperature Protection, Grid Monitoring		
Surge Protection (DC/AC)	Type II / Type II		
IV Curve scanning	Yes		
Integrated DC Switch	Yes		
Integrated AC Switch	Yes	Optional	
String Monitoring	Yes		
Anti - PID Function	Yes		
Integrated AFCI (DC arc-fault circuit protection)	Yes		
<b>GENERAL DATA</b>			
Dimension (mm) (W/O AC Switch)	1014W*567H*314.5D	1065W*567H*344.5D	
Weight (kg)	82	84	
Topology	Transformerless		
Self Consumption (watt)	< 2 (Night) (Without Anti-PID)		
Operating Ambient Temperature Range	-25 to 60°C		
Relative Humidity	0~100%		
Ingress Protection	IP66		
Noise Emission (typical)	< 65dB		
Cooling Concept	Intelligent Fan-cooling		
Max.Operation Altitude (m)	4000		
Design Life	> 25 Years		
<b>FEATURES</b>			
DC Connection	MC - 4 mateable		
AC Connection	OT Terminal Connectors (max 185 mm <sup>2</sup> )		
Display	LCD, 2x20 Z		
Communication Interface	RS485, Ethernet; PLC (Optional)		
Monitoring	WiFi / GPRS / LAN		
OTA update	Yes		
<b>IEC CERTIFICATES</b>			
Grid Connection	IEC 61727		
Anti-Islanding Protection	IEC 62116		
Environmental Testing	IEC 60068-2 (1 - 2 - 14 - 27 - 30 - 64)		
Safety	IEC 62109 - 1, IEC 62109 - 2, EN 62109 - 1, EN 62109-2		
EMC	IEC 61000-6-2, IEC 61000-6-4, EN61000-6-2, EN61000-6-4, IEC 61000-3-5, IEC 61000-3-12		
Efficiency Measurement	IEC 61683, EN50530		

Note: Specifications are subject to change

POLYCAB INDIA LIMITED (formerly known as 'Polycab Wires Limited')  
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