

**SPECIFICATION OF POWERONE MICROSYSTEMS SOLAR GRID TIE (STRING) INVERTER 30kW &50 kW**

Model	Specifications – POM SGTU	30 kW	50 kW
<b>Input(DC)</b>			
Max. DC power		33K	55KW
Max. DC voltage		1000V	1000V
MPPT voltage range		250V-850V	250V-850V
Normal DC voltage		580V	580V
Min. / start DC voltage		200V/250V	200V/250V
Number of MPP trackers		3	3
Strings per MPP tracker		3	3
Max. DC power per MPP tracker		11KW	18KW
Max. input current per MPP tracker		26A/26A/26A	38A/38A/38A
<b>Output (AC)</b>			
Normal AC output Power		30KW	50KW
Max. AC output Power		30.5KW	50.5KW
Normal AC voltage		400 V	400 V
AC voltage range		280 V – 480 V	280 V – 480 V
Normal AC grid frequency		50	50
AC grid frequency range		± 5 Hz	± 5 Hz
Max. output current		48A	74A
Phase shift (cos φ)		0.9leading- 0.9lagging	0.9leading- 0.9lagging
THD		<3%	<3%
AC connection		Three phase	Three phase
Topology		Transformer less	Transformer less
<b>Efficiency</b>			
Max. efficiency		98 %	98 %
Consumption: standby / night		<15W / < 2W	<15W / < 2W
<b>Mechanical Data</b>			
Dimensions (W / L / D) in mm		600/800/250	700/800/250
Weight		65KG	80KG
<b>Environment Data</b>			
Operating temperature range		-20 °C ... +60 °C	-20 °C ... +60 °C
Noise emission (typical)		≤60 dB	≤60 dB
Cooling		fans	fans
Location		Indoor / Outdoor	Indoor / Outdoor
Protection rating		IP65	IP65
<b>Features</b>			
LCD display		yes	yes
Interfaces		RS485	RS485

Sl. No	IEC Standards	IEC Type
1	60068-2(1.2.14.30)	Environment Testing
2	61683:1999	Efficiency Measurement
3	IEC - 62109-1 (2010/4) IEC - 62109-2 (2011/6)	Product safety standard
4	IEC 61727 IEEE 1547 IEEE 1547.1	Grid Connectivity standard and test procedure for islanding prevention measures for utility/interconnected PV inverters
5	IEC 61000-6-3>16 Amps IEC 61000-6-4<16 Amps	Electromagnetic compatibility & Electro Magnetic Interference
6	IP 65 (for outdoor)/ IP 21 (for indoor) As per IEC 529	Ingress protection

\*As per MNRE Beyond 10KW self certification by the manufactures is acceptable.