

SPECIFICATION OF POWERONE MICROSYSTEMS SOLAR GRID TIE (STRING) INVERTER 10-20kW

Model Specifications – POM SGTU	10 kW SGTU-103	12.5 kW SGTU-1253	15 kW SGTU-153	17 kW SGTU-173	20 kW SGTU-203
Input(DC)					
Max. DC power	12KW	13.5 KW	17KW	18K	22KW
Max. DC voltage	900V	900V	900V	900V	900V
MPPT voltage range	250V-850V	250V-850V	250V-850V	250V-850V	250V-850V
Normal DC voltage	580V	580V	580V	580V	580V
Min. / start DC voltage	200V/250V	200V/250V	200V/250V	200V/250V	200V/250V
Number of MPP trackers	3	3	3	3	3
Strings per MPP tracker	2	2	2	2	2
Max. DC power per MPP tracker	4 KW	4.5KW	5KW	6KW	7.5KW
Max. input current per MPP tracker	12A/12A/12A	12A/12A/12A	17A/17A/17A	17A/17A/17A	17A/17A/17A
Output (AC)					
Normal AC output Power	10KW	12.5KW	15KW	17KW	20KW
Max. AC output Power	10.5KW	13KW	15.5KW	17.5KW	20.5KW
Normal AC voltage	400 V	400 V	400 V	400 V	400 V
AC voltage range	280 V – 480 V	280 V – 480 V	280 V – 480 V	280 V – 480 V	280 V – 480 V
Normal AC grid frequency	50	50	50	50	50
AC grid frequency range	± 5 Hz	± 5 Hz	± 5 Hz	± 5 Hz	± 5 Hz
Max. output current	17A	20A	24A	27A	30A
Phase shift (cos φ)	0.9leading-0.9lagging	0.9leading-0.9lagging	0.9leading-0.9lagging	0.9leading-0.9lagging	0.9leading-0.9lagging
THD	<3%	<3%	<3%	<3%	<3%
AC connection	Three phase	Three phase	Three phase	Three phase	Three phase
Topology	Transformer less	Transformer less	Transformer less	Transformer less	Transformer less
Efficiency					
Max. efficiency	98 %	98 %	98 %	98 %	98 %
Consumption: standby / night	<10W / < 2 W	<10W / < 2 W	<15W / < 2 W	<15W / < 2W	<15W / < 2W
Mechanical Data					
Dimensions (W / L / D) in mm	500/670/210	500/670/210	500/700/210	500/700/210	500/700/210
Weight	44KG	44KG	50KG	50KG	50KG
Environment Data					
Operating temperature range	-20 °C ... +60 °C	-20 °C ... +60 °C	-20 °C ... +60 °C	-20 °C ... +60 °C	-20 °C ... +60 °C
Noise emission (typical)	≤ 50dB	≤ 50dB	≤60 dB	≤60 dB	≤60 dB
Cooling	fans	fans	fans	fans	fans
Location	Indoor / Outdoor	Indoor / Outdoor	Indoor / Outdoor	Indoor / Outdoor	Indoor / Outdoor
Protection rating	IP65	IP65	IP65	IP65	IP65
Features					
LCD display	yes	yes	yes	yes	yes
Interfaces	RS485	RS485	RS485	RS485	RS485