



Omega KSG TM String Inverter Series is the ideal solution for commercial usage, such as medium-size shopping mall. With the characteristics of dual independent input sections with three independent MPP trackers, wide MPPT tracking range, True three phase transformer-less design, IP65 harshest industrial protection level, convectional cooling system and various communication interfaces, such as RS232, RS485, WiFi & Ethernet, it forms Omega TM String Inverter an ideal solution for small and medium PV Power Station.

Features

High Efficiency Output

- Achieve Euro Efficiency up to 97.7%
- MPPT accuracy > 99.9%

High Reliability

- True three-phase bridge transformer-less topology for DC/AC output converter
- Three independent MPP tracking gains optimal energy harvesting.
- Low sensitivity to grid disturbances to avoid undesired disconnection from the grid

High Flexibility

- Wide range of input voltage and operation environment
- Multiple MPPT Channels
- IP65 Harshest Industrial Protection for indoors & outdoors.
- Wide DC input range from 200V up to 850V
- Wide operating temperature range -20 C/+60 C.

User-friendly

- RS232/RS485/WiFi interfaces
- Cable connection without tools
- Easily accessible connection area
- Easy-to-read LCD Display with all operational status and monitored data.

Omega KSG TM 10-20K Series

KSG-10K | KSG-12.5K | KSG-15K | KSG-17K | KSG-20K

Omega KSG TM Series Technical Specifications

Model	KSG-10K	KSG-12.5K	KSG-15K	KSG-17K	KSG-20K
DC Input					
Max. Input Power	12KW	14KW	17KW	19KW	22KW
Rated Voltage	580V				
Max DC Voltage	900V				
Operation Voltage	200-850V				
Max. MPPT Voltage range	250-850V				
Number of MPP Tracker	3				
Strings per MPP Tracker	2				
Max. DC Power per MPP Tracker	5.5KW		7.5KW		
DC Switch	Optional				
Max. Input Current per MPP Tracker	12A/12A/12A		17A/17A/17A		
AC Output					
Nominal AC Power	10KW	12.5KW	15KW	17KW	20KW
Max. AC Power Output	10.5KW	13KW	15.5KW	17.5KW	20.5KW
Normal AC Voltage	400 Vac				
AC Voltage Window	400V±20% (adjustable)				
Phase/Wire	3 phases 4 wires + Ground				
Output Frequency Range	50/ 60Hz ±5Hz (adjustable)				
Max. Output Current	17A	20A	24A	27A	30A
Rated Output Current(rms)	15.2A	18.9A	22.9A	25.8A	30.3A
Power Factor(cosθ)	0.9 leading - 0.9 lagging				
Current THD(THDi)	<3%				
AC connection	Three phase				
Islanding Protection Detection	Active & Passive				
System					
Topology	Transformer-less				
Consumption(standby/night)	<10W/<2W		<15W/<2W		
Efficiency					
Max. Efficiency	>98.0%	>98.0%	>98.1%	>98.1%	>98.2%
Euro Efficiency	>97.5%	>97.5%	>97.6%	>97.6%	>97.7%
MPPT Efficiency	99.9%				
Cooling concept	Forced Air Cooling				
Protection					
DC reverse-polarity Protection	Yes				
All-pole fault current monitoring unit	Yes				
AC Short-circuit Protection	Yes				
Ground fault monitoring	Yes				
Environment					
Environmental Protection Degree	IP65				
Operating Temperature	-20°C~+60°C				
Noise Emission	<40dB (1 meter from surface)				
Relative Humidity	0~95% (non-condensing)				
Altitude	<2000M without de-rating				
Communication Interface					
Communication Port	RS485 standard, external WiFi or Ethernet (optional)				
Mechanical Characteristics					
Dimensions(WxHxD)mm	506x670x210		522x690x210		
Overall Weight(Kg)	44		50		
Safety Conformance					
Quality Assurance	ISO9001				
EMC Standard	EN61000-6-2, EN61000-6-3, EN61000-3-11, EN61000-3-12, etc				
Safety	IEC/EN62109-1, IEC/EN62109-2, VDE0126-1-1, VDE AR N4105, G83/59/EEG2012, AS3100/4777, CEI 0-21, etc				

Specifications subject to change without prior notice.

