

GOODWE

SMT Series

50-60kW | Three Phase | Up to 6 MPPTs

GoodWe SMT 50-60kW Series inverter is ideal for medium and large-scale commercial installations. Harvest solar energy and generate environmental-friendly power for increased return on investment brought by high yields with your commercial PV system. Its unique fuse-free design makes it exceptionally easy to maintain for operators, saving time and money. The superb safety design provides reliable protections in outdoor installation and guarantees stable usage and generation even in extreme conditions. SMT 50-60kW Series is a pioneering inverter for your business and value.



Smart Control & Monitoring

- Remote data monitoring
- Multi-protocol compatibility



Friendly & Thoughtful Design

- 200V-950V wide input operating voltage range
- Fuse-free design



Superb Safety & Reliability

- Type II Surge Protection for both DC and AC
- IP65 ingress protection



High Power Generation for High Returns

- Maximum 15A DC input current per string
- 150% DC input oversizing & 110% AC output overloading

Technical Data		GW50KS-MT	GW60KS-MT
Input			
Max. Input Voltage (V)		1100	
MPPT Operating Voltage Range (V)		200 ~ 950	
Start-up Voltage (V)		180	
Nominal Input Voltage (V)		600	
Max. Input Current per MPPT (A)		30	
Max. Short Circuit Current per MPPT (A)		37.5	
Number of MPP Trackers	5		6
Number of Strings per MPPT		2	
Output			
Nominal Output Power (kW)	50		60
Nominal Output Apparent Power (kVA)	50		60
Max. AC Active Power (kW)	55 ^{*1}		66 ^{*1}
Max. AC Apparent Power (kVA)	55 ^{*2}		66 ^{*2}
Nominal Output Voltage (V)	230 / 400 ^{*3} , 3L / N / PE or 3L / PE		
Output Voltage Range (V)	320 ~ 460		
Nominal AC Grid Frequency (Hz)	50 / 60		
AC Grid Frequency Range (Hz)	45 ~ 55 / 55 ~ 65		
Max. Output Current (A)	80.0		96.0
Output Power Factor	~ 1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion	<3%		
Efficiency			
Max. Efficiency		98.6%	
European Efficiency		98.1%	
Protection			
PV String Current Monitoring		Integrated	
PV Insulation Resistance Detection		Integrated	
Residual Current Monitoring		Integrated	
PV Reverse Polarity Protection		Integrated	
Anti-islanding Protection		Integrated	
AC Overcurrent Protection		Integrated	
AC Short Circuit Protection		Integrated	
AC Overvoltage Protection		Integrated	
DC Switch		Integrated ^{*4}	
DC Surge Protection		Type II (Type I + II Optional)	
AC Surge Protection		Type II	
AFCI		Optional	
Emergency Power Off ^{*5}		Optional	
Remote Shutdown ^{*6}		Optional	
PID Recovery		Optional	
General Data			
Operating Temperature Range (°C)		-30 ~ +60	
Relative Humidity		0 ~ 100%	
Max. Operating Altitude (m)		3000	
Cooling Method		Smart Fan Cooling	
User Interface		LED, LCD (Optional), WLAN + APP	
Communication		RS485, WiFi or 4G or PLC (Optional) ^{*7}	
Communication Protocols		Modbus-RTU (SunSpec Compliant)	
Weight (kg)		55	
Dimension (W × H × D mm)		520 × 660 × 220	
Topology		Non-isolated	
Self-consumption at Night (W)		<1	
Ingress Protection Rating		IP65	
DC Connector		MC4 (4 ~ 6mm ²)	
AC Connector		OT / DT Terminal (Max. 50mm ²)	

*1: For Brazil and Chile Max. AC Active Power (kW): GW50KS-MT is 50; GW60KS-MT is 60.

*2: For Brazil and Chile Max. AC Apparent Power (kVA): GW50KS-MT is 50; GW60KS-MT is 60.

*3: For Brazil and Thailand (PEA) Nominal Output Voltage (V): 220 / 380, 3L / N / PE or 3L / PE.

*4: For Australia DC Switch is PV2.

*5: For Indian Emergency Power Off: Optional.

*6: For Europe Remote Shutdown: integrated.

*7: For Brazil Communication is RS485, WiFi, USB, PLC (Optional).

*. Please visit GoodWe website for the latest certificates.

** Please refer to the user manual for the MPPT Voltage Range at Nominal Power.