

GOODWE

SMT Series

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

The GoodWe SMT 50-60kW Series inverter is ideal for medium and large-scale commercial installations. 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 that guarantees an earlier generation of power and a longer working time in order to maximise long-term returns and profitability in safe operating conditions.



Smart Control & Monitoring

- Remote data monitoring
- Multi-protocol compatibility



Superb Safety & Reliability

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



Friendly & Thoughtful Design

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



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 Power (kW)	75		90
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			PV2
DC Surge Protection			Type II (Type I + II Optional)
AC Surge Protection			Type II
AFCI			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) ^{*4}
Communication Protocols			Modbus-RTU (SunSpec Compliant)
Weight (kg)			55
Dimension (W × H × D mm)			520 × 660 × 220
Noise Emission (dB)			<65
Topology			Non-isolated
Self-consumption at Night (W)			<1
Ingress Protection Rating			IP65
DC Connector			MC4 (4 ~ 6mm²)
AC Connector			OT / DT Terminal (Max. 50mm²)
Country of Manufacture			China

*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 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.