

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	1100
MPPT Operating Voltage Range (V)	200 ~ 950	200 ~ 950
Start-up Voltage (V)	180	180
Nominal Input Voltage (V)	600	600
Max. Input Current per MPPT (A)	30	30
Max. Short Circuit Current per MPPT (A)	37.5	37.5
Number of MPP Trackers	5	6
Number of Strings per MPPT	2	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	230 / 400 ^{*3} , 3L / N / PE or 3L / PE
Output Voltage Range (V)	320 ~ 460	320 ~ 460
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60
AC Grid Frequency Range (Hz)	45 ~ 55 / 55 ~ 65	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%	<3%
Efficiency		
Max. Efficiency	98.6%	98.6%
European Efficiency	98.1%	98.1%
Protection		
PV String Current Monitoring	Integrated	Integrated
PV Insulation Resistance Detection	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated
DC Switch	PV2	PV2
DC Surge Protection	Type II (Type I + II Optional)	Type II (Type I + II Optional)
AC Surge Protection	Type II	Type II
AFCI	Optional	Optional
PID Recovery	Optional	Optional
General Data		
Operating Temperature Range (°C)	-30 ~ +60	-30 ~ +60
Relative Humidity	0 ~ 100%	0 ~ 100%
Max. Operating Altitude (m)	3000	3000
Cooling Method	Smart Fan Cooling	Smart Fan Cooling
User Interface	LED, LCD (Optional), WLAN + APP	LED, LCD (Optional), WLAN + APP
Communication	RS485, WiFi or 4G or PLC (Optional) ^{*4}	RS485, WiFi or 4G or PLC (Optional) ^{*4}
Communication Protocols	Modbus-RTU (SunSpec Compliant)	Modbus-RTU (SunSpec Compliant)
Weight (kg)	55	55
Dimension (W × H × D mm)	520 × 660 × 220	520 × 660 × 220
Noise Emission (dB)	<65	<65
Topology	Non-isolated	Non-isolated
Self-consumption at Night (W)	<1	<1
Ingress Protection Rating	IP65	IP65
DC Connector	MC4 (4 ~ 6mm ²)	MC4 (4 ~ 6mm ²)
AC Connector	OT / DT Terminal (Max. 50mm ²)	OT / DT Terminal (Max. 50mm ²)
Country of Manufacture	China	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.