

High and reliable energy yield for commercial PV rooftops

- ✓ Maximised energy output
- ✓ Flexible configurations
- ✓ Smart and efficient operation
- ✓ Highest safety standards

The SMT 80kW Series string inverter presents an excellent solution for commercial and industrial (C&I) applications, offering enhanced productivity through increased energy yields and remarkable power density. It is specifically designed to accommodate high-power PV modules, featuring multiple MPPTs and a high input current of 21A per DC string, resulting in improved overall yield. Safety remains our top priority and both the DC and AC sides of the inverter are equipped with Type II surge protection.

-  Max. 21A DC input current per string
-  Up to 150% DC input oversizing
-  Optional AFCI 3.0 and PID functions



Technical Data		GW80K-SMT
Input		
Max. Input Voltage (V)		1100 ^{*1}
MPPT Operating Voltage Range (V)		180 ~ 1000
Start-up Voltage (V)		200
Nominal Input Voltage (V)		600
Max. Input Current per MPPT (A)		42
Max. Short Circuit Current per MPPT (A)		52.5
Number of MPP Trackers		6
Number of Strings per MPPT		2
Output		
Nominal Output Power (kW)		80
Nominal Output Apparent Power (kVA)		80
Max. AC Active Power (kW)		88
Max. AC Apparent Power (kVA)		88
Nominal Output Voltage (V)		220 / 380, 230 / 400, 3L/N / PE or 3L / PE
Output Voltage Range (V)		323 ~ 457
Nominal AC Grid Frequency (Hz)		50 / 60
AC Grid Frequency Range (Hz)		45 ~ 55 / 55 ~ 65
Max. Output Current (A)		128
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
DC Surge Protection		Type II (Type I + II Optional)
AC Surge Protection		Type II
AFCI		Optional
Remote Shutdown		Integrated
PID Recovery		Optional
Reactive Power Compensation at Night		Optional
Power Supply at Night		Optional
General Data		
Operating Temperature Range (°C)		-30 ~ +60
Relative Humidity		0 ~ 100%
Max. Operating Altitude (m)		4000
Cooling Method		Smart Fan Cooling
User Interface		LED, APP
Communication		RS485, WiFi or LAN or 4G
Communication Protocols		Modbus-RTU
Weight (kg)		64
Dimension (W × H × D mm)		700 × 550 × 260
Topology		Non-isolated
Self-consumption at Night (W)		<1
Ingress Protection Rating		IP66
DC Connector		MC4 (4 ~ 6mm ²)
AC Connector		OT / DT terminal (Max. 150mm ²)

*1: When the input voltage ranges from 1000V to 1100V, the inverter will enter the standby state. When the input voltage returns to the MPPT operating voltage range, the inverter will resume normal operating state.

*: Please visit GoodWe website for the latest certificates.