

SMT Series

80kW | Three phase | 6 MPPTs

The SMT Series string inverter of the 80kW capacity, is an ideal choice for commercial and industrial (C&I) applications, delivering superior productivity with enhanced energy yields and impressive power density. Specifically tailored to accommodate high-power PV modules, it boasts multiple MPPTs and a high input current of 21A per DC string, ensuring optimized overall yield. Safety is paramount, with both DC and AC sides featuring Type II surge protection, while AFCI is available as an optional feature.



Smart Control & Monitoring

- Remote data monitoring
- Compatible with multiple communication methods



High Power Generation for High Returns

- Up to 150% DC input oversizing
- 6 MPPTs, Max. efficiency up to 98.6%



Superb Safety & Reliability

- Type II Surge Protection for both DC and AC
- IP66 protection for outdoor installation safety
- AFCI optional¹



Flexible & Adaptable Applications

- Compatible with 182/210mm modules
- Wide input operating voltage range

*1: Optional functions or devices are purchased separately.

Technical Data		GW80K-SMT
Input		
Max. Input Voltage (V)		1100
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		Optional
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, LCD (Optional), WLAN + APP
Communication		RS485, WiFi or LAN or 4G
Communication Protocols		Modbus-RTU
Weight (kg)		64
Dimension (W x H x D mm)		700 x 550 x 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)

*: Please visit GoodWe website for the latest certificates.