

SMT G2 Series

35-80kW | Three phase | 4/6 MPPTs

The SMT G2 Series string inverters (35–80kW) are designed for C&I applications, delivering high energy yields and exceptional power density. The 35–50kW models are tailored for low-voltage (127/220Vac) installations. Across the range, support for high-power PV modules is ensured through multiple MPPTs and up to 21A input current per string, delivering consistently optimized performance. The SMT G2 Series comes in two designs: a compact, ultra-low-noise version for the 35/37.5/60kW models, and a reinforced, high-power-density version for the 50/75/80kW models. For reliability, the series includes Type II surge protection on both DC and AC sides, with optional AFCI for enhanced protection.



Smart Control & Monitoring

- Remote data monitoring
- Compatible with multiple communication methods



High Power Generation for High Returns

- Up to 200% DC input oversizing¹
- Up to 6 MPPTs, Max. efficiency 98.8%



Superb Safety & Reliability

- Type II Surge Protection for both DC and AC
- IP66 protection for outdoor installation safety
- AFCI optional²



Flexible & Adaptable Applications

- Compatible with 182/210mm modules
- Wide input operating voltage range
- Best-in-class 42kg design for easy and cost-saving installation³
- <50dB full-load noise, ideal for noise sensitive areas³

1: Applies only to GW37.5K-SMT-L-G20.
 GW80K-SMT / GW60K-SMT-G20: 150% DC oversizing
 GW50K-SMT-L-G10 / GW35K-SMT-L-G20 / GW75K-SMT: 180% DC oversizing
 2: Optional functions or devices are purchased separately.
 3: Applies only to GW60K-SMT-G20/GW35K-SMT-L-G20/GW37.5K-SMT-L-G20.

Technical Data	GW35K-SMT-L-G20	GW37.5K-SMT-L-G20	GW60K-SMT-G20	GW50K-SMT-L-G10	GW75K-SMT	GW80K-SMT
Input						
Max. Input Voltage (V)	900	900	1100 ¹	900 ²	1100 ¹	1100 ¹
MPPT Operating Voltage Range (V) ³	160 ~ 900	160 ~ 900	160 ~ 1000	180 ~ 800	180 ~ 1000	180 ~ 1000
Start-up Voltage (V)	180	180	180	180	200	200
Nominal Input Voltage (V)	370	370	600	370	600	600
Max. Input Current per MPPT (A)				42		
Max. Short Circuit Current per MPPT (A)				52.5		
Number of MPP Trackers	4	4	4	6	6	6
Number of Strings per MPPT				2		
Output						
Nominal Output Power (kW)	35.0	37.5	60.0	50.0	75.0	80.0
Nominal Output Apparent Power (kVA)	35.0	37.5	60.0	50.0	75.0	80.0
Max. AC Active Power (kW)	38.5	37.5	66.0 ⁴	50.0	75.0	88.0 ⁵
Max. AC Apparent Power (kVA)	38.5	37.5	66.0 ⁴	50.0	75.0	88.0 ⁶
Nominal Output Voltage (V)	127 / 220, 3L / N / PE or 3L / PE		220 / 380, 230 / 400, 3L / N / PE or 3L / PE	127 / 220, 3L / N / PE or 3L / PE	220 / 380, 3L / N / PE or 3L / PE	220 / 380, 230 / 400, 3L / N / PE or 3L / PE
Output Voltage Range (V)	176 ~ 279	161 ~ 279	323 ~ 456	176 ~ 246	305 ~ 426	323 ~ 457
Nominal AC Grid Frequency (Hz)				50 / 60		
AC Grid Frequency Range (Hz)				45 ~ 55 / 55 ~ 65		
Max. Output Current (A)	101.0	98.4	100.0@220V, 95.7@230V	131.2	114.0	128.0
Power Factor				0.8 leading ~ 0.8 lagging		
Max. Total Harmonic Distortion				<3%		
Efficiency						
Max. Efficiency	98.4%	98.4%	98.8%	98.6%	98.6%	98.6%
European Efficiency	98.0%	98.0%	98.3%	98.1%	98.1%	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	Integrated	Optional ⁷	Optional ⁷	Integrated	Optional
Emergency Power Off	-	-	Optional	-	Optional	Optional
Rapid Shutdown				Optional		
Remote Shutdown	Integrated	Integrated	Optional ⁷	Optional ⁷	Optional	Optional
PID Recovery				Optional		
Reactive Power Compensation at Night	-	-	-	Optional	Optional	Optional
Power Supply at Night				Optional		
I-V Curve Scan				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), APP		LED, APP
Communication	RS485, WiFi + LAN + Bluetooth	RS485, WiFi + LAN + Bluetooth ⁸	RS485, WiFi + LAN + Bluetooth	RS485, WiFi + LAN + Bluetooth ⁸		RS485, WiFi or LAN or 4G
Communication Protocols	Modbus-RTU (SunSpec Compliant), Modbus-TCP			Modbus-RTU (SunSpec Compliant)		Modbus-RTU
Weight (kg)	42	42	42	64	64	64
Dimension (W x H x D mm)		685 x 545 x 225			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. 70mm ²)			OT / DT terminal (Max. 150mm ²)	
Mounting Method				Wall Mounted		

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.
²: When the input voltage ranges from 800V to 900V, 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.
³: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.

⁴: For Brazil, Max. AC Active Power & Max. AC Apparent Power: 60kW/Kva.
⁵: For Chile Max. AC Active Power (kW): GW80K-SMT is 80.
⁶: For Chile Max. AC Apparent Power (kVA): GW80K-SMT is 80.
⁷: For Brazil: Integrated.
⁸: For Brazil: Communication is RS485, WiFi+Bluetooth, WiFi+LAN+Bluetooth (Optional).
 *: Please visit GoodWe website for the latest certificates.