GOODWE

SMT-US Series

Three Phase I Up to 6 MPPTS I 1000Vdc 50/60kW at 480V

The flagship of its C&I inverter solution suite, the GoodWe 480V inverter is designed for medium to large-scale C&I installations. The SMT-US inverter is an advanced and cost-effective string inverter that offers up to 6 MPPTs and meets rapid shutdown standards without requiring additional hardware. This enables an improved LCOE for the asset owner, while reducing the amount of time on the roof for installation.

High Power Generation

- 98.5% max efficiency
- 180V-980V wide input operating voltage range
- Up to 6 MPPTs with 2 inputs each for maximum flexibility and optimization
- 150% DC input oversizing & 110% AC outputoverloading

Smart Control & Monitoring

- Multi-protocol compatibility
- Remote data monitoring and firmware updates

Advanced Design

- AC terminal compatible with aluminum cables
- Fast installation and fast commissioning (Set up via SolarGo App within minutes)
- Smart shadow scan
- Fuse-free design

Advanced Safety & Reliability

- Built-in Type II Surge Protection for both DC and AC
- Integrated AFCI, driven by AI, proactively improves fire safety
- NEMA Type 4X rated for indoor or outdoor use
- Meets rapid shutdown requirements
- UL certified

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Product Model	GW50K-SMT-US	GW60K-SMT-US
Input		
Max. Input Voltage (V)	1000	
MPPT Operating Voltage Range (V)	180 ~ 980	
Start-up Voltage (V)	200	
Nominal Input Voltage (V)	720	
Max. Input Current per MPPT (A)	30	
Max. Short Circuit Current per MPPT (A)	50	
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	66
Max. AC Apparent Power (kVA)	55	66
Nominal AC Grid Voltage (V)	480, 3L / N / PE or 3L / PE	
Nominal AC Grid Frequency (Hz)	60	
Max. Output Current (A)	67	80
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Max. Total Harmonic Distortion	<3%	
Efficiency		
Max. Efficiency	98.5%	
CEC Efficiency	98.2%	
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	
AC Switch	Integrated	
DC Surge Protection	Type II	
AC Surge Protection	Type II	
AFCI	Integrated	
Rapid Shutdown	Integrated	
General Data		
Operating Temperature Range	-30 ~ +60°C (>45°C derating) -22 ~ +140°F (>113°F derating)	
Relative Humidity	0 ~ 100%	
Max. Operating Altitude	4000m (>3000m derating) 13123ft (>9842.5ft derating)	
Cooling Method	Smart Fan Cooling	
Display	LED, WLAN + APP	
Communication	RS485, WiFi, USB, 4G or WiFi + LAN (Optional)	
Communication Protocols	Modbus-RTU (SunSpec Compliant)	
Weight	70kg 154.3lb	
Dimensions (W × H × D)	520 × 990 × 220 (mm) 20.5 × 39.0 × 8.7 (in)	
Noise Level	<65db (A)	
Topology	Non-isolated	
Self-consumption at Night (W)	<12*1	
Ingress Protection Rating	TYPE 4X	
DC Connector	#12 ~ #8AWG Cu	
AC Connector	OT (#5-3 / 0AWG, Cu or Al)	
Certification	UL 1741 (Third Edition, Dated September 28, 2021) IEEE 1547-2018, IEEE1547.1-2020, 1547a-2020, Grid support function is verified according to UL 1741 Supplement SB and IEEE 1547.1-2020 with the SRDs of IEEE 1547-2018, IEEE 1547a-2020 and Hawaiian Electric Co. SRD-V2.0, IEEE 2030.5-2018	
	CSA C22.2 No. 0.8-19 and UL 1998 Edition 3	
	PVRSS function according to NEC-2020 Article 690.12 and CEC-2018 Sec 64-218.	

*1: Self-consumption at night will be less than 1W without the optional RSD and 24-hour load monitoring.
*: Please visit GoodWe website for the latest certificates.