LVSMT-US Series

Three Phase I Up to 4 MPPTs I 1000Vdc
22/28kW at 208V I 23/30kW at 220V
25/32kW at 240V
UL certified

Expanding its C&I inverter solutions suite, the GoodWe low voltage inverter LVSMT-US is designed for small C&I installations and offers a maximum efficiency of 97.5% and a CEC efficiency of 96.5%. It is an advanced and cost-effective string inverter with up to 4 MPPTs, optimizing power output and eliminating the need for MLPE. Additionally, it meets rapid shutdown standards without requiring additional hardware. Its flexibility allows the inverter to be set to different grid voltages during commissioning: 208V, 220V, 240V – one inverter does it all. This improves the levelized cost of electricity (LCOE) for the asset owner while reducing installation time on the roof.

High Power Generation

- 97.5% max efficiency and 96.5% CEC efficiency
- 180V-950V wide operating voltage range
- Up to 4 MPPTs with 2 inputs each for maximum flexibility and optimization
- 180% DC input oversizing

Smart Control & Monitoring

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

Advanced Design

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

Advanced Safety & Reliability

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

LVSMT-US Series

GOODWE

Technical Data	GW22KLV-SMT-US	GW28KLV-SMT-US
Input		
Max. Input Power (kW)	39.6	50.4
Max. Input Voltage (V)	1000	
MPPT Operating Voltage Range (V)	180 ~ 950	
Start-up Voltage (V)	200	
Nominal Input Voltage (V)	450	
Max. Input Current per MPPT (A)	32	
Max. Short Circuit Current per MPPT (A)	45	
Number of MPP Trackers	3	4
Number of Strings per MPPT	2	
Output		
Nominal Output Power (kW)	22	28
Nominal Output Apparent Power (kVA)	22	28
Max. AC Active Power (kW)	22@208V 23@220V 25@240V	28@208V 30@220V 32@240V
Max. AC Apparent Power (kVA)	22@208V 23@220V 25@240V	28@208V 30@220V 32@240V
Nominal Output Voltage (V)	208 / 220 / 240, 3L / N / PE or 3L / PE	
Output Voltage Range (V)	183.0 ~ 228.8@208V 193.6 ~ 242.0@220V 211.2 ~ 264.0@240V	
Nominal AC Grid Frequency (Hz)	60	
AC Grid Frequency Range (Hz)	58.5 ~ 61.2	
Max. Output Current (A)	61.0	77.7
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Max. Total Harmonic Distortion	<3%	
Efficiency		
Max. Efficiency	97.5%	
CEC Efficiency	96.5%	
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	Integrated	
Rapid Shutdown	Integrated	
Power Supply at Night	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	
User Interface	LED, WLAN + APP	
Communication	RS485, WiFi + LAN, 4G (Optional)	
Communication Protocols	Modbus-RTU (SunSpec Compliant)	
Weight	60kg 132.2ibs	62kg 136.4ibs
Dimension (W × H × D)	520 × 990 × 220 (mm) 20.5 × 39.0 × 8.7 (in)	
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 3141, 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, California Rule 21	
	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.
*: All pictures shown are for reference only. Actual appearance may vary.