



GOODWE

LVSMT-US Series

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

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



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



Smart Control & Monitoring

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



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

| 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 | 28@208V |
| | 23@220V | 30@220V |
| | 25@240V | 32@240V |
| Max. AC Apparent Power (kVA) | 22@208V | 28@208V |
| | 23@220V | 30@220V |
| | 25@240V | 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 | 62kg |
| | 132.2lbs | 136.4lbs |
| Dimension (W x H x D) | 520 x 990 x 220 (mm) | |
| | 20.5 x 39.0 x 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 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.

*: All pictures shown are for reference only. Actual appearance may vary.