

# GOODWE

## LVSMT Series

12-35kW | Three Phase  
Up to 6 MPPTs

GoodWe's LVSMT Series three-phase inverter is designed with low voltage power input, and is an ideal choice for commercial installations. Developed as an efficient response to South American market needs for low-voltage inverters above 10kW, this series is applicable to special grid voltage ranges within the region. With the GoodWe LVSMT Series inverter, the system configuration can be simplified by avoiding the installation of an expensive transformer, greatly reducing the initial investment costs of the system.



### Smart Control & Monitoring

- String level monitoring
- Power line communication



### Superb Safety & Reliability

- Optional AFCI
- IP65 ingress protection



### High Power Generation for High Returns

- Max. Efficiency up to 98.8%
- 130% DC input oversizing



### Friendly & Thoughtful Design

- 200V-650V wide MPPT voltage range
- Fuse-free design

| Technical Data                          | GW12KLV-MT                                      | GW15KLV-MT                            | GW20KLV-MT                            | GW30KLS-MT                   | GW35KLS-MT |
|-----------------------------------------|-------------------------------------------------|---------------------------------------|---------------------------------------|------------------------------|------------|
| Input                                   |                                                 |                                       |                                       |                              |            |
| Max. Input Voltage (V)                  | 800                                             |                                       |                                       |                              |            |
| MPPT Operating Voltage Range (V)        | 200 ~ 650                                       |                                       |                                       |                              |            |
| Start-up Voltage (V)                    | 180                                             |                                       |                                       |                              |            |
| Nominal Input Voltage (V)               | 370                                             |                                       |                                       |                              |            |
| Max. Input Current per MPPT (A)         | 30                                              |                                       |                                       |                              |            |
| Max. Short Circuit Current per MPPT (A) | 37.5                                            |                                       |                                       |                              |            |
| Number of MPP Trackers                  | 3                                               | 3                                     | 3                                     | 5                            | 6          |
| Number of Strings per MPPT              | 2                                               |                                       |                                       |                              |            |
| Output                                  |                                                 |                                       |                                       |                              |            |
| Nominal Output Power (kW)               | 12.0                                            | 15.0                                  | 20.7                                  | 30.0                         | 35.0       |
| Nominal Output Apparent Power (kVA)     | 12.0                                            | 15.0                                  | 20.7                                  | 30.0                         | 35.0       |
| Max. AC Active Power (kW)               | 11.3@208V,<br>12.0@220V,<br>13.1@240V           | 14.4@208V,<br>15.0@220V,<br>16.6@240V | 19.6@208V,<br>20.7@220V,<br>22.6@240V | 30.0                         | 35.0       |
| Max. AC Apparent Power (kVA)            | 13.1                                            | 16.6                                  | 22.6                                  | 30.0                         | 35.0       |
| Nominal Output Voltage (V)              | 220, 3L / N / PE or 3L / PE                     |                                       |                                       |                              |            |
| Nominal AC Grid Frequency (Hz)          | 50 / 60                                         |                                       |                                       |                              |            |
| Max. Output Current (A)                 | 31.5                                            | 40.0                                  | 54.5                                  | 80.0                         | 96.0       |
| Power Factor                            | ~1 (Adjustable from 0.8 leading to 0.8 lagging) |                                       |                                       |                              |            |
| Max. Total Harmonic Distortion          | <3%                                             |                                       |                                       |                              |            |
| Efficiency                              |                                                 |                                       |                                       |                              |            |
| Max. Efficiency                         | 98.7%                                           | 98.7%                                 | 98.8%                                 | 98.0%                        | 98.0%      |
| European Efficiency                     | 98.4%                                           | 98.5%                                 | 98.5%                                 | 97.7%                        | 97.7%      |
| 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 III (Type II Optional)                     |                                       | Type II (Type I Optional)             |                              |            |
| AC Surge Protection                     | Type III (Type II Optional)                     |                                       | Type II                               |                              |            |
| AFCI                                    | Optional                                        |                                       |                                       |                              |            |
| Remote Shutdown                         | Optional                                        |                                       |                                       |                              |            |
| PID Recovery                            | Optional                                        |                                       |                                       |                              |            |
| General Data                            |                                                 |                                       |                                       |                              |            |
| Operating Temperature Range (°C)        | -30 ~ +60                                       |                                       |                                       |                              |            |
| Relative Humidity                       | 0 ~ 100%                                        |                                       |                                       |                              |            |
| Max. Operating Altitude (m)             | 3000                                            |                                       |                                       |                              |            |
| Cooling Method                          | Smart Fan Cooling                               |                                       |                                       |                              |            |
| User Interface                          | LED, LCD (Optional), WLAN + APP                 |                                       |                                       |                              |            |
| Communication                           | RS485, WiFi or 4G or PLC (Optional)*1           |                                       |                                       |                              |            |
| Communication Protocols                 | Modbus-RTU (SunSpec Compliant)                  |                                       |                                       |                              |            |
| Weight (kg)                             | 40.0                                            | 40.0                                  | 40.0                                  | 55.0                         | 55.0       |
| Dimension (W × H × D mm)                | 480 × 590 × 200                                 |                                       |                                       | 520 × 660 × 220              |            |
| Noise Emission (dB)                     | <60                                             | <60                                   | <60                                   | <65                          | <65        |
| Topology                                | Non-isolated                                    |                                       |                                       |                              |            |
| Self-consumption at Night (W)           | <1                                              |                                       |                                       |                              |            |
| Ingress Protection Rating               | IP65                                            |                                       |                                       |                              |            |
| DC Connector                            | MC4 (4 ~ 6mm²)                                  |                                       |                                       |                              |            |
| AC Connector                            | OT / DT Terminal (Max.25mm²)                    |                                       |                                       | OT / DT Terminal (Max.50mm²) |            |

\*1: For Brazil Communication is RS485, WiFi, USB, PLC (Optional).

\*: Please visit GoodWe website for the latest certificates.