

# GOODWE

## SMT Series

### 50-60kW I Three Phase

#### Upto 6 MPPTS

GoodWe SMT 50-60kW Series inverter is ideal for medium and large-scale commercial installations. Harvest solar energy and generate environmental-friendly power for increased return on investment brought by high yields with your commercial PV system. Its unique fusefree design makes it exceptionally easy to maintain for operators, saving time and money. The superb safety design provides reliable protections in outdoor installation and guarantees stable usage and generation even in extreme conditions. SMT 50-60kW Series is a pioneering inverter for your business and value.



#### Smart Control & Monitoring

- Remote data monitoring
- Multi-protocol compatibility



#### Superb Safety & Reliability

- Type II Surge Protection for both DC and AC
- IP65 ingress protection



#### Friendly & Thoughtful Design

- 200V-950V wide input operating voltage range
- Fuse-free design



#### High Power Generation for High Returns

- Maximum 15A DC input current per string
- 150% DC input oversizing & 110% AC output overloading

| Technical Data                          | GW50KS-MT                                         | GW60KS-MT                                         |
|-----------------------------------------|---------------------------------------------------|---------------------------------------------------|
| <b>Input</b>                            |                                                   |                                                   |
| Max. Input Voltage (V)                  | 1100                                              | 1100                                              |
| MPPT Operating Voltage Range (V)        | 200 ~ 950                                         | 200 ~ 950                                         |
| Start-up Voltage (V)                    | 180                                               | 180                                               |
| Nominal Input Voltage (V)               | 600                                               | 600                                               |
| Max. Input Current per MPPT (A)         | 30                                                | 30                                                |
| Max. Short Circuit Current per MPPT (A) | 37.5                                              | 37.5                                              |
| Number of MPP Trackers                  | 5                                                 | 6                                                 |
| Number of Strings per MPPT              | 2                                                 | 2                                                 |
| <b>Output</b>                           |                                                   |                                                   |
| Nominal Output Power (kW)               | 50                                                | 60                                                |
| Nominal Output Apparent Power (kVA)     | 50                                                | 60                                                |
| Max. AC Active Power (kW)               | 55 <sup>*1</sup>                                  | 66 <sup>*1</sup>                                  |
| Max. AC Apparent Power (kVA)            | 55 <sup>*2</sup>                                  | 66 <sup>*2</sup>                                  |
| Nominal Output Voltage (V)              | 230 / 400 <sup>*3</sup> , 3L / N / PE or 3L / PE  | 230 / 400 <sup>*3</sup> , 3L / N / PE or 3L / PE  |
| Output Voltage Range (V)                | 320 ~ 460                                         | 320 ~ 460                                         |
| Nominal AC Grid Frequency (Hz)          | 50 / 60                                           | 50 / 60                                           |
| AC Grid Frequency Range (Hz)            | 45 ~ 55 / 55 ~ 65                                 | 45 ~ 55 / 55 ~ 65                                 |
| Max. Output Current (A)                 | 80.0                                              | 96.0                                              |
| Output Power Factor                     | ~1 (Adjustable from 0.8 leading to 0.8 lagging)   |                                                   |
| Max. Total Harmonic Distortion          | <3%                                               | <3%                                               |
| <b>Efficiency</b>                       |                                                   |                                                   |
| Max. Efficiency                         | 98.6%                                             | 98.6%                                             |
| European Efficiency                     | 98.1%                                             | 98.1%                                             |
| <b>Protection</b>                       |                                                   |                                                   |
| PV String Current Monitoring            | Integrated                                        | Integrated                                        |
| PV Insulation Resistance Detection      | Integrated                                        | Integrated                                        |
| Residual Current Monitoring             | Integrated                                        | Integrated                                        |
| PV Reverse Polarity Protection          | Integrated                                        | Integrated                                        |
| Anti-islanding Protection               | Integrated                                        | Integrated                                        |
| AC Overcurrent Protection               | Integrated                                        | Integrated                                        |
| AC Short Circuit Protection             | Integrated                                        | Integrated                                        |
| AC Overvoltage Protection               | Integrated                                        | Integrated                                        |
| DC Switch                               | Integrated <sup>*4</sup>                          | Integrated <sup>*4</sup>                          |
| DC Surge Protection                     | Type II (Type I + II Optional)                    | Type II (Type I + II Optional)                    |
| AC Surge Protection                     | Type II                                           | Type II                                           |
| AFCI                                    | Optional                                          | Optional                                          |
| Emergency Power Off <sup>*5</sup>       | Optional                                          | Optional                                          |
| Remote Shutdown <sup>*6</sup>           | Optional                                          | Optional                                          |
| PID Recovery                            | Optional                                          | Optional                                          |
| <b>General Data</b>                     |                                                   |                                                   |
| Operating Temperature Range (°C)        | -30 ~ +60                                         | -30 ~ +60                                         |
| Relative Humidity                       | 0 ~ 100%                                          | 0 ~ 100%                                          |
| Max. Operating Altitude (m)             | 3000                                              | 3000                                              |
| Cooling Method                          | Smart Fan Cooling                                 | Smart Fan Cooling                                 |
| User Interface                          | LED, LCD (Optional), WLAN + APP                   | LED, LCD (Optional), WLAN + APP                   |
| Communication                           | RS485, WiFi or 4G or PLC (Optional) <sup>*7</sup> | RS485, WiFi or 4G or PLC (Optional) <sup>*7</sup> |
| Communication Protocols                 | Modbus-RTU (SunSpec Compliant)                    | Modbus-RTU (SunSpec Compliant)                    |
| Weight (kg)                             | 55                                                | 55                                                |
| Dimension (W × H × D mm)                | 520 × 660 × 220                                   | 520 × 660 × 220                                   |
| Topology                                | Non-isolated                                      | Non-isolated                                      |
| Self-consumption at Night (W)           | <1                                                | <1                                                |
| Ingress Protection Rating               | IP65                                              | IP65                                              |
| DC Connector                            | MC4 (4 ~ 6mm <sup>2</sup> )                       | MC4 (4 ~ 6mm <sup>2</sup> )                       |
| AC Connector                            | OT / DT Terminal (Max. 50mm <sup>2</sup> )        | OT / DT Terminal (Max. 50mm <sup>2</sup> )        |