## MT Series

## 50-80kW I Three Phase I 4 MPPTs

The second generation of GoodWe MT Series inverter is suited for medium and large scale commercial rooftops and ground-mounted solar PV systems where maximum versatility and profitability are important. With its compact design and power boost function, the Goodwe MT series of the new generation can provide a $150 \%$ continuous maximum AC output power overload, offering a faster return on investment. The start-up voltage is 200 V , much lower than other products, which makes the inverter start up earliere therefore generating more power over time.


(AN) Power line communication

| Technical Data | GW50KN -MT | $\begin{aligned} & \text { GW60KN } \\ & \text {-MT } \end{aligned}$ | GW50KBF -MT | GW60KBF -MT | GW75KBF -MT | GW80KBF -MT | GW70KHV -MT | GW80KHV <br> -MT | $\begin{gathered} \text { GW75K } \\ \text {-MT } \end{gathered}$ | $\begin{aligned} & \text { GW80K } \\ & \text {-MT } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Input |  |  |  |  |  |  |  |  |  |  |
| Max. Input Voltage (V) | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 |
| MPPT Operating Voltage Range (V) | $200 \sim 1000$ | 200 ~ 1000 | 200 ~ 1000 | 200 ~ 1000 | 200 ~ 1000 | 200 ~ 1000 | $200 \sim 1000$ | 200 ~ 1000 | 200 ~ 1000 | 200 ~ 1000 |
| Start-up Voltage (V) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| Nominal Input Voltage (V) | 620 | 620 | 620 | 620 | 750 | 800 | 750 | 800 | 600 | 620 |
| Max. Input Current per MPPT (A) | $\begin{gathered} 33 / 33 / 1 \\ 22 / 22 \end{gathered}$ | 33 | 30 | 44 | 44 | 39 | 33 | 44 | 44 | 44 |
| Max. Short Circuit Current per MPPT (A) | $\begin{gathered} 41.5 / 41.5 / \\ 27.5 / 27.5 \\ \hline \end{gathered}$ | 41.5 | 37.5 | 55.0 | 55.0 | 54.8 | 41.5 | 55.0 | 55.0 | 55.0 |
| Number of MPP Trackers | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Number of Strings per MPPT | 3/3/2/2 | 3 | 2 | 3 | 3 | 3 | 3 | 4 | 4 <br> (Standard), <br> 3 (Optional, Support bifacial module) | 3 <br> (Standard, Support bifacial module), 4 (Optional) |
| Output |  |  |  |  |  |  |  |  |  |  |
| Nominal Output Power (W) | 50000 | 60000 | 50000 | 60000 | 75000 | 80000 | 70000 | 80000 | 75000 | 80000 |
| Nominal Output Apparent Power (VA) | 50000 | 60000 | 50000 | 60000 | 75000 | 80000 | 70000 | 80000 | 75000 | 80000 |
| Max. AC Active Power (W) | $\begin{gathered} \text { 55000; } 57500 \\ @ 415 V^{\star 1} \end{gathered}$ | $\begin{gathered} 66000 ; 69000 \\ @ 415 V^{\star 1} \end{gathered}$ | $\begin{gathered} 55000 ; 57500 \\ @ 415 V^{11} \end{gathered}$ | $\begin{gathered} 66000 ; 69000 \\ @ 415 V^{\star 1} \end{gathered}$ | 82500*1 | 88000*1 | 77000*1 | 88000*1 | 75000 | 88000*1 |
| Max. AC Apparent Power (VA) | $\begin{gathered} 55000 ; 57500 \\ @ 415 V^{\star 2} \end{gathered}$ | $\begin{gathered} 66000 ; 69000 \\ @ 415 V^{\star 2} \\ \hline \end{gathered}$ | $\begin{gathered} 55000 ; 57500 \\ @ 415 V^{2} \\ \hline \end{gathered}$ | $\begin{gathered} 66000 ; 69000 \\ @ 415 V^{2} \end{gathered}$ | 82500*2 | 88000*2 | 77000*2 | 88000*2 | 75000 | 88000*2 |
| Nominal Output Voltage (V) |  | 400, 3L / N / | PE or 3L / PE |  | 500, 3L / PE | 540, 3L / PE | 500, 3L / PE | 540, 3L / PE | 400, 3L / N / | PE or 3L / PE |
| Nominal AC Grid Frequency (Hz) | $50 / 60$ | 50 / 60 | 50 / 60 | $50 / 60$ | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | $50 / 60$ |
| Max. Output Current (A) | 80.0 | 96.0 | 80.0 | 96.0 | 95.3 | 94.1 | 89.0 | 94.1 | 133.0 | 133.0 |
| Power Factor |  |  |  | ~ 1 (adjusta | able from 0.8 | lagging to 0 | 0.8 leading) |  |  |  |
| Max. Total Harmonic Distortion | <3\% | <3\% | <3\% | <3\% | <3\% | <3\% | <3\% | <3\% | <3\% | <3\% |
| Efficiency |  |  |  |  |  |  |  |  |  |  |
| Max. Efficiency | 98.7\% | 98.8\% | 98.8\% | 98.8\% | 99.0\% | 99.0\% | 99.0\% | 99.0\% | 98.8\% | 98.8\% |
| European Efficiency | 98.3\% | 98.5\% | 98.3\% | 98.3\% | 98.4\% | 98.4\% | 98.4\% | 98.4\% | 98.3\% | 98.3\% |
| Protection |  |  |  |  |  |  |  |  |  |  |


| PV String Current Monitoring Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated |
| :--- | | PV Insulation Resistance Detection Integrated |
| :---: | Residual Current Monitoring Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated PV Reverse Polarity Protection Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Anti-islanding Protection Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated AC Overcurrent Protection Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated AC Short Circuit Protection Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated AC Overvoltage Protection Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated DC Switch Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated


| DC Surge Protection | Type II | Type II | Type II | Type II | Type II | Type II | Type II | Type II | Type II | Type II |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AC Surge Protection | Type II | Type II | Type II | Type II | Type II | Type II | Type II | Type II | Type II | Type II |
| AFCI | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional |

PID Recovery Optional Optional Optional Optional Optional Optional Optional Optional Optional Optional

## General Data

| Operating Temperature Range $\left({ }^{\circ} \mathrm{C}\right)$ | $-30 \sim+60$ | $-30 \sim+60$ | $-30 \sim+60$ | $-30 \sim+60$ | $-30 \sim+60$ | $-30 \sim+60$ | $-30 \sim+60$ | $-30 \sim+60$ | $-30 \sim+60$ | $-30 \sim+60$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Relative Humidity | $0 \sim 100 \%$ | $0 \sim 100 \%$ | $0 \sim 100 \%$ | $0 \sim 100 \%$ | $0 \sim 100 \%$ | $0 \sim 100 \%$ | $0 \sim 100 \%$ | $0 \sim 100 \%$ | $0 \sim 100 \%$ | $0 \sim 100 \%$ |
| Max. Operating Altitude $(\mathrm{m})$ | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | $\leq 4000$ | $\leq 4000$ |
| Cooling Method |  |  |  | Smart Fan Cooling |  |  | Fan Cooling |  |  |  |


| Cooling Method | Smart Fan Cooling |  |  |  |  |  |  |  | Fan Cooling |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| User Interface | LED, LCD (Optional), WiFi + APP |  |  | LED, WiFi + APP |  |  | LED, LCD (Optional), WiFi + APP | LED, WiFi + APP |  |  |
| Communication | RS485, WiFi or PLC (Optional) |  |  |  |  |  |  |  | RS48 | NiFi, PLC <br> onal) |
| Weight (kg) | 59.0 | 64.0 | 60.0 | 65.0 | 65.0 | 65.0 | 60.0 | 65.0 | 70.0 | 70.0 |
| Dimension ( $\mathrm{W} \times \mathrm{H} \times \mathrm{D} \mathrm{mm}$ ) | $586 \times 788 \times 264$ |  |  | $586 \times 788 \times 267$ |  |  | $\begin{gathered} 586 \times 788 \\ \times 264 \end{gathered}$ | $586 \times 788 \times 267$ |  |  |
| Topology | Non-isolated |  |  |  |  |  |  |  |  |  |
| Self-consumption at Night (W) | $<1$ | $<1$ | $<1$ | $<1$ | $<1$ | $<1$ | $<1$ | $<1$ | $<1$ | $<1$ |
| Ingress Protection Rating | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 |
| DC Connector | MC4 | mm²) | - | - | - | - | - | - | - | $\begin{gathered} \mathrm{MC} 4 \\ \left(4 \sim 6 \mathrm{~mm}^{2}\right) \end{gathered}$ |

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[^0]:    *1: For Chile Max. AC Active Power (W): GW50KN-MT is 50000; GW60KN-MT is 60000 ; GW50KBF-MT is 50000 ; GW60KBF-MT is 60000; GW75KBF-MT is 75000 ; GW80KBF-MT is 80000 ; GW70KHV-MT is 70000; GW80KHV-MT is 80000 ; GW80K-MT is 80000 .
    *2: For Chile Max. AC Apparent Power (VA): GW50KN-MT is 50000; GW60KN-MT is 60000; GW50KBF-MT is 50000 ; GW60KBF-MT is 60000; GW75KBF-MT is 75000 ;
    GW80KBF-MT is 80000 ; GW70KHV-MT is 70000 ; GW80KHV-MT is 80000 ; GW80K-MT is 80000 .
    *: Please visit GoodWe website for the latest certificates.

