# Maximize Your Power & Savings

## SDT Series

Dual-MPPT, Three-Phase

- Easy wall mounting
- Super large 5-inch LCD
- RS485, LAN & Wi-Fi communication
- IP65 dustproof and waterproof

The GoodWe Smart DT series inverter is specially designed for three-phase solar systems, covering a wide power range of 12kW, 15kW, 17kW, 20kW. The two integrated MPPTs allows two-array inputs from different roof orientations.

The SDT series inverter is small, light and easy to install. Suitable for both outdoor and indoor installations, this inverter offers quiet operation. In addition, the combination of both RS485 and Wi-Fi communication allows the system to be easily monitored and controlled.

| Technical Data | GW12KN-DT | GW15KN-DT | GW17KN-DT | GW20KN-DT |
|---|---|---|---|---|
| **PV String Input Data** | | | | |
| Max. DC Input Power (W) | 16800 | 19500 | 22100 | 26000 |
| Max. DC Input Voltage (V) | 1000 | 1000 | 1000 | 1000 |
| MPPT Range (V) | 200~850 | 200~850 | 200~950 | 200~950 |
| Start-up Voltage (V) | 180 | 180 | 180 | 180 |
| Nominal DC Input Voltage (V) | 620 | 620 | 600 | 600 |
| Max. Input Current (A) | 22/11 | 22/11 | 22/22 | 22/22 |
| Max. Short Current (A) | 27.6/13.8 | 27.6/13.8 | 27.5/27.5 | 27.5/27.5 |
| No. of MPP Trackers | 2 | 2 | 2 | 2 |
| No. of Input Strings per Tracker | 2/1 | 2/1 | 2/2 | 2/2 |
| **AC Output Data** | | | | |
| Nominal Output Power (W) | 12000 | 15000 | 17000 | 20000 |
| Max. Output Apparent Power (VA) | 14000 | 16500 | 19000 | 22000 |
| Nominal Output Voltage (V) | 400, 3L/N/PE | 400, 3L/N/PE | 400, 3L/N/PE or 3L/PE | 400, 3L/N/PE or 3L/PE |
| Nominal Output Frequency (Hz) | 50/60 | 50/60 | 50/60 | 50/60 |
| Max. Output Current (A) | 21.5 | 24 | 28.8 | 31.9 |
| Output Power Factor | ~1 (Adjustable from 0.8 leading to 0.8 lagging) | | | |
| Output THDi (@Nominal Output) | <2% | <2% | <2% | <2% |
| **Efficiency** | | | | |
| Max. Efficiency | 98.3% | 98.3% | 98.6% | 98.6% |
| European Efficiency | >98.0% | >98.0% | >98.1% | >98.1% |
| **Protection** | | | | |
| PV String Current Monitoring | Integrated | Integrated | Integrated | Integrated |
| Anti-Islanding Protection | Integrated | Integrated | Integrated | Integrated |
| Input Reverse Polarity Protection | Integrated | Integrated | Integrated | Integrated |
| Insulation Resistor Detection | Integrated | Integrated | Integrated | Integrated |
| Residual Current Monitoring Unit | Integrated | Integrated | Integrated | Integrated |
| Output Over Current Protection | Integrated | Integrated | Integrated | Integrated |
| Output Short Protection | Integrated | Integrated | Integrated | Integrated |
| Output Over Voltage Protection | Integrated | Integrated | Integrated | Integrated |
| DC SPD Protectioin | Integrated (Type III) | Integrated (Type III) | Integrated (Type III) | Integrated(Type III) |
| AC SPD Protection | Integrated (Type III) | Integrated (Type III) | Integrated (Type III) | Integrated(Type III) |
| **General Data** | | | | |
| Operating Temperature Range (°C) | -25~60 | -25~60 | -25~60 | -25~60 |
| Relative Humidity | 0~100% | 0~100% | 0~100% | 0~100% |
| Operating Altitude (m) | ≤4000 | ≤4000 | ≤4000 | ≤4000 |
| Cooling | Natural Cooling | Natural Cooling | Fan Cooling | Fan Cooling |
| Noise (dB) | <40 | <40 | 45 | 45 |
| User Interface | LCD & LED | LCD & LED | LCD & LED | LCD & LED |
| Communication | RS485 or WiFi | RS485 or WiFi | RS485 or WiFi | RS486 or WiFi |
| Weight (kg) | 26 | 26 | 26 | 26 |
| Size (Width*Height*Depth mm) | 516*455*192 | 516*455*192 | 516*455*220 | 516*455*220 |
| Protection Degree | IP65 | IP65 | IP65 | IP66 |
| Night Self Consumption (W) | <1 | <1 | <1 | <2 |
| Topology | Transformerles | | | |
| **Certifications & Standards** | | | | |
| Grid Regulation | VDE0126-1-1, EN50438(PL), VDE-AR-N 4105 | VDE0126-1-1, AS4777.2, G83, IEC61727, IEC62116, EN50438(SW), EN50438(IR), CEI 0-21 | | |
| Safety Regulation | IEC62109-1&-2 | | | |
| EMC | EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN61000-4-16, EN61000-4-18, EN61000-4-29 | | | |

# Compact and Powerful for Increased Efficiency

## SMT Series

Three-MPPT, Three-Phase

- Compact and lightweight
- 30% DC input oversizing
- Up to 10% AC output overloading
- Wide MPPT range from 200 V to 950 V
- IP65 dustproof and waterproof

The brand new GoodWe SMT series inverter is ideal for medium and large-scale commercial rooftop installations, providing maximum efficiency of 98.8% and up to three MPPT routes for a particular environment. With its weight of just 40kg and compact design, the SMT series is easier to handle and install compared to similar inverters in the market. Featuring a maximum DC input voltage of 1100 V, wider MPPT range, and a start-up voltage of 180 V, the SMT series guarantees an earlier generation of power and a longer working time in order to maximize long-term returns and profitability for the system's owner.

| Technical Data | GW25K-MT | GW30K-MT | GW36K-MT |
|---|---|---|---|
| **DC Input Data** | | | |
| Max. PV Power (W) | 32500 | 39000 | 42900 |
| Max. DC Input Voltage (V) | 1100 | 1100 | 1100 |
| MPPT Range (V) | 200~950 | 200~950 | 200~950 |
| Starting Voltage (V) | 180 | 180 | 180 |
| Nominal DC Input Voltage (V) | 600 | 600 | 600 |
| Max. Input Current (A) | 25/25/25 | 25/25/25 | 25/25/25 |
| Max. Short Current (A) | 31.3/31.3/31.3 | 31.3/31.3/31.3 | 31.3/31.3/31.3 |
| No. of MPP Trackers | 3 | 3 | 3 |
| No. of Input Strings per Tracker | 2/2/2 | 2/2/2 | 2/2/2 |
| **AC Output Data** | | | |
| Nominal Output Power (W) | 25000 | 30000*[1] | 36000*[4] |
| Max. Output Power (W) | 27500 | 33000*[2] | 36000 |
| Max. Output Apparent Power (VA) | 27500 | 33000*[3] | 36000 |
| Nominal Output Voltage (V) | 400, 3L/N/PE or 3L/PE | | |
| Nominal Ouput Frequency (Hz) | 50/60 | 50/60 | 50/60 |
| Max. Output Current (A) | 40 | 48 | 53.3 |
| Output Power Factor | ~1 (Adjustable from 0.8 leading to 0.8 lagging) | | |
| Output THDi (@Nominal Output) | <3% | <3% | <3% |
| **Efficiency** | | | |
| Max. Efficiency | 98.70% | 98.80% | 98.80% |
| European Efficiency | >98.4% | >98.5% | >98.5% |
| **Protection** | | | |
| Anti-Islanding Protection | Integrated | Integrated | Integrated |
| Input Reverse Polarity Protection | Integrated | Integrated | Integrated |
| PV String Current Monitoring | Integrated | Integrated | Integrated |
| Anti-PID Function for Module | Optional | Optional | Optional |
| Insulation monitoring | Integrated | Integrated | Integrated |
| DC SPD Protectioin | Optional (Type II) | Optional (Type II) | Optional (Type II) |
| AC SPD Protectioin | Optional (Type II) | Optional (Type II) | Optional (Type II) |
| Residual Current Monitoring Unit | Integrated | Integrated | Integrated |
| AC Over Current Protection | Integrated | Integrated | Integrated |
| AC Short Protection | Integrated | Integrated | Integrated |
| AC Over Voltage Protection | Integrated | Integrated | Integrated |
| **General Data** | | | |
| Ambient Temperature Range (°C) | -30~60 | -30~60 | -30~60 |
| Relative Humidity | 0~100% | 0~100% | 0~100% |
| Operating Altitude (m) | ≤3000 | ≤3000 | ≤3000 |
| Cooling | Fan Cooling | Fan Cooling | Fan Cooling |
| Display | LCD & LED or APP & LED | | |
| Communication | RS485 or WiFi or GPRS or PLC (LCD); WiFi+RS485 or GPRS+RS485 (APP) | | |
| Weight (kg) | 40 | 40 | 40 |
| Dimension (Width*Height*Depth mm) | 480*590*200 | 480*590*200 | 480*590*200 |
| Protection Degree | IP65 | IP65 | IP65 |
| Night Self Consumption (W) | <1 | <1 | <1 |
| Topology | Transformerles | | |
| **Certifications & Standards** | | | |
| Grid Regulation | AS4777.2/VDE0126-1-1/VDE-AR-N 4105 | | |
| Safety Regulation | IEC62109-1&-2 | | |
| EMC Regulation | EN61000-6-1/EN61000-6-2/EN61000-6-3/EN61000-6-4 | | |

*1: 29.99kW for Australia, 30kW for other country
*2: 29.99kW for Australia, 33kW for other country
*3: 29.99kVA for Australia, 33kVA for other country
*4: 33kWfor Italy, 36kW for other country

# Boost Your Power & Profit

## MT Series

Four-MPPT, Three-Phase

- 30% DC input oversizing ratio
- 15% AC output overloading ratio
- Smart monitoring for 13 strings
- Full-load running at 50ºC
- Integrated bussman fuse for panel protection

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 G2 series can provide a 15% continuous maximum AC output power overload, offering a faster return on investment. The start-up voltage is 200V, much lower than 600V of other products, which makes the inverter start up earlier, therefore generating more power over time.

| Technical Data | GW50K-MT | GW50KN-MT | GW60K-MT | GW60KN-MT | GW50KBF-MT | GW60KBF-MT | GW70KHV-MT | GW80KHV-MT | GW80KBF-MT |
|---|---|---|---|---|---|---|---|---|---|
| **DC Input Data** | | | | | | | | | |
| Max. PV Power (W) | 65000 | 65000 | 80000 | 80000 | 65000 | 80000 | 91000 | 120000 | 104000 |
| Max. DC Input Voltage (V) | 1000 | 1100 | 1000 | 1100 | 1100 | 1100 | 1100 | 1100 | 1100 |
| MPPT Range (V) | 200~850 | 200~1000 | 200~850 | 200~1000 | 200~1000 | 200~1000 | 200~1000 | 200~1000 | 200~1000 |
| Starting Voltage (V) | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| Nominal DC Input Voltage (V) | 620 | 620 | 620 | 620 | 620 | 620 | 750 | 800 | 800 |
| Max. Input Current (A) | 30/30/20/20 | 33/33/22/22 | 30/30/30/30 | 33/33/33/33 | 30/30/30/30 | 44/44/44/44 | 33/33/33/33 | 44/44/44/44 | 39/39/39/39 |
| Max. Short Current (A) | 38/38/25/25 | 41.5/41.5/27.5/27.5 | 38/38/38/38 | 41.5/41.5/41.5/41.5 | 37.5/37.5/37.5/37.5 | 55/55/55/55 | 41.5/41.5/41.5/41.5 | 55/55/55/55 | 54.8/54.8/54.8/54.8 |
| No. of MPP Trackers | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| No. of Input Strings per Tracker | 3/3/2/2 | 3/3/2/2 | 3/3/3/3 | 3/3/3/3 | 2/2/2/2 | 3/3/3/3 | 3/3/3/3 | 4/4/4/4 | 3/3/3/3 |
| **AC Output Data** | | | | | | | | | |
| Nominal Output Power (W) | 50000 | 50000 | 60000 | 60000 | 50000 | 60000 | 70000 | 80000 | 80000 |
| Max. Output Power (W) | 55000; 57500@415Vac | | 66000; 69000@415Vac | | 55000;57500@415Vac | 66000;69000@415Vac | 77000 | 88000 | 88000 |
| Max. Output Apparent Power (VA) | 55000; 57500@415Vac | | 66000; 69000@415Vac | | 55000;57500@415Vac | 66000;69000@415Vac | 77000 | 88000 | 88000 |
| Nominal Output Voltage (V) | 400, 3L/N/PE or 3L/PE | | 400, 3L/N/PE or 3L/PE | | 400, 3L/N/PE or 3L/PE | | 500, 3L/PE | 540, 3L/PE | 540, 3L/PE |
| Nominal Ouput Frequency (Hz) | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 |
| Max. Output Current (A) | 80 | 80 | 96 | 96 | 80 | 96 | 89 | 94.1 | 94.1 |
| Output Power Factor | ~1 (Adjustable from 0.8 leading to 0.8 lagging) | | | | | | | | |
| Output THDi (@Nominal Output) | <3% | <3% | <3% | <3% | <3% | <3% | <3% | <3% | <3% |
| **Efficiency** | | | | | | | | | |
| Max. Efficiency | 98.7% | 98.7% | 98.8% | 98.8% | 98.8% | 98.8% | 99.0% | 99.0% | 99.0% |
| European Efficiency | 98.3% | 98.3% | 98.5% | 98.5% | 98.3% | 98.3% | 98.4% | 98.4% | 98.4% |
| **Protection** | | | | | | | | | |
| PV String Current Monitoring | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Anti-Islanding Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Input Reverse Polarity Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Insulation monitoring | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| DC fuse | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Anti-PID Function for Module | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional |
| DC SPD Protectioin | Integrated (Type II) | | | | | | | | |
| AC SPD Protectioin | Integrated (Type II) | | | | | | | | |
| Residual Current Monitoring Unit | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| AC Over Current Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| AC Short Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| AC Over Voltage Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Arc Fault Circuit Interrupter | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional |
| **General Data** | | | | | | | | | |
| Ambient Temperature Range (℃) | -30~60 | -30~60 | -30~60 | -30~60 | -30~60 | -30~60 | -30~60 | -30~60 | -30~60 |
| Relative Humidity | 0~100% | 0~100% | 0~100% | 0~100% | 0~100% | 0~100% | 0~100% | 0~100% | 0~100% |
| Operating Altitude (m) | ≤4000 | ≤4000 | ≤4000 | ≤4000 | ≤4000 | ≤4000 | ≤4000 | ≤4000 | ≤4000 |
| Cooling | Fan Cooling | Fan Cooling | Fan Cooling | Fan Cooling | Fan Cooling | Fan Cooling | Fan Cooling | Fan Cooling | Fan Cooling |
| Display | LCD or WiFi+APP | | | | | | | | |
| Communication | RS485 or WiFi or PLC | | | | | | | | |
| Weight (kg) | 59 | 59 | 64 | 64 | 60 | 65 | 60 | 65 | 65 |
| Dimension (Width*Height*Depth mm) | 586*788*264 | 586*788*264 | 586*788*264 | 586*788*264 | 586*788*264 | 586*788*264 | 586*788*264 | 586*788*267 | 586*788*264 |
| Protection Degree | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 |
| Night Self Consumption (W) | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Topology | Transformerless | | | | | | | | |
| **Certifications & Standards** | | | | | | | | | |
| Grid Regulation | IEC61727, IEC62116, IEC60068, IEC61683, EN50530, EN50438+, VDE0126-1-1/A1, VDE-AR-N 4105, RD1699, RD661, RD413, UNE, AS/NZS 4777.2, DRRG/DEWA, NRS 097,G99 | IEC61727, IEC62116, VDE4105, VDE0126, RD1699, RD413, RD661, EN50438, AS/NZS 4777.2, NRS 097, CEI 0-21, ERDF-NOI-RES_13E | IEC61727, IEC62116, IEC60068, IEC61683, EN50530, EN50438+, VDE0126-1-1/A1,VDE-AR-N 4105, RD1699, RD661, RD413, UNE, AS/NZS 4777.2, DRRG/DEWA, NRS 097,G99 | IEC61727, IEC62116, VDE4105, VDE0126, RD1699, RD413, RD661, EN50438, AS/NZS 4777.2, NRS 097, CEI 0-21, ERDF-NOI-RES_13E, MEA,PEA | IEC61727, IEC62116, VDE4105, VDE0126, RD1699, RD413, RD661, EN50438 | IEC61727, IEC62116, VDE4105, VDE0126, RD1699, RD413, RD661, EN50438 | IEC61727, IEC62116, VDE4105, VDE0126, RD1699, RD413, RD661, EN50438 | IEC61727, IEC62116, VDE4105, VDE0126, RD1699, RD413, RD661, EN50438 | IEC61727, IEC62116, VDE4105, VDE0126, RD1699, RD413, RD661, EN50438 |
| Safety Regulation | IEC62109-1&-2 | | | | | | | | |
| EMC Regulation | EN6100-6-4:2007+A1:2011, EN61000-6-2:2005, EN61000-3-11:2000, EN61000-3-12:2011+AC:2013 | | | | | | | | |