



Smart DT Series (Dual-MPPT, Three-Phase)

The GoodWe Smart DT series inverter is specially designed for three-phase home solar systems, covering a wide power range of 4kW, 5kW, 6kW, 8kW, 10kW, 12kW and 15kW. The integrated two MPPTs allow 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 a quiet operation thanks to its fanless, natural convection cooling. In addition, the combination of both RS485 and Wi-Fi communication allows the system to be easily monitored and controlled.

- Easy wall mounting
- RS485 and Wi-Fi communication
- Fanless and quiet
- Super large 5-inch LCD
- IP65 dustproof and waterproof

Technical Data

| | GW4000-DT | GW5000-DT | GW6000-DT | GW8000-DT | GW10KN-DT | GW12KN-DT | GW15KN-DT |
|-----------------------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| PV String Input Data | | | | | | | |
| Max. DC Input Power (W) | 5200 | 6500 | 7800 | 9600 | 12000 | 16800 | 19500 |
| Max. DC Input Voltage (V) | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| MPPT Range (V) | 200~800 | 200~800 | 200~800 | 200~850 | 200~850 | 200~850 | 200~850 |
| Start-up Voltage (V) | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| MPPT Range for Full Load (V) | 195~800 | 240~800 | 285~800 | 380~850 | 480~850 | 380~850 | 480~850 |
| Nominal DC Input Voltage (V) | 620 | 620 | 620 | 620 | 620 | 620 | 620 |
| Max. Input Current (A) | 11/11 | 11/11 | 11/11 | 11/11 | 11/11 | 22/11 | 22/11 |
| Max. Short Current (A) | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 27.6/13.8 | 27.6/13.8 |
| No. of MPP Trackers | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| No. of Input Strings per Tracker | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 2/1 | 2/1 |
| AC Output Data | | | | | | | |
| Nominal Output Power (W) | 4000 | 5000 | 6000 | 8000 | 10000 | 12000 | 15000 |
| Max. Output Apparent Power (VA) | 4000 | 5000 | 6000 | 8000 | 10000 | 14000 | 16500 |
| Nominal Output Voltage (V) | 400, 3L/N/PE | 400, 3L/N/PE | 400, 3L/N/PE | 400, 3L/N/PE | 400, 3L/N/PE | 400, 3L/N/PE | 400, 3L/N/PE |
| Nominal Output Frequency (Hz) | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 | 50/60 |
| Max. Output Current (A) | 8.5 | 8.5 | 10 | 12.1 | 15.2 | 21.5 | 24 |
| Output Power Factor | ~1 (Adjustable from 0.8 leading to 0.8 lagging) | | | | | | |
| Output THDi (@Nominal Output) | <2% | <2% | <2% | <2% | <2% | <2% | <2% |
| Efficiency | | | | | | | |
| Max. Efficiency | 98.0% | 98.0% | 98.0% | 98.3% | 98.3% | 98.3% | 98.3% |
| Euro Efficiency | 97.5% | 97.5% | 97.5% | 98.0% | 98.0% | 98.0% | 98.0% |
| MPPT Efficiency | 99.9% | 99.9% | 99.9% | 99.9% | 99.9% | 99.9% | 99.9% |
| Protection | | | | | | | |
| Anti-islanding Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Input Reverse Polarity Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Insulation Resistor Detection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Residual Current Monitoring Unit | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Output Over Current Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Output Short Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Output Over Voltage Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| General Data | | | | | | | |
| Operating Temperature Range (°C) | -25~60 | -25~60 | -25~60 | -25~60 | -25~60 | -25~60 | -25~60 |
| Relative Humidity | 0~100% | 0~100% | 0~100% | 0~100% | 0~100% | 0~100% | 0~100% |
| Operating Altitude (m) | ≤4000 | ≤4000 | ≤4000 | ≤4000 | ≤4000 | ≤4000 | ≤4000 |
| Cooling | Natural Convection | | | | | | |
| Noise (dB) | <30 | <30 | <30 | <30 | <30 | <30 | <30 |
| User Interface | LCD & LED | LCD & LED | LCD & LED | LCD & LED | LCD & LED | LCD & LED | LCD & LED |
| Communication | RS485 or WiFi | RS485 or WiFi | RS485 or WiFi | RS485 or WiFi | RS485 or WiFi | RS485 or WiFi | RS485 or WiFi |
| Weight (kg) | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| Size (Width*Height*Depth mm) | 516*455*192 | 516*455*192 | 516*455*192 | 516*455*192 | 516*455*192 | 516*455*192 | 516*455*192 |
| Protection Degree | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 |
| Night Self Consumption (W) | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Topology | Transformerless | Transformerless | Transformerless | Transformerless | Transformerless | Transformerless | Transformerless |
| Standards | | | | | | | |
| Safety Regulation | IEC62109-1&2 | | | | | | |
| EMC | EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4 | | | | | | |