

The ET G2 hybrid inverter is designed to maximise energy output, enhance self-consumption, and facilitate extensive back-up power for homeowners. With power rating up to 15kW, intelligent load controls and a wide battery voltage range, the inverter caters to individual needs. To secure a high level of energy autonomy, combine the hybrid inverter with GoodWe HV battery, and connect the system to the GoodWe EV chargers and/or any smart-grid ready household appliances. By combining a variety of smart operation modes, the system can be optimized to further drive down energy cost.



Smart operation modes



Powerful backup



Integrated smart meter





Technical Data	GW6000-ET-20	GW8000-ET-20	GW10K-ET-20	GW12K-ET-20	GW15K-ET-
Battery Input Data					
Battery Type			Li-lon		
Nominal Battery Voltage (V)			500 150 ~ 720		
Battery Voltage Range (V) Start-up Voltage (V)			150 ~ 720		
Number of Battery Input			1		
Max. Continuous Charging Current (A)	30	30	40	40	40
Max. Continuous Discharging Current (A) Max. Charging Power (W)	30 9000	30 12000	40 15000	40 18000	40 24000
Max. Discharging Power (W)	6600	8800	11000	13200	16500
PV String Input Data			11000	10200	10000
	0000	10000	40000	10000	0.4000
Max. Input Power (W)*1 Max. Input Voltage (V)*2	9600	12800	16000 1000	19200	24000
MPPT Operating Voltage Range (V)			120 ~ 850		
Start-up Voltage (V)			150		
Nominal Input Voltage (V) Max. Input Current per MPPT (A)			620 16		
Max. Short Circuit Current per MPPT (A)			24		
Number of MPP Trackers	2	2	3	3	3
Number of Strings per MPPT			1		
AC Output Data (On-grid)					
Nominal Output Power (W)	6000	8000	10000	12000	15000
Nominal Apparent Power Output to Utility Grid (VA)	6000	8000	10000	12000	15000
Max. Apparent Power Output to Utility Grid (VA)	6000	8000	10000	12000	15000
Max. Apparent Power from Utility Grid (VA) Nominal Output Voltage (V)	12000	16000	20000 400 / 380, 3L / N / PE	20000	20000
Output Voltage Range (V)*4			170 ~ 290		
Nominal AC Grid Frequency (Hz)			50 / 60		
AC Grid Frequency Range (Hz)	0.7	11.0	45 ~ 65	17.4	01.7
Max. AC Current Output to Utility Grid (A) <sup>-5</sup> Max. AC Current From Utility Grid (A)	8.7 15.7	11.6 21.0	14.5 26.1	17.4 26.1	21.7 26.1
Power Factor	10.7	21.0	0.8 leading~0.8 lagging		20.1
Max. Total Harmonic Distortion			<3%		
AC Output Data (Back-up)					
Back-up Nominal Apparent Power (VA)	6000	8000	10000	12000	15000
, , ,	6000	8000	10000	12000	15000
Max. Output Apparent Power without Grid (VA)	(12000 @60sec)*6	(16000 @60sec)	(18000 @60sec)	(18000 @60sec)	(18000 @60se
Max. Output Apparent Power with Grid (VA)	6000	8000	10000	12000	15000
Max. Output Current (A) Nominal Output Voltage (V)	13.0 (17.4 @60sec)	17.4 (23.3 @60sec)	21.7 (26.1 @60sec) 400 / 380	21.7 (26.1 @60sec)	21.7 (26.1 @60s
Nominal Output Frequency (Hz)			50 / 60		
Output THDv (@Linear Load)			<3%		
Efficiency					
Max. Efficiency	98.0%	98.0%	98.2%	98.2%	98.2%
European Efficiency	97.2%	97.2%	97.5%	97.5%	97.5%
Max. Battery to AC Efficiency MPPT Efficiency	97.2%	97.5%	97.5%	97.5%	97.5%
IMPPT Efficiency			99.5%		
PV Insulation Resistance Detection			Integrated		
PV Insulation Resistance Detection PV AFCI3.0			Optional		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring					
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection			Optional Integrated Integrated Integrated		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection			Optional Integrated Integrated Integrated Integrated Integrated		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection			Optional Integrated Integrated Integrated Integrated Integrated Integrated Integrated		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection			Optional Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch			Optional Integrated		
Protection  PV Insulation Resistance Detection PV AFCI3.0  Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection			Optional Integrated		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AC Surge Protection			Optional Integrated Type II Type II		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AC Surge Protection AC Surge Protection AC Surge Protection			Optional Integrated		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection Remote Shutdown			Optional Integrated Type II Type II Integrated		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection Remote Shutdown  General Data Operating Temperature Range (°C)			Optional Integrated Type II Type II Integrated		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection Remote Shutdown  General Data  Operating Temperature Range (°C) Relative Humidity			Optional Integrated - Type II - Type II - Type III - Ty		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Acti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AC Surge Protection AC Overgous Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AC Surge Protection Remote Shutdown  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m)			Optional Integrated Type II Type II Integrated  -35 ~ +60 0 ~ 100% 4000 Natural Convection		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Overcurrent Protection AC Overvoltage Protection AC Overvoltage Protection AC Overyoltage Protection AC Overge Protection AC Overge Protection AC Overyoltage Protection BC Surge Protection AC Surge Protection Remote Shutdown  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface			Optional Integrated  -35 ~ +60 0 ~ 100% 4000 Natural Convection LED, WLAN + APP		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection AC Surge Protection AC Surge Protection BC Surge Protection AC Surge Protection AC Surge Protection AC Surge Protection Remote Shutdown  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS			Optional Integrated  435 ~ +60 0 ~ 100% 4000 Natural Convection LED, WLAN + APP RS485, CAN		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Battery Reverse Polarity Protection Action Action Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AC Surge Protection Remote Shutdown  General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter			Optional Integrated Type II Type II Integrated  -35 ~ +60 0 ~ 100% 4000 Natural Convection LED, WLAN + APP RS485, CAN RS485		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Battery Reverse Polarity Protection Acti-islanding Protection AC Overcurrent Protection AC Overcurrent Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection Remote Shutdown  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal	23	23	Optional Integrated Type II Type II Type II Integrated  -35 ~ +60 0 ~ 100% 4000 Natural Convection LED, WLAN + APP RS485, CAN RS485 WiFi + LAN + Bluetooth	25	25
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Battery Reverse Polarity Protection Acti-islanding Protection AC Overcurrent Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection AC Overyoltage Protection AC Surge Protection AC Surge Protection Remote Shutdown  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm)	23	23	Optional Integrated  WIFI + LAON + APP RS485, CAN RS485 WIFI + LAN + Bluetooth 25 496 × 460 × 221	25	25
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Battery Reverse Polarity Protection Acti-islanding Protection AC Overcurrent Protection AC Overcurrent Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AC Surge Protection Remote Shutdown  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Portal Weight (kg) Dimension (W x H x D mm) Noise Emission (dB)	23 <30	23 <30	Optional Integrated  -35 ~ +60 0 ~ 100% 4000 Natural Convection LED, WLAN + APP RS485, CAN RS485 WiFi + LAN + Bluetooth 25 496 × 460 × 221 <30	25 <45	25 <45
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Battery Reverse Polarity Protection Acti-islanding Protection AC Overcurrent Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection AC Overyoltage Protection AC Surge Protection AC Surge Protection AC Surge Protection Remote Shutdown  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm) Noise Emission (dB) Topology			Optional Integrated  -35 ~ +60 0 ~ 100% 4000 Natural Convection LED, WLAN + APP RS485, CAN RS485 WiFi + LAN + Bluetooth 25 496 × 460 × 221 <30 Non-isolated		
PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Activislanding Protection AC Overcurrent Protection AC Overcurrent Protection AC Overcurrent Protection AC Overvoltage Protection DC Switch DC Switch DC Surge Protection AC Surge Protection Remote Shutdown  General Data  Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Portal Weight (kg) Dimension (W x H x D mm) Noise Emission (dB)			Optional Integrated  -35 ~ +60 0 ~ 100% 4000 Natural Convection LED, WLAN + APP RS485, CAN RS485 WiFi + LAN + Bluetooth 25 496 × 460 × 221 <30		

<sup>\*1:</sup> Max. Input Power, not continuous for 1.6\*normal power.
\*2: For 1000V system, Maximum operating voltage is 950V.
\*3: According to the local grid regulation.
\*4: Output Voltage Range: phase voltage.

<sup>\*5:</sup> The Max. AC Current Output to on-grid load is 13A, 17.4A, 21.7A, 21.7A, 21.7A separately.
\*6: Can be reached only if PV and battery power is enough.
\*7: No Back-up Output.
\*: Please visit GoodWe website for the latest certificates.