



Flexible & Adaptable Applications

- · Integrated dry contact for external loads
- · Backup with UPS-level switching <10ms
- · Fast load response



Friendly & Thoughtful Design

- · Plug & Play installations
- · Elegant and compact design



Superb Safety & Reliability

- · Al-driven AFCI 3.01
- · IP66 ingress protection
- · Type II SPD on DC & AC sides



Higher Power Generation

- · Unbalanced output up to 150%²
- · Up to 160% PV input oversizing
- · Parallel connection capability for increased output power

^{1:} Optional functions or devices are purchased separately.

^{2:} Only for the GW10K-ET-20 model



Technical Data	GW6000-ET-20	GW8000-ET-20	GW10K-ET-20	GW12K-ET-20	GW15K-ET-
Battery Input Data	_				
Battery Type*1			Li-lon		
Nominal Battery Voltage (V)			500		
Battery Voltage Range (V) Start-up Voltage (V)			150 ~ 720		
Number of Battery Input			150 1		
Max. Continuous Charging Current (A)	30	30	40	40	40
Max. Continuous Discharging Current (A)	30	30	40	40	40
Max. Charging Power (W) Max. Discharging Power (W)	9000	12000	15000	18000	24000
PV String Input Data	6600	8800	11000	13200	16500
Max. Input Power (W)*2	9600	12800	16000	19200	24000
Max. Input Voltage (V)*3*4	3000	12000	1000	13200	24000
MPPT Operating Voltage Range (V)*5			120 ~ 850		
Start-up Voltage (V) Nominal Input Voltage (V)			150 620		
Max. Input Current per MPPT (A)			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) Max. Apparent Power Output to Utility Grid (VA) ⁶	6000 6000	8000 8000	10000 10000	12000 12000	15000 15000
Max. Apparent Power from Utility Grid (VA)	12000	16000	20000	20000	20000
Nominal Output Voltage (V)	12000	10000	400 / 380, 3L / N / PE	20000	
Output Voltage Range (V)*7			170 ~ 290		
Nominal AC Grid Frequency (Hz)			50 / 60		
AC Grid Frequency Range (Hz) Max. AC Current Output to Utility Grid (A)*8	8.7	11.6	45 ~ 65 14.5	17.4	21.7
Max. AC Current From Utility Grid (A)	15.7	21.0	26.1*9	26.1*9	26.1 ^{*9}
Power Factor			0.8 leading ~ 0.8 lagging		
Max. Total Harmonic Distortion			<3%		
AC Output Data (Back-up)					
Back-up Nominal Apparent Power (VA)	6000	8000	10000	12000	15000
Max. Output Apparent Power without Grid (VA)*10	6000 (12000 @60sec)	8000 (16000 @60sec)	10000 (18000 @60sec)	12000 (18000 @60sec)	15000 (18000 @60se
Max. Output Apparent Power with Grid (VA)	6000	8000	10000	12000	15000
Max. Output Current (A)	13.0 (17.4 @60sec)	17.4 (23.3 @60sec)	21.7 (26.1 @60sec)	21.7 (26.1 @60sec)	21.7 (26.1 @60s
Nominal Output Voltage (V)			400 / 380		
Nominal Output Frequency (Hz) Output THDv (@Linear Load)			50 / 60 <3%		
			< 3 /0		
Efficiency					
Efficiency Max. Efficiency	98.0%	98.0%	98.2%	98.2%	98.2%
Efficiency Max. Efficiency European Efficiency	97.2%	97.2%	97.5%	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency					
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency	97.2%	97.2%	97.5% 97.5%	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency Protection PV Insulation Resistance Detection	97.2%	97.2%	97.5% 97.5% 99.5%	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency Protection PV Insulation Resistance Detection PV AFCI3.0	97.2%	97.2%	97.5% 97.5% 99.5% Integrated Optional	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPT Efficiency Protection PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring	97.2%	97.2%	97.5% 97.5% 99.5% Integrated Optional Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency Protection PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection	97.2%	97.2%	97.5% 97.5% 99.5% Integrated Optional	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPT Efficiency Protection PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection	97.2%	97.2%	97.5% 97.5% 99.5% Integrated Optional Integrated Integrated Integrated Integrated Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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	97.2%	97.2%	97.5% 97.5% 99.5% Integrated Optional Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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 Overcurrent Protection AC Short Circuit Protection	97.2%	97.2%	97.5% 97.5% 99.5% Integrated Optional Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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 Overcurrent Protection AC Overvoltage Protection AC Overvoltage Protection	97.2%	97.2%	97.5% 97.5% 99.5% Integrated Optional Integrated Integrated Integrated Integrated Integrated Integrated Integrated Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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	97.2%	97.2%	97.5% 97.5% 99.5% Integrated Optional Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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 Overcurrent Protection AC Overvoltage Protection DC Switch DC Switch DC Surge Protection AC Ourge Protection AC Ourge Protection AC Ourge Protection AC Surge Protection	97.2%	97.2%	97.5% 97.5% 97.5% 99.5% Integrated Optional Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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 Switch DC Surge Protection AC Surge Protection AC Surge Protection Remote Shutdown	97.2%	97.2%	97.5% 97.5% 99.5% Integrated Optional Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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 Switch DC Switch DC Switch DC Surge Protection AC Surge Protection Remote Shutdown General Data	97.2%	97.2%	97.5% 97.5% 97.5% 99.5% Integrated Optional Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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 AC Surge Protection AC Surge Protection AC Overcultage Protection CS Surge Protection CS Surge Protection CS Gurge Protection CS Gurge Protection CS Gurge Protection CS Gurge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity	97.2%	97.2%	97.5% 97.5% 97.5% 99.5% Integrated Optional Integrated - Type II Type II Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPT Efficiency 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 Overcurrent Protection AC Overvoltage Protection AC Overvoltage Protection AC Surge Protection AC Overvoltage Protection AC Overvoltage Protection AC Overvoltage Protection AC 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)	97.2%	97.2%	97.5% 97.5% 97.5% 99.5% Integrated Optional Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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 Overcurrent Protection AC Overcurrent Protection AC Overvoltage Protection AC Surge Protection AC Surge Protection CS urge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method	97.2%	97.2%	97.5% 97.5% 97.5% 99.5% Integrated Optional Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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 Overcurrent Protection AC Overcurrent Protection AC Surge Protection Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface	97.2%	97.2%	97.5% 97.5% 97.5% 99.5% Integrated Optional Integrated	97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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 Overcurrent Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AC Surge Protection AC Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS	97.2%	97.2% 97.5%	97.5% 97.5% 97.5% 99.5% Integrated Optional Integrated	97.5% 97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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 Overcurrent Protection AC Overcurrent Protection AC Overculrage Protection AC Overvoltage Protection AC Short Circuit Protection AC Surge Interface Coema Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter	97.2% 97.2%	97.2% 97.5%	97.5% 97.5% 97.5% 99.5% Integrated Optional Integrated	97.5% 97.5%	97.5% 97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency Protection PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection AC Overcurrent Protection AC Overcurrent Protection AC Overcurrent Protection AC Switch 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 Communication with Portal Weight (kg)	97.2%	97.2% 97.5%	97.5% 97.5% 97.5% 99.5% Integrated Optional Integrated	97.5% 97.5%	97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPPT Efficiency 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 Overcurrent Protection AC Overvoltage Protection AC Overvoltage Protection AC Surge Protection AC Surge Protection AC Surge Protection AC Overvoltage Protection C 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 BMS Communication with Portal Weight (kg) Dimension (W × H × D mm)	97.2% 97.2%	97.2% 97.5%	97.5% 97.5% 97.5% 99.5% Integrated Optional Integrated	97.5% 97.5%	97.5% 97.5%
Efficiency Max. Efficiency European Efficiency Max. Battery to AC Efficiency MPT Efficiency Protection PV Insulation Resistance Detection PV AFCI3.0 Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection AC Overcurrent Protection AC Overcurrent Protection AC Overcurrent Protection AC Surge Protection AC Surge Protection AC Surge Protection AC Surge Protection CR Surge Protection AC Surge Protection CR Surge Protection CR 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)	97.2% 97.2%	97.2% 97.5%	97.5% 97.5% 97.5% 99.5% Integrated Optional Integrated	97.5% 97.5%	97.5% 97.5%

^{*1:} The Li-lon battery usually contain two mainstream type: LFP and Ternary Lithium battery.
*2: Max. input power, not continuous for 1.6*normal power. Besides, in Australia, for most of the PV modules, the max. input power can reach 2*Pn, for example, the max. input power of GW6000-ET-20 can reach 12000W.
*3: For 1000V system, the maximum operating voltage is 950V.

^{*4:} When the input voltage ranges from 975V to 1000V, the inverter will enter the standby mode, and the voltage returns to 975V to enter the normal operation state.
*5: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.

^{*6:} According to the local grid regulation.
*7: Output Voltage Range: phase voltage.
*8: When the three-unbalance function is activated, the Max. AC Current Output to the on-grid load can reach 13A, 17.4A, 21.7A, 21.7A and 21.7A respectively.
*9: If the inverter is installed with the 3x25A AC breaker, it is suggested that

the consumption and feed-in AC power should be less than 11040W (0.8×0.8×25×230×3), and this limitation can be set by SolarGo App. *10: Can be reached only if PV and battery power is enough.

^{*:} Please visit GoodWe website for the latest certificates.