



Smart Control & Monitoring

- · Integrated dry contact for external loads
- · Backup with UPS-level switching <10ms
- · Peak shaving



Friendly & Thoughtful Design

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



Superb Safety & Reliability

- · Integrated AFCI
- · IP66 ingress protection
- · Type II SPD on DC & AC sides



Flexible & Adaptable Applications

- \cdot Maximum 16A DC input current per string
- · Up to 160% DC input oversizing
- · Parallel connection capability for increased output power



Technical Data	GW6000-ET-20	GW8000-ET-20	GW9900-ET-20	GW12K-ET-20	GW15K-ET-
Battery Input Data					
Battery Type			Li-lon		
Nominal Battery Voltage (V)			500		
Battery Voltage Range (V)			150 ~ 720 150		
Start-up Voltage (V) Number of Battery Input			130		
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 6600	12000 8800	15000 11000	18000 13200	24000 16500
	6600	0000	11000	13200	16500
PV String Input Data	2000	10000	10000	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)			620		
Max. Input Current per MPPT (A) Max. Short Circuit Current per MPPT (A)			16 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	9900	12000	15000
Nominal Apparent Power Output to Utility Grid (VA)	6000	8000	9900	12000	15000
Max. Apparent Power Output to Utility Grid (VA)*3	6000	8000	9900	12000	15000
Max. Apparent Power from Utility Grid (VA)	12000	16000	20000 400 / 380, 3L / N / PE	20000	20000
Nominal Output Voltage (V) Output Voltage Range (V)*4			400 / 380, 3L / N / PE 170 ~ 290		
Nominal AC Grid Frequency (Hz)			50 / 60		
AC Grid Frequency Range (Hz)			45 ~ 65		
Max. AC Current Output to Utility Grid (A)*5	8.7	11.6	14.3	17.4	21.7
Max. AC Current From Utility Grid (A) Power Factor	15.7	21.0	26.1 0.8 leading ~ 0.8 laggin	26.1	26.1
Max. Total Harmonic Distortion			<3%	9	
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 at 60 sec)*6	(16000 at 60 sec)	(18000 at 60 sec)	(18000 at 60 sec)	(18000 at 60 s
Max. Output Apparent Power with Grid (VA)	6000	8000	10000	12000	15000
Max. Output Current (A) Nominal Output Voltage (V)	13.0 (17.4 at 60 sec)	17.4 (23.3 at 60 sec)	21.7 (26.1 at 60 sec) 400 / 380	21.7 (26.1at 60 sec)	21.7 (26.1at 60
Nominal Output Voltage (V) 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	97.2%	97.5%	97.5%	97.5%	97.5%
MPPT Efficiency			99.5%		
Protection					
PV Insulation Resistance Detection			Integrated		
PV AFCI3.0 Residual Current Monitoring			Integrated Integrated		
PV Reverse Polarity Protection			Integrated		
Battery Reverse Polarity Protection			Integrated		
Anti-islanding Protection			Integrated		
AC Overcurrent Protection AC Short Circuit Protection			Integrated Integrated		
AC Overvoltage Protection			Integrated		
DC Switch			Integrated		
DC Surge Protection			Type II		
AC Surge Protection			Type II		
Remote Shutdown			Integrated		
General Data					
Operating Temperature Range (°C)			-35 ~ +60		
Relative Humidity Max. Operating Altitude (m)			0 ~ 100% 4000		
Cooling Method			Natural Convection		
User Interface			LED, WLAN + APP		
Communication with BMS			RS485, CAN		
Communication with Meter		1 1 1 1 / 4	RS485	. \\/iEi	
Communication with Portal Weight (kg)	23	23 LAN (4	G optional) + Bluetooth 25	+ WIFI 25	25
rroight (NG)			496 × 460 × 221	20	
Dimension (W x H x D mm)		.00	<30	<45	<45
Noise Emission (dB)	<30	<30		N-10	
Noise Emission (dB) Topology	<30	<30	Non-isolated	V+0	
Noise Emission (dB) Topology Self-consumption at Night (W) ⁷	<30	<30	Non-isolated <15	X+0	
Noise Emission (dB) Topology	<30	<30	Non-isolated	X-10	

^{*1:} 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.

^{*5:} The Max. AC Current Output to on-grid load is 13A, 17.4A, 21.7A, 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.