

## Optimized performance and flexibility for C&I energy storage

- ✓ Powerful backup with STS box
- ✓ Highest safety standards
- ✓ Optimised energy autonomy
- ✓ Dual independent battery inputs with 220A

Compact yet powerful, the ET Series 80-100kW expands GoodWe's C&I solutions. It supports smart modes for self-consumption, peak shaving, time-of-use, and grid support. Parallelable for easy expansion, it pairs seamlessly with the BAT Series—each ET inverter can connect up to four BAT 112kWh units for 448kWh total capacity. With an optional STS, it can enable flexible on/off-grid operation and seamless power management.



21A per string & 200% PV oversizing



Smart temperature sensing on AC and PV connector



Smart DC circuit breaker with self-protection



Technical Data	GW80K-ET-G10	GW99.99K-ET-G10	GW100K-ET-G10
<b>Battery Side</b>			
Battery Type <sup>*1</sup>		Li-Ion	
Nominal Voltage (V)		600	
Voltage Range (V)		300 ~ 800	
Start-up Voltage (V)		300	
Number of Battery Inputs		2	
Max. Continuous Charging Current (A)	100 x 2	110 x 2	110 x 2
Max. Continuous Discharging Current (A)	100 x 2	110 x 2	110 x 2
Max. Charging Power (kW)	88	99.99	110
Max. Discharging Power (kW)	88	99.99	110
<b>PV Side</b>			
Max. Input Power (kW)	160	200	200
Max. Input Voltage (V) <sup>*2</sup>		1000	
MPPT Operating Voltage Range (V) <sup>*3</sup>		160 ~ 950	
Start-up Voltage (V)		200	
Nominal Input Voltage (V)		620	
Max. MPPT Current (A)		42 x 8	
Max. MPPT Short Circuit Current (A)		55 x 8	
Number of MPPTs		8	
Number of Strings per MPPT		2	
<b>AC Side (on-grid)</b>			
Nominal Power (kW)	80	99.99	100
Max. Power (kW)	88	99.99	110
Nominal Apparent Power from/to Grid (kVA)	80	99.99	100
Max. Apparent Power to Grid (kVA)	88	99.99	110
Max. Apparent Power from Grid (kVA)	88	99.99	110
Nominal Voltage (V)		220 / 380, 230 / 400, 240 / 415, 3L / N / PE	
Voltage Range (V) (according to local standard)		180 ~ 280	
Nominal Frequency (Hz)		50 / 60	
Frequency Range (Hz)		45 ~ 55 / 55 ~ 65	
Nominal Current from / to Grid (A)	121.6 @ 380Vac; 115.5 @ 400Vac; 111.3 @ 415Vac	152.0 @ 380Vac; 144.4 @ 400Vac; 139.2 @ 415Vac	152.0 @ 380Vac; 144.4 @ 400Vac; 139.2 @ 415Vac
Max. Current to Grid (A)	133.8 @ 380Vac; 127.1 @ 400Vac; 122.5 @ 415Vac	152.0 @ 380Vac; 144.4 @ 400Vac; 139.2 @ 415Vac	167.2 @ 380Vac; 158.8 @ 400Vac; 153.1 @ 415Vac
Max. Current from Grid (A)	133.8 @ 380Vac; 127.1 @ 400Vac; 122.5 @ 415Vac	152.0 @ 380Vac; 144.4 @ 400Vac; 139.2 @ 415Vac	167.2 @ 380Vac; 158.8 @ 400Vac; 153.1 @ 415Vac
Power Factor		0.8 leading ~ 0.8 lagging	
THDI		<3%	
<b>Backup Side<sup>*4</sup></b>			
Nominal Output Apparent Power (kVA)	80	99.99	100
Max. Output Apparent Power (kVA)	88	99.99	110
Peak Output Power without Grid (kW)	110% @ continuous; 120% @ 60s; 150% @ 10s	120% @ 60s; 150% @ 10s	110% @ continuous; 120% @ 60s; 150% @ 10s
Nominal Output Voltage (V)		220 / 380, 230 / 400, 240 / 415, 3L / N / PE	
Nominal Output Frequency (Hz)		50 / 60	
Max. Output Current (A)	133.8 @ 380Vac; 127.1 @ 400Vac; 122.5 @ 415Vac	152.0 @ 380Vac; 144.4 @ 400Vac; 139.2 @ 415Vac	167.2 @ 380Vac; 158.8 @ 400Vac; 153.1 @ 415Vac
THDv (@Linear Load)		<3%	
On / Off-grid Switching Time		<4ms	
<b>Generator Side<sup>*4</sup></b>			
Nominal Apparent Power (kVA)	80	99.99	100
Max. Apparent Power (kVA)	88	99.99	110
Nominal Voltage (V)		220 / 380, 230 / 400, 240 / 415, 3L / N / PE	
Nominal Frequency (Hz)		50 / 60	
Frequency Range (Hz)		45 ~ 55 / 55 ~ 65	
Max. Current (A)	133.8 @ 380Vac; 127.1 @ 400Vac; 122.5 @ 415Vac	152.0 @ 380Vac; 144.4 @ 400Vac; 139.2 @ 415Vac	167.2 @ 380Vac; 158.8 @ 400Vac; 153.1 @ 415Vac
<b>Efficiency</b>			
Max. Efficiency	98.1%	98.1%	98.1%
European Efficiency	97.7%	97.7%	97.7%
Max. Battery to AC Efficiency	98.2%	98.2%	98.2%
MPPT Efficiency		99.9%	
<b>Protection</b>			
PV String Current Monitoring		Integrated	
PV Insulation Resistance Detection		Integrated	
Residual Current Monitoring		Integrated	
PV Reverse Polarity Protection		Integrated	
Battery Reverse Polarity Protection		Integrated	
Anti-islanding Protection		Integrated	
AC Overcurrent Protection		Integrated	
AC Short Circuit Protection		Integrated	
AC Overvoltage Protection		Integrated	
DC Switch		Integrated	
DC Surge Protection		Type II (Type I + II Optional)	
AC Surge Protection		Type II	
AFCI		Optional	
Rapid Shutdown		Optional	
Remote Shutdown		Integrated	
<b>General Data</b>			
Operating Temperature Range (°C)		-35 ~ +60	
Relative Humidity		0 ~ 100%	
Max. Operating Altitude (m)		4000	
Cooling Method		Smart Fan Cooling	
User Interface		LED, LCD (Optional), WLAN + APP	
Communication with BMS		CAN	
Communication		RS485, WiFi + LAN + Bluetooth, 4G + Bluetooth (Optional)	
Communication Protocols		Modbus-RTU, Modbus-TCP	
Weight (kg)		97	
Dimension (W x H x D mm)		995 x 758 x 358	
Noise Emission (dB)		<60	
Power Self-consumption at Night (W)		<15	
Ingress Protection Rating		IP66	
Anti-corrosion Class		C4	
Mounting Method		Wall Mounted	

\*1: The Li-Ion battery usually contain two mainstream type: LFP and Ternary Lithium battery.

\*2: For GW80K-ET-G10/GW99.99K-ET-G10/GW100K-ET-G10, when the input voltage ranges from 950V to 1000V, the inverter will enter the standby mode, and the voltage returns to 950V to enter the normal operation state.

\*3: Please refer to the user manual for the MPPT Voltage Range at nominal Power.

\*4: The STS Box or STS Cabinet is needed.

\*: Please visit GoodWe website for the latest certificates.