

Optimized performance and flexibility for C&I energy storage

- ✓ Optimised energy autonomy
- ✓ Smart and efficient operations
- ✓ Modern and compact design
- ✓ Highest safety standards

Powerful and compact, the GoodWe ET50 hybrid inverter is ideal for Commercial and Industrial (C&I) energy storage solutions. The inverter is compatible with a range of battery capacities, and leverages intelligent operating modes to optimize system performance across various scenarios such as self-consumption, peak shaving, time-of-use and grid support. Its parallel connection capability facilitates seamless expansion for both on-grid and off-grid setups. When coupled with the Static Transfer Switch (STS) Box, the system supports dependable UPS-level switching to backup mode. Paired with the GoodWe Lynx C battery system, GoodWe provides a complete energy storage solution.



Parallel connection



Peak shaving and grid support



Powerful back-up with STS box



Technical Data		GW40K-ET-10	GW50K-ET-10
Battery Input Data			
Battery Type ⁴		Li-Ion	
Nominal Battery Voltage (V)		500	
Battery Voltage Range (V)		200 ~ 800	
Start-up Voltage (V)		200	
Number of Battery Input		1	
Max. Continuous Charging Current (A)		100	
Max. Continuous Discharging Current (A)		100	
Max. Charging Power (W)	44000		55000
Max. Discharging Power (W)	44000		55000
PV String Input Data			
Max. Input Power (W) ¹	60000		75000
Max. Input Voltage (V) ³		1000	
MPPT Operating Voltage Range (V) ⁵		165 ~ 850	
Start-up Voltage (V)		200	
Nominal Input Voltage (V)		620	
Max. Input Current per MPPT (A)	42 / 32 / 42		42 / 32 / 42 / 32
Max. Short Circuit Current per MPPT (A)	55 / 42 / 55		55 / 42 / 55 / 42
Number of MPP Trackers	3		4
Number of Strings per MPPT		2	
AC Output Data (On-grid)*requires additional STS box			
Nominal Output Power (W)	40000		50000
Nominal Apparent Power Output to Utility Grid (VA)	40000		50000
Max. Apparent Power Output to Utility Grid (VA)	40000		50000
Max. Apparent Power from Utility Grid (VA)	40000		50000
Nominal Output Voltage (V)		380 / 400, 3L / N / PE	
Output Voltage Range (V) ¹		176 ~ 276	
Nominal AC Grid Frequency (Hz)		50 / 60	
AC Grid Frequency Range (Hz)		45 ~ 65	
Max. AC Current Output to Utility Grid (A)	60.6 @ 380V; 58.0 @ 400V		75.8 @ 380V; 72.5 @ 400V
Max. AC Current From Utility Grid (A) ⁶	60.6		75.8
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion		<3%	
AC Output Data (Back-up)			
Back-up Nominal Apparent Power (VA)	40000		50000
Max. Output Apparent Power (VA)	44000 (48000 @ 60sec, 60000 @ 10sec)		55000 (60000 @ 60sec, 75000 @ 10sec)
Max. Output Current (A) ⁷	66.7		83.3
Nominal Output Voltage (V)		380 / 400, 3L / N / PE	
Nominal Output Frequency (Hz)		50 / 60	
Output THDv (@Linear Load)		< 3%	
Efficiency			
Max. Efficiency		98.1%	
European Efficiency		97.5%	
Max. Battery to AC Efficiency		97.7%	
MPPT Efficiency		99.0%	
Protection			
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	
Remote Shutdown		Integrated	
General Data			
Operating Temperature Range (°C)		-35 ~ +60	
Relative Humidity		0 ~ 95%	
Max. Operating Altitude (m)		4000	
Cooling Method		Smart Fan Cooling	
User Interface		LED, WLAN + APP	
Communication with BMS		CAN	
Communication with Meter		RS485	
Communication with Portal		LAN / 4G (Optional)	
Weight (kg)	62		65
Dimension (W x H x D mm)		520 x 660 x 260	
Topology		Non-isolated	
Self-consumption at Night (W)		<15	
Ingress Protection Rating		IP66	
Mounting Method		Wall Mounted	

*1: For most of the PV module, the max. input power can achieve 2*P_n, Such as the max. input power of GW50K-ET can achieve 100kW.

*2: Output Voltage Range: phase voltage.

*3: When the input voltage is greater than 980V, the inverter will enter standby mode, and when the voltage returns to below 970V the inverter will return to normal operation.

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

*5: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.

*6: When Nominal Output Voltage is 400V, the Max. AC Current From Utility Grid is 58.0A for GW40K-ET-10 and 72.5A for GW50K-ET-10.

*7: When Nominal Output Voltage is 400V, the Max. Output Current is 63.8A for GW40K-ET-10 and 79.7A for GW50K-ET-10.

*: Please visit GoodWe website for the latest certificates.