

GoodWe C&I Outdoor Energy Storage Solution

ET 50kW / BAT 100kWh



ET Series

40/50kW | Three Phase | 3/4 MPPTs
Hybrid Inverter (HV)

GoodWe's ET Series inverters, available in 40kW and 50kW capacities, are designed for commercial and industrial PV installations. These adaptable inverters seamlessly integrate into both on-grid and off-grid applications, facilitating parallel connections in either scenario. When paired with the Static Transfer Switch (STS) Box from GoodWe, the inverter not only ensures dependable UPS-level switching to backup mode but also interacts with diesel generators to efficiently replenish batteries. Moreover, the ET Series is compatible with diverse battery capacities and brands, including the GoodWe Lynx C, offering a comprehensive energy storage solution.



Flexible & Adaptable Applications

- Supports parallel connection in both on- and off-grid modes
- Up to 150% DC input oversizing
- 4 MPPTs, Max. efficiency up to 98.1%



Smart Control & Monitoring

- 110% unbalanced output
- UPS-level switching



Superb Safety & Reliability

- Optional Type I+II SPD on DC side¹
- IP66 protection for outdoor installation safety
- AFCI optional¹



Friendly & Thoughtful Design

- Elegant and compact design
- Plug & Play installations

¹: Optional functions or devices are purchased separately.

Technical Data		GW40K-ET-10	GW50K-ET-10
Battery Input Data			
Battery Type		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) ^{*2}		1000	
MPPT Operating Voltage Range (V)		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)			
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) ^{*3}		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		75.8
Max. AC Current From Utility Grid (A)	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)*requires additional STS box			
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)	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 × H × D mm)		520 × 660 × 260	
Topology		Non-isolated	
Self-consumption at Night (W)		< 15	
Ingress Protection Rating		IP66	
Mounting Method		Wall Mounted	

*1: In Australia, for most of the PV module, the max. Input power can achieve 2*Pn, Such as the max. input power of GW50K-ET can achieve 100000W.

*2: 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.

*3: Output Voltage Range: phase voltage.

*: Please visit GoodWe website for the latest certificates.

BAT Series

102.4/112.6kWh | C&I Battery System

GoodWe's BAT Series high-voltage lithium batteries, available in 102.4kWh and 112.6kWh capacities, are specifically designed for small to medium-sized commercial and industrial (C&I) applications.

Paired with GoodWe ET hybrid inverters, the BAT 102.4/112.6kWh battery system provides a compact, easy-to-install, and high-performance turnkey energy storage solution. This powerful system delivers efficient energy backup, peak shaving, and optimized load management. Additionally, it supports parallel connections of up to 4 clusters, enabling expansion to 450.4kWh to meet growing energy storage demands.



COMING
SOON



Flexible & Adaptable Applications

- 0.9C/1.1C rated battery @Max. Charge/Discharge
- Support parallel connection for easy system expansion



Superb Safety & Reliability

- Reliable LFP technology with high cycle stability
- Aerosol-based fire suppression system at cabinet-level
- Long cycle life, >6000 times



Friendly & Thoughtful Design

- Highly integrated cabinet for easy transportation and installation
- Modular design for easier O&M



Smart Control & Monitoring

- Remote monitoring & updates
- Smart energy management system

Technical Data		GW102.4-BAT-AC-G10	GW112.6-BAT-AC-G10
Battery System			
Cell Type	LFP (LiFePO4)		
Cell Capacity (Ah)	100		
Rated Capacity (Ah)	200		
Pack Type / model	GW10.2-PACK-ACI-G10		
Pack Nominal Energy (kWh)	10.24		
Pack Configuration	2P160S	2P176S	
Pack Weight (kg)	<90		
Number of Packs	10	11	
Nominal Energy (kWh)	102.4	112.6	
Usable Energy (kWh) ^{*1}	100	110	
Nominal Voltage (V)	512.0	563.2	
Operating Voltage Range (V)	459.2 ~ 577.6	505.12 ~ 635.36	
Charging Operating Temperature Range (°C)	-20 ~ +55		
Discharging Operating Temperature Range (°C)	-20 ~ +55		
Max. Charge / Discharge Current (A) ^{*2}	180 / 220		
Max. Charge / Discharge Rate ^{*2}	0.9C / 1.1C		
MAX. CHARGE / DISCHARGE POWER (KW) ^{*2}	92.1 / 112.6	101.3 / 123.9	
Cycle Life	6000 (25 ± 2°C, 0.5C, 90%DOD, 70%EOL)		
Depth of Discharge	100%		
Efficiency			
Round-trip Efficiency	96%@100%DOD, 0.2C, 25 ± 2°C		
General Data			
Operating Temperature Range (°C)	-20 ~ +55°C		
Storage Temperature (°C)	+35°C ~ +45°C(<6 Months); -20°C ~ +35°C(<1 Year)		
Relative Humidity	0 ~ 100% (Condensationless)		
Max. Operating Altitude (m)	4000		
Cooling Method	Air Conditioner		
User Interface	LED		
Communication	CAN (RS485 Optional)		
Weight (kg)	<1310	<1400	
Dimension (W × H × D mm)	1055 × 2000 × 1055		
Ingress Protection Rating	IP55		
Anti-corrosion Class	C4 (C5-M Optional)		
Fire safety equipment	Aerosol (Cabinet Level)		
Certification ^{*3}			
Safety Regulation	IEC62619 / IEC63056 / IEC60730 / IEC62477 / VDE2510 / ISO13849 IEC62040 / N140 / EU 2023 / 1542		
EMC	IEC / EN61000-6-1 / 2 / 3 / 4		

*1: Test conditions, 100% DOD, 0.2C charge & discharge at +25 ± 2°C for battery system at beginning life. System Usable Energy may vary with system configuration.

*2: Actual Dis- / Charge Current and power derating will occur related to Cell Temperature and SOC. And, Max C-rate continuous time is affected by SOC, Cell Temperature, Atmosphere environment temperature.

*3: Not all certifications & standards listed, check the official website for detail.

*: Please visit GoodWe website for the latest certificates.

*: As a part of our policy of continuous improvement, we reserve the right to alter design and specifications without further notice.

Driving the World's Smart Energy Future



Scan and Follow GoodWe

Disclaimer

The technical data above mentioned may be modified in order to reflect continuous technical innovation and improvements achieved by GoodWe's R & D team. GoodWe has the sole right to make such modification at any time without further notice. GoodWe's customers have the right to request the latest version of GoodWe product datasheets and any commercial contracts that may be signed will be based on the most recent version of the datasheet at the moment of signing the contract.