

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

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)					
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) ^{*2}			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)*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) ^{*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 × H × D mm)			520 × 660 × 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*Pn, 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.