

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		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) ²	60000	75000	
Max. Input Voltage (V)		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) ^{††}			
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	
Operating Environment		Outdoor	
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	
Country of Manufacture		China	

*1: Backup function can be only realized with STS Box (Static Transfer Switch Box).

*2: 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.

*3: Output Voltage Range: phase voltage.

*: Please visit GoodWe website for the latest certificates.

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