GOODWE

ET Series

40/50kW I Three Phase I 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%

Superb Safety & Reliability

- Optional Type I+II SPD on DC side[1]
- IP66 protection for outdoor installation safety
- AFCI optional[1]

Smart Control & Monitoring

- 110% unbalanced output
- UPS-level switching

Friendly & Thoughtful Design

- Elegant and compact design
- Plug & Play installations

1: Optional functions or devices are purchased separately.

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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 - 55 / 55 - 65	
Max. AC Current Output to Utility Grid (A)*4	60.6 @ 380V 58.0 @ 400V	75.8 @ 380V 72.5 @ 400V
Max. AC Current From Utility Grid (A)*4	60.6 @ 380V 58.0 @ 400V	75.8 @ 380V 72.5 @ 400V
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Max. Total Harmonic Distortion	<3%	
AC Output Data (Back-up)*1		
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 @ 380V 63.8 @ 400V	83.3 @ 380V 79.7 @ 400V
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	RS485, WiFi + LAN + Bluetooth, 4G + Bluetooth (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	
Protective Class	I	
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.
*4: For 400 V grid: Max. AC current (to/from grid) is 58 A for GW40K-ET-10 and 72.5 A for GW50K-ET-10.
*: Please visit GoodWe website for the latest certificates.
**: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.