

ETC Series

50/100kW | Three phase | 1/2 MPPT
Hybrid inverter (HV)

The GoodWe ETC Series is a versatile three-phase hybrid inverter designed to accommodate a wide battery voltage range, spanning from 200 to 865V. Its user-friendly Plug & Play modularized design consists of five main modules: MPPT, DC/DC, DC/AC, STS, and EMS. This design approach offers increased flexibility and simplifies the installation process.

Featuring UPS-level switching with an impressive response time of less than 10ms, the GoodWe ETC Series ensures a seamless and uninterrupted power supply for critical loads. Additionally, it incorporates a Type II SPD for enhanced system safety. The combination of the ETC hybrid inverters and the GoodWe battery system Lynx C (ranging from 101kWh to 156kWh) creates a highly efficient energy storage solution. This solution is an excellent choice for commercial and industrial applications, whether the goal is to increase self-consumption, implement peak load shaving, or establish a robust backup power system.



Smart Control & Monitoring

- <10ms UPS-level switching
- Multi-protocol communication



Friendly & Thoughtful Design

- Modularized design
- Plug & Play



Superb Safety & Reliability

- Built-in Type II SPD (Type I + II offered as optional configuration)
- Integrated remote shutdown



Flexible & Adaptable Applications

- Peak load shaving
- 100% unbalanced output

Technical Data	GW50K07-ETC	GW50K06-ETC ^{*1}	GW100K07-ETC	GW100K06-ETC ^{*1}
Battery Input Data				
Battery Type	Li-Ion			
Nominal Battery Voltage (V)	422.4 / 499.2 / 576.0 / 652.8			
Battery Voltage Range (V)	200 ~ 865			
Start-up Voltage (V)	200			
Number of Battery Input	1	1	2	2
Max. Continuous Charging Current (A)	100	100	100 / 100	100 / 100
Max. Continuous Discharging Current (A)	100	100	100 / 100	100 / 100
Max. Charging Power (kW)	50	50	100	100
Max. Discharging Power (kW)	55	55	110	110
PV String Input Data				
Max. Input Power (kW)	65	65	130	130
Max. Input Voltage (V)	1000			
MPPT Operating Voltage Range (V)**	250 ~ 960			
Start-up Voltage (V)	250			
Nominal Input Voltage (V)	600			
Max. Input Current per MPPT (A)	100			
Max. Short Circuit Current per MPPT (A)	125			
Number of MPP Trackers	1	1	2	2
AC Output Data (On-grid)				
Nominal Output Power (kW)	50	50	100	100
Nominal Apparent Power Output to Utility Grid (kVA)	50	50	100	100
Max. Apparent Power Output to Utility Grid (kVA)	55	55	110	110
Max. Apparent Power from Utility Grid (kVA)	55	55	110	110
Nominal Output Voltage (V)	400, 3L / N / PE			
Output Voltage Range (V)	312 ~ 460 (AU); 318 ~ 497 (Germany)			
Nominal AC Grid Frequency (Hz)	50 / 60			
AC Grid Frequency Range (Hz)	47 ~ 52 (AU); 47.5 ~ 51.5 (Germany)			
Max. AC Current Output to Utility Grid (A)	79.8	79.8	159.5	159.5
Max. AC Current from Utility Grid (A)	79.8	79.8	159.5	159.5
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 (kVA)	50	-	100	-
Max. Output Apparent Power without Grid (kVA)	55	-	110	-
Max. Output Apparent Power with Grid (kVA)	55	-	110	-
Max. Output Current (A)	79.8	-	159.5	-
Nominal Output Voltage (V)	400	-	400	-
Nominal Output Frequency (Hz)	50 / 60	-	50 / 60	-
Output THDv (@Linear Load)	<3%	-	<3%	-
Efficiency				
Max. Efficiency	97.6%			
European Efficiency	97.3%			
Max. Battery to AC Efficiency	97.2%			
MPPT Efficiency	99.9%			
Protection				
PV Insulation Resistance Detection	Integrated			
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			
AC Switch	Integrated			
DC Surge Protection	Type II (Type I + II Optional)			
AC Surge Protection	Type II (Type I + II Optional)			
Remote Shutdown	Integrated			
General Data				
Operating Temperature Range (°C)	-20 ~ +60 (>45°C derating)			
Relative Humidity	0 ~ 95% (Non-condensing)			
Max. Operating Altitude (m)	4000			
Cooling Method	Smart Fan Cooling			
User Interface	LED, LCD, WLAN + APP			
Communication with BMS	RS485, CAN			
Communication with Meter	RS485			
Communication with Portal	RS485, LAN			
Weight (kg)	184.5	170.0	239.5	225.0
Dimension (W × H × D mm)	585 × 1360 × 750			
Topology	Non-isolated			
Ingress Protection Rating	IP20			
Mounting Method	Grounded			
Country of Manufacture	China			

*1: The models with the "06" suffix do not include an automatic switching module, specifically designed for 'grid-tied' applications.

*: Please visit GoodWe website for the latest certificates.

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