

# 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 <sup>*1</sup>	GW100K07-ETC	GW100K06-ETC <sup>*1</sup>
<b>Battery Input Data</b>				
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
<b>PV String Input Data</b>				
Max. Input Power (kW)	65	65	130	130
Max. Input Voltage (V)		1000		
MPPT Operating Voltage Range (V) <sup>**</sup>		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
<b>AC Output Data (On-grid)</b>				
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%		
<b>AC Output Data (Back-up)</b>				
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%	-
<b>Efficiency</b>				
Max. Efficiency		97.6%		
European Efficiency		97.3%		
Max. Battery to AC Efficiency		97.2%		
MPPT Efficiency		99.9%		
<b>Protection</b>				
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		
<b>General Data</b>				
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 x H x D mm)		585 x 1360 x 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.