

GOODWE

ET Series

5-10kW | Three Phase HV Hybrid Inverter

The GoodWe ET series is a three-phase high voltage energy storage inverter that enables enhanced energy independence and maximizes self-consumption through an export limit feature and time of use shifts for reduced electricity bills. Covering a power range of 5kW to 10kW, the ET series allows up to 110% overloading to maximize power output and features Uninterruptible Power Supply (UPS) to inductive loads such as air conditioners or refrigerators. With an automatic switchover time of less than 10 milliseconds, the inverter can provide grid-tied savings when the grid is up and off-grid independence and security when it is down or compromised.



98.2% Maximum System Efficiency



8 ms UPS-level Switching



100% Unbalanced Load



Battery Voltage 180-600V

Technical Data	GW5K-ET	GW6.5K-ET	GW8K-ET	GW10K-ET
Battery Input Data				
Battery Type	Li-Ion	Li-Ion	Li-Ion	Li-Ion
Battery Voltage Range (V)	180~600	180~600	180~600	180~600
Max. Charging Current (A)	25	25	25	25
Max. Discharging Current (A)	25	25	25	25
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	Self-adaption to BMS	Self-adaption to BMS	Self-adaption to BMS
PV String Input Data				
Max. DC Input Power (W)	6500	8450	9600	13000
Max. DC Input Voltage (V)* ¹	1000	1000	1000	1000
MPPT Range (V)* ²	200~850	200~850	200~850	200~850
Start-up Voltage (V)	180	180	180	180
Min. Feed-in Voltage (V)	210	210	210	210
MPPT Range for Full Load (V)* ³	240~850	310~850	380~850	460~850
Nominal DC Input Voltage (V)* ⁴	620	620	620	620
Max. Input Current (A)	12.5 / 12.5	12.5 / 12.5	12.5 / 12.5	12.5 / 12.5
Max. Short Current (A)	15.2 / 15.2	15.2 / 15.2	15.2 / 15.2	15.2 / 15.2
Number of MPPTs	2	2	2	2
Number of Strings per MPPT	1 / 1	1 / 1	1 / 1	1 / 1
AC Output Data (On-grid)				
Nominal Apparent Power Output to Utility Grid (VA)	5000	6500	8000	10000
Max. Apparent Power Output to Utility Grid (VA)* ^{5,9}	5500	7150	8800	11000
Max. Apparent Power from Utility Grid (VA)	10000	13000	15000	15000
Nominal Output Voltage (V)	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE
Nominal Output Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60
Max. AC Current Output to Utility Grid (A)	8.5	10.8	13.5	16.5
Max. AC Current from Utility Grid (A)	15.2	19.7	22.7	22.7
Output Power Factor		~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Output THDi (@Nominal Output)	<3%	<3%	<3%	<3%
AC Output Data (Back-up; Optional)				
Max. Output Apparent Power (VA)	5000	6500	8000	10000
Peak Output Apparent Power (VA)* ⁶	10000, 60sec	13000, 60sec	16000, 60sec	16500, 60sec
Max. Output Current (A)	8.5	10.8	13.5	16.5
Nominal Output Voltage (V)	400/380	400/380	400/380	400/380
Nominal Output Frequency (Hz)	50/60	50/60	50/60	50/60
Output THDv (@Linear Load)	<3%	<3%	<3%	<3%
Efficiency				
Max. Efficiency	98.0%	98.0%	98.2%	98.2%
Max. Battery to Load Efficiency	97.5%	97.5%	97.5%	97.5%
European Efficiency	97.2%	97.2%	97.5%	97.5%
Protection				
Anti-Islanding Protection	Integrated	Integrated	Integrated	Integrated
PV String Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated	Integrated
Output Short Protection	Integrated	Integrated	Integrated	Integrated
Battery Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated	Integrated
General Data				
Operating Temperature Range (°C)	-35~60	-35~60	-35~60	-35~60
Relative Humidity	0~95%	0~95%	0~95%	0~95%
Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000
Cooling	Natural Convection	Natural Convection	Natural Convection	Natural Convection
Noise (dB)	<30	<30	<30	<30
User Interface	LED & APP	LED & APP	LED & APP	LED & APP
Communication with BMS* ⁷	RS485; CAN	RS485; CAN	RS485; CAN	RS485; CAN
Communication with Meter	RS485	RS485	RS485	RS485
Communication with EMS	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)
Communication with Portal	Wi-Fi	Wi-Fi	Wi-Fi	Wi-Fi
Weight (Kg)	24	24	24	24
Size (Width × Height × Depth mm)	415 × 516 × 180	415 × 516 × 180	415 × 516 × 180	415 × 516 × 180
Mounting	Wall Bracket	Wall Bracket	Wall Bracket	Wall Bracket
Protection Degree	IP66	IP66	IP66	IP66
Standby Self-Consumption (W)* ⁸	<15	<15	<15	<15
Topology	Battery Non-Isolation	Battery Non-Isolation	Battery Non-Isolation	Battery Non-Isolation

*¹: For 1000V system, Maximum operating voltage is 950V.
 For AustraliaL safety, there will be a warning if PV voltage > 600V.
 *²: For AustraliaL safety, MPPT range is 200~550V.
 *³: For AustraliaL safety, MPPT voltage upper limit is 550V.
 *⁴: For AustraliaL safety, nominal DC input voltage is 450V.
 *⁵: According to the local grid regulation.

*⁶: Can be reached only if PV and battery power is enough.
 *⁷: CAN communication is configured by default. If 485 communication is used, please replace the corresponding communication line.
 *⁸: No Back-up Output.
 *⁹: For Belgium Max. Output Apparent Power (VA): GW5K-ET is 5000; GW6.5K-ET is 6500; GW8K-ET is 8000; GW10K-ET is 10000.
 *: Please visit GoodWe website for the latest certificates.