

Maximising energy back-up for high-power PV rooftops

- ✓ Optimised energy autonomy
- ✓ Smart and efficient operations
- ✓ Modern and compact design
- ✓ Highest safety standards

The trend of increasing PV module yield is influencing overall PV system requirements. At the forefront of development, GoodWe's ET inverters efficiently meet the needs of powerful solar rooftops to facilitate energy back-up, peak shaving and load management for optimised autonomy and reduced energy cost. The ET series can be combined with a range of battery capacities and brands, including the GoodWe Lynx Home F.

-  Peak shaving
-  UPS level switching <math>< 10\text{ms}</math>
-  Powerful back-up overload



Technical Data	GW15K-ET	GW20K-ET	GW25K-ET	GW29.9K-ET
Battery Input Data				
Battery Type			Li-Ion	
Nominal Battery Voltage (V)			500	
Battery voltage range (V)			200 ~ 800	
Start-up Voltage (V)			180	
Number of Battery Input	1	1	2	2
Max. Continuous Charging Current (A)	50	50	50 × 2	50 × 2
Max. Continuous Discharging Current (A)	50	50	50 × 2	50 × 2
Max. Charging Power (W)	15000	20000	12500 × 2	15000 × 2
Max. Discharging Power (W)	15000	20000	12500 × 2	15000 × 2
PV String Input Data				
Max. Input Power (W) ¹	22500	30000	37500	45000
Max. Input Voltage (V) ²			1000	
MPPT Operating Voltage Range (V)			200 ~ 850	
Start-up Voltage (V)			200	
Nominal Input Voltage (V)			620	
Max. Input Current per MPPT (A)			30	
Max. Short Circuit Current per MPPT (A)			38	
Number of MPP Trackers	2	2	3	3
Number of Strings per MPPT	2 / 2	2 / 2	2 / 2 / 2	2 / 2 / 2
AC Output Data (On-grid)				
Nominal Output Power (W)	15000	20000	25000	29900
Nominal Apparent Power Output to Utility Grid (VA)	15000	20000	25000	29900
Max. Apparent Power Output to Utility Grid (VA)	16500	22000	27500	29900
Max. Apparent Power from Utility Grid (VA)	22500	30000	33000	33000
Nominal Output Voltage (V)			380 / 400, 3L / N / PE	
Nominal AC Grid Frequency (Hz)			50 / 60	
Max. AC Current Output to Utility Grid (A) ⁶	25.0	33.3	41.7	49.8
Max. AC Current From Utility Grid (A)	34.0	45.0	50.0	50.0
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)	15000	20000	25000	29900
Max. Output Apparent Power without Grid(VA) ⁴	15000 (18000@60s, 24000@3s)	20000 (24000@60s, 32000@3s)	25000 (30000@60s)	30000 (36000@60s)
Max. Output Apparent Power with Grid (VA) ³	15000	20000	25000	29900
Max. Output Current (A)	22.7 (27.3@60s, 36.4@3s)	30.3 (36.4@60s, 48.5@3s)	37.9 (45.5@60s)	45.5 (54.5@60s)
Nominal Output Voltage (V)			380 / 400	
Nominal Output Frequency (Hz)			50 / 60	
Output THDv (@Linear Load)			<3%	
Efficiency				
Max. Efficiency			98.0%	
European Efficiency			97.5%	
Max. Battery to AC Efficiency			97.5%	
MPPT Efficiency			99.9%	
Protection				
PV String Current Monitoring			Integrated	
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	
DC Surge Protection			Type II	
AC Surge Protection			Type III	
AFCI			Optional	
Remote Shutdown			Integrated	
General Data				
Operating Temperature Range (°C)			-35 ~ +60	
Relative Humidity			0 ~ 95%	
Max. Operating Altitude (m)			4000	
Cooling Method			Smart Fan Cooling	
User Interface			LED, WLAN + APP	
Communication with BMS			RS485 / CAN	
Communication with Meter			RS485	
Communication with Portal			WiFi / 4G	
Weight (kg)	48	48	54	54
Dimension (W × H × D mm)			520 × 660 × 220	
Noise Emission (dB)	<45	<45	<45	<60
Topology			Non-isolated	
Self-consumption at Night (W) ⁵			<15	
Ingress Protection Rating			IP66	
Mounting Method			Wall Mounted	

1: Max. Input Power, not continuous for 1.5 normal power.
 *2: For 1000V system, Maximum operating voltage is 950V.
 *3: According to the local grid regulation.
 *4: Can be reached only if PV and battery power is enough.

*5: No Back-up Output.
 *6: For 400V grid, the Max. AC Current Output to Utility Grid is 23.9A for GW15K-ET, 31.9A for GW20K-ET, 39.9A for GW25K-ET, 43.3A for GW29.9K-ET.
 *: Please visit GoodWe website for the latest certificates.