# GOODWE

# **ET** Series

### 15-29.9 kW I Three phase Up to 3 MPPTs I Hybrid Inverter (HV)

The GoodWe ET 15kW-29.9kW Series inverter is ideal for residential, small to medium commercial and industrial applications. As the core of an energy storage solution, the ET inverter massively lowers energy costs by efficiently storing the solar power for flexible use and increasing self-consumption. Peak shaving balances power demand and grid power imported, to effectively reduce extra grid demand for the most costeffective use for your property. When paired with the GoodWe Home F Series battery, this offers a one-stop shop solution for Three Phase systems. This series is available in 15kW, 20kW, 25kW and 29.9kW models.



#### Friendly & Thoughtful Design

· Elegant and compact design

Plug & Play installations



#### Superb Safety & Reliability

Smart Control & Monitoring

· Integrated dry contact for external loads

Type II SPD on DC side
 AFCI optional<sup>1</sup>

· Peak shaving

Flexible & Adaptable Applications

· Max 15A DC input current per string

· Up to 200% DC input oversizing

## ET 15-29.9kW Series

### GOODWE

Technical Data	GW15K-ET	GW20K-ET	GW25K-ET	GW29.9K-E
Battery Input Data				
Battery Type		1	lon	
Nominal Battery Voltage (V)	500			
Battery voltage range (V)	200 ~ 800			
Start-up Voltage (V) Number of Battery Input	1	1	2	2
Max. Continuous Charging Current (A)	50	50	2	2
Max. Continuous Discharging Current (A)	50	50	50 × 2	50 × 2
Max. Charging Power (W)	15000	20000	25000	30000
Max. Discharging Power (W)	15000	20000	25000	30000
PV String Input Data				
Max. Input Power (W) <sup>*1</sup>	30000	40000	50000	59800
Max. Input Voltage (V) <sup>2</sup> MPPT Operating Voltage Range (V)			00 ~ 850	
Start-up Voltage (V)			00	
Nominal Input Voltage (V)			20	
Max. Input Current per MPPT (A) Max. Short Circuit Current per MPPT (A)			8	
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)*3	16500	22000	27500	29900
Max. Apparent Power from Utility Grid (VA) <sup>-7</sup> Nominal Output Voltage (V)	15000	20000	25000 31 / N / PE	30000
Output Voltage Range (V) <sup>4</sup>	380 / 400, 3L / N / PE 0 ~ 300			
Nominal AC Grid Frequency (Hz)			/ 60	
AC Grid Frequency Range (Hz) Max. AC Current Output to Utility Grid (A)	23.9	31.9	~ <u>65</u> 39.9	43.3
Max. AC Current From Utility Grid (A)*8	23.9	29.0	36.2	43.3
Nominal Output Current (A)	21.7	29.0	36.2	43.3
Power Factor			8 leading~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) <sup>5</sup> Max. Output Apparent Power with Grid (VA)	15000 (18000@60s, 24000@3s) 15000	20000 (24000@60s, 32000@3s) 20000	25000 (30000@60s) 25000	30000 (36000@60 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)	· · ·		/ 400	
Nominal Output Fregency (Hz) Output THDv (@Linear Load)			/ 60	
Efficiency				
Max. Efficiency European Efficiency	98.0% 97.5%			
Max. Battery to AC Efficiency			5%	
MPPT Efficiency		99	9%	
Protection				
PV String Current Monitoring		Intec	rated	
PV Insulation Resistance Detection	Integrated			
Residual Current Monitoring		Integ	rated	
Residual Current Monitoring PV Reverse Polarity Protection		Integ Integ	rated rated	
Residual Current Monitoring		Integ Integ Integ	rated	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection		Integ Integ Integ Integ Integ	rated rated rated rated rated	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-Islanding Protection AC Overcurrent Protection AC Short Circuit Protection		Integ Integ Integ Integ Integ Integ Integ	rated rated rated rated rated rated	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection		Integ Integ Integ Integ Integ Integ Integ	rated rated rated rated rated	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection		Integ Integ Integ Integ Integ Integ GHX	rated rated rated rated rated rated 6-55P 6-11 6-11 6-11 6-11 6-11 6-11 6-11 6-1	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection		Integ Integ Integ Integ Integ Integ GHX Typ	rated rated rated rated rated rated rated -55P be II e III	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AC Surge Protection AFCI		Integ Integ Integ Integ Integ Integ GHX Typ	rated rated rated rated rated rated 6-55P 6-11 6-11 6-11 6-11 6-11 6-11 6-11 6-1	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AFCI General Data		Integ Integ Integ Integ Integ Integ GHX Typ Opt	rated rated rated rated rated rated -55P be II e III onal	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AFCI General Data Operating Temperature Range (°C)		Integ Integ Integ Integ Integ Integ GHX Typ Opt	rated rated rated rated rated rated c-55P e II e III onal	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection DC Switch DC Surge Protection AC Surge Protection AC Surge Protection AFCI General Data Operating Temperature Range (°C) Relative Humidity		Integ Integ Integ Integ Integ Integ GHX Typ Opt	rated rated rated rated rated 6-55P e II e III onal	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AFCI General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method		Integ Integ Integ Integ Integ Integ GHX Typ Opt Opt -35 - 0 0 ~ 40 Smart Fa	rated rated rated rated rated rated rated a-55P be II e III onal *+60 95% 00 n Cooling	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Activational Protection AC Overcurrent Protection AC Short Circuit Protection C Switch DC Surge Protection AC Surge Protection AC Surge Protection AFCI General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface		Integ Integ Integ Integ Integ Integ GHX Typ Opt -35 - 0 ~ 4 C Smart Fa LED, WL	rated rated rated rated rated 6-55P e II e III e III onal * +60 95% 00 n Cooling AN + APP	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AC Surge Protection AFCI General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS		Integ Integ Integ Integ Integ Integ Integ GHX Typ Opt -35 - 0 ~ 4 C Smart Fa LED, WL RS48	rated rated rated rated rated rated rated 	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Activational Protection AC Overcurrent Protection AC Short Circuit Protection C Switch DC Surge Protection AC Surge Protection AC Surge Protection AFCI General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface		Integ Integ Integ Integ Integ Integ GHX Typ Opt Opt -35 - 0 ~ 40 Smart Fa LED, WL RS485 RS	rated rated rated rated rated 6-55P e II e III e III onal * +60 95% 00 n Cooling AN + APP	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Switch DC Surge Protection AC Surge Protection AFCI General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal Weight (kg)	48	Integ Integ Integ Integ Integ Integ Integ GHX Typ Opt -35 - 0 ~ 40 Smart Fa LED, WL RS488 RS WiFi 48	rated rated rated rated rated rated rated - rated - s5P 00 e III e III onal - +60 95% 00 00 n Cooling AN + APP / CAN 485 / 4G 54	54
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Overcurrent Protection AC Overvoltage Protection DC Switch DC Surge Protection AFCI General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm)		Integ Integ Integ Integ Integ Integ GHX Typ Opt 35 - 35 - 44 Smart Fa LED, WL RS488 RS WiFi 48 S20 × 6	rated rated rated rated rated rated rated 	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection DC Switch DC Surge Protection AC Overvoltage Protection AC Surge Protection AC Overvoltage Comparing Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Portal Weight (kg) Dimension (W × H × D mm) Noise Emission (dB)	48 <45	Integ Integ Integ Integ Integ Integ GHX Typ Opt 3-35 - 0 0 ~ 44 Smart Fa LED, WL RS488 RS WFI 48 520 × 6 <45	rated rated rated rated rated rated - rated - ra	54 <60
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Overcurrent Protection AC Overvoltage Protection DC Switch DC Surge Protection AFCI General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm)		Integ Integ Integ Integ Integ Integ GHX Typ Opt 35 - 35 - 0 ~ 40 Smart Fa LED, WL RS485 RS WiFi 48 520 × 6 <45 Non-is	rated rated rated rated rated rated 	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Activational Protection AC Overcurrent Protection AC Short Circuit Protection DC Surge Protection AC Overvoltage Protection AC Surge Surge Surger Surg		Integ Integ Integ Integ Integ Integ Integ GHX Typ Opt Integ Com Smart Fa So So So So So So So So So So So So So	rated rated rated rated rated rated - rated - rate	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Anti-islanding Protection AC Overcurrent Protection AC Short Circuit Protection AC Overvoltage Protection DC Surge Protection AC Surge Protection Self-consumption at Night (W) <sup>r6</sup> Ingress Protection Rating Overvoltage Category		Integ Integ Integ Integ Integ Integ Integ GHX Typ Opt Integ Com Smart Fa So So So So So So So So So So So So So	rated rated rated rated rated rated 	
Residual Current Monitoring PV Reverse Polarity Protection Battery Reverse Polarity Protection Activational Protection AC Overcurrent Protection AC Short Circuit Protection DC Surge Protection AC Overvoltage Protection AC Surge Surge Surger Surg		Integ Integ Integ Integ Integ Integ GHX Typ Opt 3-35 - 0 ~ 44 Smart Fa LED, WL RS48 RS WIFI 48 520 × 6 <45 Non-is FI DC II	rated rated rated rated rated rated - rated - rate	

\*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: Output Voltage Range: phase voltage.
\*5: Can be reached only if PV and battery power is enough.
\*6: No Back up Output.

\*6: No Back-up Output.
\*7: When the load is connected to the inverter's backup port, the Max.

Apparent Power from Utility Grid can reach to 22.5K for GW15K-ET, 30K for GW20K-ET, 33K for GW25K-ET, 33K for GW29.9K-ET, and 33K for GW30K-ET respectively. \*8: When the load is connected to the inverter's backup port, the Max. AC Current From Utility Grid can reach to 34A for GW15K-ET, 45A for GW20K-ET, 50A for GW25K-ET, 50A for GW29.9K-ET, and 50A for GW30K-ET respectively.

\*: Please visit GoodWe website for the latest certificates. \*: All pictures shown are for reference only. Actual appearance may vary.