



ES Uniq Series

3-6 kW

Technical Data		GW3000-ES-C10	GW3600-ES-C10	GW5000-ES-C10	GW6000-ES-C10
Battery Input Data					
Battery Type		Li-Ion / Lead-acid			
Nominal Battery Voltage (V)		48			
Battery Voltage Range (V)		40 ~ 60			
Start-up Voltage (V)		44.2			
Number of Battery Input		1			
Max. Continuous Charging Current (A)	70	90		120	140
Max. Continuous Discharging Current (A)	70	90		120	140
Max. Charging Power (kW)*1	3.0	3.6		5.0	6.0
Max. Discharging Power (kW)*1	3.3	3.96		5.5	6.6
PV String Input Data					
Max. Input Power (kW)	6.0	7.2		10.0	12.0
Max. Input Voltage (V)*2			600		
MPPT Operating Voltage Range (V)*3			60 ~ 550		
Start-up Voltage (V)			58		
Nominal Input Voltage (V)			360		
Max. Input Current per MPPT (A)	20	20		20	20
Max. Short Circuit Current per MPPT (A)	26	26		26	26
Number of MPPT Trackers	1	2		2	2
Number of Strings per MPPT	1	1		1	1
AC Output Data (On-grid)					
Nominal Output Power (kW)	3.0	3.6		5.0	6.0
Nominal Apparent Power Output to Utility Grid (kVA)	3.0	3.6		5.0	6.0
Max. AC Active Power (kW)*4,5	3.3	3.96*		5.5	6.6
Max. Apparent Power Output to Utility Grid (kVA)*4,5	3.3	3.96*		5.5	6.6
Max. Apparent Power from Utility Grid (kVA)	7.04	7.04		8.8	8.8
Nominal Output Voltage (V)*7			220 / 230 / 240		
Output Voltage Range (V)			170 ~ 280		
Nominal AC Grid Frequency (Hz)			50 / 60		
AC Grid Frequency Range (Hz)			45 ~ 55 / 55 ~ 65		
Max. AC Current Output to Utility Grid (A)	15	18**		25	30
Max. AC Current From Utility Grid (A)	32	32		40	40
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)	3.0	3.6		5.0	6.0
Max. Output Apparent Power without Grid (kVA)	3.3 (6.0, 10s)	3.96 (7.2, 10s)		5.5 (10.0, 10s)	6.6 (12.0, 10s)
Max. Output Apparent Power with Grid (kVA)	7.04	7.04		8.8	8.8
Max. Output Current without Grid (A)	15	18		25	30
Max. Output Current with Grid (A)	32	32		40	40
Nominal Output Voltage (V)			220 / 230 / 240		
Nominal Output Frequency (Hz)			50 / 60		
Output THDv (@Linear Load)			<3%		
AC Data (Generator)					
Nominal Apparent Power from AC generator (kVA)	3.0	3.6		5.0	6.0
Max. Apparent Power from AC generator (kVA)	3.3	3.96		5.5	6.6
Nominal Input Voltage (V)*7			220 / 230 / 240		
Input Voltage Range (V)			170 ~ 280		
Nominal AC generator Frequency (Hz)			50 / 60		
AC generator Frequency Range (Hz)			45 ~ 55 / 55 ~ 65		
Max. AC Current From AC generator (A)	32.0	32.0		40.0	40.0
Nominal AC Current From AC generator (A)	13.7 at 220V	16.4 at 220V		22.8 at 220V	27.3 at 220V
	13.1 at 230V	15.7 at 230V		21.8 at 230V	26.1 at 230V
	12.5 at 240V	15.0 at 240V		20.9 at 240V	25.0 at 240V
Nominal Input Current (A)	13.7 at 220V	16.4 at 220V		22.8 at 220V	27.3 at 220V
	13.1 at 230V	15.7 at 230V		21.8 at 230V	26.1 at 230V
	12.5 at 240V	15.0 at 240V		20.9 at 240V	25.0 at 240V
Efficiency					
Max. Efficiency			97.6%		
European Efficiency			96.2%		
Max. Battery to AC Efficiency			95.5%		
MPPT Efficiency			99.9%		
Protection					
PV String Current Monitoring			Integrated		
PV Insulation Resistance Detection			Integrated		
Residual Current Monitoring			Integrated		
PV Reverse Polarity Protection			Integrated		
Anti-islanding Protection			Integrated		
AC Overcurrent Protection			Integrated		
AC Short Circuit Protection			Integrated		
AC Overvoltage Protection			Integrated		
DC Switch			Integrated		
DC Surge Protection			Type III		
AC Surge Protection			Type III		
AFCI			Optional		
Rapid Shutdown			Optional		
Remote Shutdown			Integrated		
General Data					
Operating Temperature Range (°C)			-35 ~ +60		
Relative Humidity			0 ~ 95%		
Max. Operating Altitude (m)			3000		
Cooling Method			Natural Convection		
User Interface			LCD, WLAN + APP		
Communication with BMS			CAN		
Communication			RS485, WiFi + LAN + Bluetooth		
Communication Protocols			Modbus-RTU, Modbus-TCP		
Weight (kg)	14.5	15.5		15.5	15.5
Dimension (W x H x D mm)			560 x 415 x 204		
Topology			Non-isolated		
Ingress Protection Rating			IP66		
Mounting Method			Wall Mounted		

*1: When the PV input voltage is higher than 490V, the battery charging and discharging power will be gradually limited, and the power limitation will be lifted after the input voltage is lowered.

*2: When the input voltage is 580V-600V, the inverter will enter standby mode, and the voltage returns to 580V to enter the normal operation state.

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

*4: For Sri Lanka, Max. Output Power (kW) is 3.0kW for GW3000-ES-C10, 3.6kW for GW3600-ES-C10, 5.0kW for GW5000-ES-C10, 6.0kW for GW6000-ES-C10, 8.0kW for GW8000-ES-C10, 10.0kW for GW10K-ES-C10, and 12.0kW for GW12K-ES-C10.

*5: For Brazil and Chile, the max. AC output power is P_{in}, such as the max. AC output power of GW8000-ES-C10 is 8000W (VA).

*6: For Jordan, UK G98, Max. AC Active Power and Max. Apparent Power Output to Utility Grid are 3.6kW/kVA for GW3600-ES-C10.

*7: In South America, back-up output does not support relative phase (F-F) connections and 110-127V loads; Only supports relative neutral wire (F-N) 208-240V connection and 208-240V load.

*8: For Jordan, UK G98, Max. AC Current Output to Utility Grid is 15.7A for GW3600-ES-C10.

*: Please visit GoodWe website for the latest certificates.