



Smart Control for Smart Energy

- · Smart load control
- · Peak shaving



Superb Safety & Reliability

- · In-built Type II SPD on DC side
- · IP66 ingress protection



Friendly & Thoughtful Design

- · Fanless cooling for quiet operation
- · Elegant and compact design



Flexible & Adaptable Applications

- · Battery ready option
- · Maximum 16A DC input current per string



Technical Data	GW5KN-ET	GW6.5KN-ET	GW8KN-ET	GW10KN-E
Battery Input Data				
	Li-lon	Li-lon	Li-lon	Li-lon
Battery Type Nominal Battery Voltage (V)	500	500	500	500
		180 ~ 600		
Battery Voltage Range (V)	180 ~ 600		180 ~ 600	180 ~ 600
Max. Continuous Charging Current (A)	25	25 25	25 25	25 25
Max. Continuous Discharging Current (A)	25			
Max. Charging Power (W)	7500	8450	9600	10000
Max. Discharging Power (W)	7500	8450	9600	10000
PV String Input Data				
Max. Input Power (W)	7500	9700	12000	15000
Max. Input Voltage (V)	1000	1000	1000	1000
MPPT Operating Voltage Range (V) ²	200 ~ 850	200 ~ 850	200 ~ 850	200 ~ 850
Start-up Voltage (V)	180	180	180	180
Nominal Input Voltage (V)	620	620	620	620
Max. Input Current per MPPT (A)	16	16	16	16
Max. Short Circuit Current per MPPT (A)	21.2	21.2	21.2	
Number of MPP Trackers				21.2
	2	2	2	2
Number of Strings per MPPT	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)*2*4	5500	7150	8800	11000
Max. Apparent Power from Utility Grid (VA)	10000	13000	15000	15000
Nominal Output Voltage (V)	10000	400 / 380,		13000
Nominal AC Grid 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 Output to Utility Grid (A)	15.2	19.7	22.7	22.7
, , ,	15.2			22.1
Power Factor		~1 (Adjustable from 0.8	0 00 0/	00/
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%
AC Output Data (Back-up)				
Back-up Nominal Apparent Power (VA)	5000	6500	8000	10000
Max. Output Apparent Power (VA)*3	5000 (10000@60sec)	6500 (13000@60sec)	8000 (16000@60sec)	10000 (16500@60
Max. Output Apparent Fower (VA)	8.5	10.8	13.5	16.5
Nominal Output Voltage (V)	400 / 380	400 / 380	400 / 380	400 / 380
Nominal Output Frequency (Hz) Output THDv (@Linear Load)	50 / 60 <3%	50 / 60 <3%	50 / 60 <3%	50 / 60 <3%
	<3%	<3%	<3%	<3%
Efficiency				
Max. Efficiency	98.0%	98.0%	98.2%	98.2%
European Efficiency	97.2%	97.2%	97.5%	97.5%
Max. Battery to AC Efficiency	97.5%	97.5%	97.5%	97.5%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%
<u> </u>		00.070	00.070	00.070
Protection				
PV Insulation Resistance Detection	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated	Integrated
DC Surge Protection	Type II	Type II	Type II	Type II
3	Type III	Type III	, ,	
AC Surge Protection			Type III	Type III
Remote Shutdown	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%
Max. Operating Altitude (m)	4000	4000	4000	4000
Cooling Method	Natural Convection	Natural Convection	Natural Convection	Natural Convect
0	LED, APP	LED, APP	LED, APP	LED, APP
Llear Intertace		RS485, CAN	RS485, CAN	
User Interface	DC/0E CVVI			RS485, CAN
Communication with BMS ^{*5}	RS485, CAN		DO 40E	
Communication with BMS ^{'5} Communication with Meter	RS485, CAN RS485	RS485	RS485	RS485
Communication with BMS ^{*5} Communication with Meter Communication with Portal	RS485	RS485 WiFi / WiFi + LAN (Op	tional) / 4G (Optional)	
Communication with BMS ^{*5} Communication with Meter Communication with Portal Weight (kg)	RS485 24	RS485 WiFi / WiFi + LAN (Op 24	tional) / 4G (Optional) 24	24
Communication with BMS ^{*5} Communication with Meter Communication with Portal Weight (kg) Dimension (W x H x D mm)	RS485 24 415 × 516 × 180	RS485 WiFi / WiFi + LAN (Op 24 415 × 516 × 180	tional) / 4G (Optional) 24 415 × 516 × 180	24 415 × 516 × 18
Communication with BMS ⁻⁵ Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm) Topology	24 415 x 516 x 180 Non-isolated	RS485 WiFi / WiFi + LAN (Op 24 415 × 516 × 180 Non-isolated	tional) / 4G (Optional) 24 415 × 516 × 180 Non-isolated	24 415 × 516 × 18 Non-isolated
Communication with BMS ^{*5} Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm) Topology Self-consumption at Night (W) ^{*6}	24 415 x 516 x 180 Non-isolated <15	RS485 WiFi / WiFi + LAN (Op 24 415 × 516 × 180 Non-isolated <15	tional) / 4G (Optional) 24 415 × 516 × 180 Non-isolated <15	24 415 × 516 × 18 Non-isolated <15
Communication with BMS ^{*5} Communication with Meter Communication with Portal Weight (kg) Dimension (W x H x D mm)	24 415 x 516 x 180 Non-isolated	RS485 WiFi / WiFi + LAN (Op 24 415 × 516 × 180 Non-isolated	tional) / 4G (Optional) 24 415 × 516 × 180 Non-isolated	24 415 × 516 × 18 Non-isolated

^{*1:} For 1000V system, maximum operating voltage is 950V.

*2: According to the local grid regulation.

*3: Can be reached only if PV and battery power is enough.

*4: For Belgium Max. Output Apparent Power(VA): GW5KN-ET is 5000; GW6.5KN-ET is 6500; GW8KN-ET is 8000; GW10KN-ET is 10000.

^{*5:} CAN communication is configured default. If RS485 communication is used, please replace the corresponding communication line.
*6: No back-up output.
*: Please visit GoodWe website for the latest certificates.