ET Series

Three-phase Energy Storage Inverter

Technical Data

	GW5K-ET	GW8K-ET	GW10K-ET
Battery Input Data			
Battery Type	Li-Ion	Li-Ion	Li-Ion
Battery Voltage Range (V)	180~600	180~600	180~600
Max. Charging Current (A)	25	25	25
Max. Discharging Current (A)	25	25	25
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	Self-adaption to BMS	Self-adaption to BMS
PV String Input Data			
Max. DC Input Power (W)	6500	9600	13000
Max. DC Input Voltage (V)*	1000	1000	1000
MPPT Range (V)		200~850	
Start-up Voltage (V)	180	180	180
MPPT Range for Full Load (V)	240~850	380~850	460~850
Nominal DC Input Voltage (V)	620	620	620
Max. Input Current (A)	12.5/12.5	12.5/12.5	12.5/12.5
Max. Short Current (A)	15.2/15.2	15.2/12.5	15.2/12.5
No. of MPP Trackers	2	2	2
No. of Strings per MPP Tracker	1/1	1/1	1/1
AC Output Data (On-grid)			
Nominal Apparent Power Output to Utility Grid (VA)	5000	8000	10000
Max. Apparent Power Output to Utility Grid (VA)**	5500	8800	11000
Max. Apparent Power from Utility Grid (VA)	10000	15000	15000
Nominal Output Voltage (V)		400/380, 3L/N/PE	
Nominal Ouput Freqency (Hz)	50/60	50/60	50/60
Max. AC Current Output to Utility Grid (A)	8.5	13.5	16.5
Max. AC Current From Utility Grid (A)	15.2	22.7	22.7
Output Power Factor		~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Output THDi (@Nominal Output)	<3%	<3%	<3%
AC Output Data (Back-up)			
Max. Output Apparent Power (VA)	5000	8000	10000
Peak Output Apparent Power (VA)***	10000, 60sec	16000, 60sec	16500, 60sec
Max. Ouput Current (A)	8.5	13.5	16.5
Nominal Output Voltage (V)	400/380	400/380	400/380
Nominal Ouput Frequency (Hz)	50/60	50/60	50/60
Output THDv (@Linear Load)	<3%	<3%	<3%
Efficiency			
Max. Efficiency	98.0%	98.2%	98.2%
Max. Battery to Load Efficiency	97.5%	97.5%	97.5%
Euro Efficiency	97.2%	97.5%	97.5%
MPPT Efficiency	99.9%	99.9%	99.9%

Protection

Anti-islanding Protection	Integrated	Integrated	Integrated
PV String Input Reverse Polarity Protection	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated
Output Short Protection	Integrated	Integrated	Integrated
Battery Input Reverse Polarity Protection	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated

General Data

Operating Temperature Range (°C)	-35~60	-35~60	-35~60
Relative Humidity	0~95%	0~95%	0~95%
Operating Altitude (m)	≤4000	≤4000	≤4000
Cooling	Nature Convection	Nature Convection	Nature Convection
Noise (dB)	<30	<30	<30
User Interface	LED & APP	LED & APP	LED & APP
Communication with BMS	RS485; CAN	RS485; CAN	RS485; CAN
Communication with Meter	RS485	RS485	RS485
Communication with EMS	RS485 (Insulated)	RS485 (Insulated)	RS485 (Insulated)
Communicaiton with Portal	Wi-Fi	Wi-Fi	Wi-Fi
Weight (kg)	24	24	24
Size (Width*Height*Depth mm)	516*415*180	516*415*180	516*415*180
Mounting	Wall Bracket	Wall Bracket	Wall Bracket
Protection Degree	IP65	IP65	IP65
Standby Self Consumption (W)****	<15	<15	<15
Topology	Transformerless	Transformerless	Transformerless

Certifications & Standards

Grid Regulation	CEI 0-21; VDE4105-AR-N; VDE0126-1-1; EN50438; G83/2; G100
Safety Regulation	IEC62109-1&2, IEC62040-1
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN61000-4-16, EN61000-4-18, EN61000-4-29

*: Maximum operating voltage is 950V.
**: According to local grid regulation.
***: Can be reached only if PV and battery power is enough.
****: No Back-up output.