FOX ESS

DATASHEET

G-MAX PLUS-H-V1

COMMERCIAL AND INDUSTRIAL ENERGY STORAGE SYSTEM

The G-MAX PLUS-H-V1 accommodates "All-in-one" design philosophy, integrating battery with longevity, intelligent BMS, high performance PCS, preventive safety system, smart distribution system and heat dissipation management system into one standard container for standardized manufacturing(for outdoor application) and simpler installation.

50kW ··· 125kW

APPLICATION

Supports direct connection to PV, grid, backup load, and generator, supplying stable power in both on-grid and off-grid modes with a seamless switching time less than 10 ms.

SAFETY

Compartmentalized design with a preventive alarm system.

ECONOMIC

Zero power loss through efficient temperature control and frequency variation.

INTELLIGENT

Offers multiple operation modes, including Peak Shaving, Load Shedding, PV-Storage Energy Control, and Frequency Regulation. Operating data can be transmitted to Fox ESS Cloud via Ethernet or 4G.

AUGMENTABLE

Preconfigured during manufacturing, plug and play onsite. Capable of parallel connection upgrades for flexible system size application.

TECHNICAL SPECIFICATIONS

MODEL		GM241kWh-50kW-H	GM241kWh-60kW-H	GM241kWh-80kW-H	GM241kWh-100kW-H	GM241kWh-125kW-H
BATTERY SPECIFICATION						
Battery Type [V / Ah]				LFP 3.2 / 314		
Battery Pack Energy [kWh]				60.29		
Battery System Energy [kWh]				241		
Operating Voltage Range [V]				672 ~ 876		
Number of Temperature Sensors				128		
Max. Charging / Discharging Current [A]				190 / 190		
Battery Pack Protection Level				IP67		
PV SPECIFICATION						
Max. PV Array Power [kW]		100	120	160	200	250
Max. PV Input Power [kW]		100	120	160	200	250
Withstand Voltage [V]				1000		
PV DC Input Voltage Range [V]				180 ~ 950		
Start-up Voltage [V]				180		
Nominal DC Operating Voltage [V]				750		
MPPT Voltage Range [V]				180 ~ 850		
Max. Current per MPPT [A]				40		
Max. Short Circuit Current per MPPT [A]				50		
No. of MPPTs / Strings per MPPT		4 / 2	4 / 2	8 / 2	8 / 2	8 / 2
AC OUTPUT (GRID)						
Nominal AC Output Power [kW]		50	60	80	100	125
Max. AC Output Power [kVA]		55	66	88	110	137.5
Nominal AC Output Current [A]	380V	76.0	91.2	121.6	152.0	190.0
	400V	72.2	86.6	115.5	144.4	180.4
Max. AC Output Current [A]	380V	83.6	100.3	133.7	167.2	198.5
	400V	79.4	95.3	127.0	158.8	198.5
Nominal AC Voltage [V]				220 / 380, 230 / 400, 3W+N+PE		
AC Voltage Range				0.8*Un ~ 1.2*Un		
Nominal AC Frequency [Hz]				50 / 60		
Frequency Range [Hz]				50 / 60, ±5		
Power Factor				0.8 Leading ~ 0.8 Lagging		
Max. THDi [%]				< 3		
AC INPUT (GRID / GENERATOR)						
Max. AC Input Power [kVA]				207		
Max. Bypass Current [A]				300		
Nominal AC Voltage [V]				220 / 380, 230 / 400, 3W+N+PE		
Frequency Range [Hz]				50 / 60, ±5		
EPS OUTPUT (LOAD)						
Max. AC Output Power [kVA]		55	66	88	110	137.5
Peak. AC Output Power (10s) [kVA]				155		
LRA Current [A]				300		
Nominal AC Voltage [V]				220 / 380, 230 / 400, 3W+N+PE		
Nominal AC Frequency [Hz]				50 / 60		
Switching Time [ms]				< 10		
Max. THDv [%]				< 3 @ Rated Power		
EFFICIENCY						
Max. Round Trip Efficiency [%]				89.5		
Max. Efficiency [%]				98.0		
PROTECTION						
DC Input Switch				YES		
PV Reverse Polarity				YES		
AC Overcurrent Protection				YES		
AC Output Short Circuit Protection				YES		
AC / DC Surge Protection				Class II		
ISO Detection				YES		
Residual Current Detection				YES		
Ground Fault Detection				YES		
AFCI				YES		
String Current Detection				YES		
GENERAL SEPECIFICATION						
Dimensions (W * H * D) [mm]				1040 * 2230 * 1500		
Weight [kg]				< 2400		
Operating Temperature [°C]				-25 ~ 55		
Type of Cooling				Liquid Cooling		
Operating Altitude [m]				≤ 3000		
Humidity [%]				0 ~ 100		
Noise [dB]				<75 @ 1 m		
DOD [%]				0 ~ 100		
Cycle Life				≥ 8000		
Communication Interfaces				Ethernet / 4G		
Ingress Protection				IP55		
Corrosion Protection				C5		
Fire Protection				Smoke Detector, Heat Detector, Alarm Sounder, Cabinet-Level / PACK-Level Aerosol, Explosion Vent		
Diesel Generator Compatibility				YES		
PARALLEL UNITS						
Max. number of parallel units (On-grid) [pcs]				25		
Max. number of parallel units (Off-grid) [pcs]*1				10		

*1 Parallel switching cabinets are required for 6 to 10 pcs in parallel.