

# G-MAX Plus

## COMMERCIAL AND INDUSTRIAL ENERGY STORAGE SYSTEM

The G-MAX Plus Series 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 |
|--|--|-----------------|--|------------------|------------------|
| <b>BATTERY SPECIFICATION</b>                     |  |                 |  |                  |                  |
| Battery Type [V / Ah]                            |  |                 | LFP 3.2 / 314  |                  |                  |
| Battery Pack Capacity [kWh]                      |  |                 | 60.29  |                  |                  |
| Battery System Capacity [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   |                  |                  |
| <b>PV SPECIFICATION</b>                          |  |                 |  |                  |                  |
| 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            |
| <b>AC OUTPUT ( GRID )</b>                        |  |                 |  |                  |                  |
| 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            |
|  | 400V                                   | 72.2            | 86.6   | 115.5            | 144.4            |
| Max. AC Output Current [A]                       | 380V                                   | 83.6            | 100.3  | 133.7            | 167.2            |
|  | 400V                                   | 79.4            | 95.3   | 127.0            | 158.8            |
| Nominal AC Voltage [V]                           | 220 / 380, 230 / 400, 3W+N+PE or 3W+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                                    |                 |  |                  |                  |
| <b>AC INPUT ( GRID / GENERATOR )</b>             |  |                 |  |                  |                  |
| Max. AC Input Power [kVA]                        |  |                 | 207  |                  |                  |
| Max. Bypass Current [A]                          |  |                 | 300  |                  |                  |
| Nominal AC Voltage [V]                           | 220 / 380, 230 / 400, 3W+N+PE or 3W+PE |                 |  |                  |                  |
| Frequency Range [Hz]                             | 50 / 60, ±5                            |                 |  |                  |                  |
| <b>EPS OUTPUT ( LOAD )</b>                       |  |                 |  |                  |                  |
| 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 or 3W+PE |                 |  |                  |                  |
| Nominal AC Frequency [Hz]                        | 50 / 60                                |                 |  |                  |                  |
| Switching Time [ms]                              | < 10                                   |                 |  |                  |                  |
| Max. THDv [%]                                    | < 3 @ Rated Power                      |                 |  |                  |                  |
| <b>EFFICIENCY</b>                                |  |                 |  |                  |                  |
| Max. Round Trip Efficiency [%]                   |  |                 | 89.5   |                  |                  |
| Max. Efficiency [%]                              |  |                 | 98.0   |                  |                  |
| <b>PROTECTION</b>                                |  |                 |  |                  |                  |
| 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  |                  |                  |
| <b>GENERAL SPECIFICATION</b>                     |  |                 |  |                  |                  |
| Dimensions (W * H * D) [mm]                      |  |                 | 1040 * 2230 * 1500   |                  |                  |
| Weight [kg]                                      |  |                 | < 2600   |                  |                  |
| 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 @ 70% EOL   |                  |                  |
| Communication Interfaces                         |  |                 | Ethernet / 4G  |                  |                  |
| Ingress Protection                               |  |                 | IP55   |                  |                  |
| Corrosion Protection                             |  |                 | Standard C4, Optional C5   |                  |                  |
| Fire Protection                                  |  |                 | Smoke Detector, Heat Detector, Alarm Sounder, Cabinet-Level / PACK-Level Aerosol, Explosion Vent |                  |                  |
| Diesel Generator Compatibility                   |  |                 | YES  |                  |                  |
| <b>PARALLEL UNITS</b>                            |  |                 |  |                  |                  |
| 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.