

T-MAX PLUS *Ultra*

COMMERCIAL AND INDUSTRIAL ENERGY STORAGE SYSTEM

The T-MAX Plus Ultra 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			TM241kWh- 50kW-H	TM241kWh- 60kW-H	TM241kWh- 80kW-H	TM241kWh- 100kW-H	TM241kWh- 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, 3P4W				
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, 3P4W				
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, 3P4W				
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 @ 70% EOL				
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.