

• YOUR
• SMART
• ENERGY



Stax-M30/M50

COMMERCIAL SERIES

POWER

30/50 kW

CAPACITY

64.5-193.5 kWh



Ultimate Transport Flexibility: Truck, train, ship, or helicopter
—choose your ideal logistics route.

Quick Installation: No battery rack or wiring needed
— just stack and start.

Reliable Operation: AlphaESS BypassTech ensures continuity by isolating faults.

Maximize Battery Life: AI-driven diagnostics & calibration for SOC Consistency.

Easy Expansion: Plug-and-play batteries for seamless scaling.

200% PV input to boost profits

IP66 for tough outdoor environments

Stax-M30/M50

Model	Stax-M30	Stax-M50
System Specifications		
Rated Output Apparent Power	30 kVA	50 kVA
Rated Output Current	43.3 A (400V)	72.2 A (400V)
Capacity Range	64. 5~ 193.5 kWh*	96.75 ~ 193.5 kWh*
Battery Chemistry	LFP (LiFePO4)	
System Ingress Protection	IP66	
Operation Temperature Range	-20~50°C	
Communication	WIFI/LAN/4G(Optional)	
Warranty	10 Years Product Warranty, 10 Years Battery Performance Warranty	
Inverter Technical Specifications	M30-INV-AU	M50-INV-AU
PV Strings Input Data		
Max. PV Input Power	60 kW	100kW
Max. PV Input Voltage	1000 V	
Startup Voltage	180 V	
MPPT Voltage Range	150-850V	
Max. Input Current per MPPT	40A	
Max. PV Short-Circuit Current	45A	
MPPT Number / Max. Input String	3/2	4/2
Battery		
Max. Charge/ Discharge Power	30 kW	50 kW
Battery Voltage Range	150-800 V	
Max.Charge / Discharge Current	2×70A/2×70A	
AC Input & Output Data (Grid Side)		
Rated. Output Power	30kVA	50 kVA
Rated. Output Current	43.3 A	72.2A
Max. Input Power	60 kW	105 kW
Nominal AC voltage	220 V / 380V,230 V / 400 V	
Rated Frequency	50/60 Hz	
Back-up Output(On-Grid & Off Grid)		
Max Output Power (On-Grid)	60 kW	100 kW
Max.Continuous AC Passthrough	86.6 A	144.4 A
Max Output Power (Off-Grid)	31.5 kW(long term); 48 kW (2s)	52.5 KW(long term); 80 kW (2s)
Switch Time	< 10ms	
Rated Output Voltage	3L/N/PE, 220/380 V; 230/400 V	
Rated Output Current	43.3 A	72.2 A
Rated Output Power	30 kVA	50 kVA
Rated Frequency	50 / 60 Hz	
Input Generator		
Max. input power	30 kW	50 kW

*Test condition: Max. 0.5C charge/discharge at 25 ± 2°C.
**If the capacity is below the minimum capacity, the output power of the battery will decrease. For details, please consult AlphaESS engineers.
*** Max. charge/discharge current derating may occur with changes in temperature and SoC.

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StaX-M30/M50

Model	Stax-M30	Stax-M50
General data		
Inverter Max Efficiency	97.8%	
Dimensions (W*H*D)	530*880*290 mm	
Weight	73 kg	
Noise Emission	70 dB	
SPD	Type II	
Max. Operating Altitude	4000 m	
Certifications & Standards	IEC61000, IEC62109, AS4777, VDE4105, TOR R25, C10/11, EN50549, CEI 0-16, CEI 0-21, G99	
Country of Manufacture	China	
Protective class	I	
OVC	DC II AC III	
Inverter topology	non-isolated	
Inverter topology	AFDPF	
Battery Technical Specifications		
Module Model	M38280-S	
Module Capacity	10.75 kWh	
Depth of Discharge (DOD)	100% DoD	
Nominal Voltage	38.4V	
Max. Charging/Discharging Current	140A*	
Operating Temperature Range	0°C ~ 50°C (Charge) ; -20°C ~ 50°C (Discharge)	
Cycle Life	6000**	
Number of Connection	5-18***	
Dimensions (W x D x H)	550*615*251 mm	
Weight	93 kg	
Certification	UN38.3, IEC 62619, IEC 62040, IEC 61000-6-1/-3	

*Test condition: Max. 0.5C charge/discharge at 25 ± 2°C.
**If the capacity is below the minimum capacity, the output power of the battery will decrease. For details, please consult AlphaESS engineers.
*** Max. charge/discharge current derating may occur with changes in temperature and SoC.