

YOUR  
SMART  
ENERGY



# StaX-M30/M50

COMMERCIAL SERIES

## POWER

29.9/50 kW

## CAPACITY

72.3-216.9 kWh



**Modular Design for Ultimate Transport Flexibility**

**Stack-and-Go Quick Installation with No Racks or Wiring**

**Reliable Operation via AlphaESS Bypass Technology**

**Maximized Battery Lifespan with AI Diagnostics & Auto SOC Calibration**

**Seamless Plug-and-Play Battery Expansion**

**200% PV Oversizing for Higher ROI**

**IP66 Protection for Outdoor Environments**

# StaX-M30/M50

Model	StaX-M30	StaX-M50
<b>System Specifications</b>		
Rated Output Apparent Power	29.9 kVA	50 kVA
Rated Output Current	43.3 A (400V)	72.2 A (400V)
Capacity Range	72.3-216.9 kWh	108.45-216.9 kWh
Battery Chemistry	LFP (LiFePO <sub>4</sub> )	
System Ingress Protection	IP66	
Operating Temperature Range	-30-50 C	
Communication	Wi-Fi/LAN/4G(Optional)	
Warranty	5 Years Product Warranty, 10 Years Battery Performance Warranty	
<b>Inverter Technical Specifications</b>		
<b>PV Strings Input Data</b>		
Max. PV Input Power	59.8 kW	100 kW
Max. PV Input Voltage	1000 V	
Start-up Voltage	180 V	
MPPT Voltage Range	150-850 V	
Max. Input Current per MPPT	40 A	
Max. PV Short-Circuit Current	60 A	
MPPT Number / Max. Input String	3/2	4/2
<b>Battery</b>		
Battery Voltage Range	150-800 V	
Max. Charging/Discharging Current	160 A	
<b>AC Input &amp; Output Data (Grid Side)</b>		
Rated Output Power	29.9 kW	50 kW
Max. Input Power	59.76 kW	100 kW
Nominal AC Voltage	220 V / 380 V, 230 V / 400 V	
Rated Frequency	50 / 60 Hz	
<b>Back-up Output (On-Grid &amp; Off-Grid)</b>		
Rated Output Current	29.9 kW	50 kW
Max. Output Power (Off-Grid)	32.89 kW(Long Term); 44.85 kW(10s); 47.84 kW(2s)	55 kW(Long Term); 75 kW(10s); 80 kW(2s)
Switchover Time	<10 ms	
Rated Output Voltage	3L/N/PE, 220/380 V; 230/400 V	
Rated Frequency	50 / 60 Hz	
THDv(@Linear Load)	<2 %	
<b>Input Generator Port</b>		
Max. Input Power	29.9 kW	50 kW
<b>General Data</b>		
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	IEC 61000, IEC 62109, AS/NZS 4777, VDE 4105, TOR R25, C10/11, EN 50549, CEI 0-16, CEI 0-21, G99	
Country of Manufacture	China	
<b>Battery Technical Specifications</b>		
Module Model	M38314-S	
Module Capacity	12.05 kWh	
Depth of Discharge (DOD)	95% DOD	
Nominal Voltage	38.4 V	
Max. Charging/Discharging Current	157 A*	
Operating Temperature Range	0°C - 50°C (Charging); -20°C - 50°C (Discharging)	
Cycle Life	6000**	
Number of Connection	5-18***	
Dimensions (W × D × H)	550 × 615 × 250 mm	
Weight	93 kg	
Cetifications	UN38.3, IEC 62619, IEC 62040, IEC 61000-6-1/-2	

\* Max. charge/discharge current degrading may occur with changes in temperature and SoC.

\*\* 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.

