

● YOUR
● SMART
● ENERGY



Stax - M30/M50

COMMERCIAL SERIES

POWER

30/50 kW

CAPACITY

96.4 - 216.9 kWh



- **Quick Installation:**
No battery rack or wiring needed — Plug and Play Solution.
- **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**
- **Heating Module integrated for low-temperature environments**

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Stax - M30/M50

Model	Stax - M30		Stax - M50	
System Specifications				
Nominal Output Power	30 kW		50 kW	
System Capacity	96.4 ~ 216.9 kWh			
Ingress Protection	IP66			
Battery Chemistry	LFP (LiFePO4)			
Warranty	5 Years Product Warranty, 10 Years Battery Warranty			
PV Side				
Max. Input Power	60 kW		100 kW	
Start-up Voltage	180 V			
MPPT Voltage Range	150 ~ 850 V			
Number of MPPTs	3		4	
Number of Strings per MPPT	6		8	
Max. Input Current	40 A * 3		40 A * 4	
Max. Short-circuit Current	60 A * 3		60 A * 4	
AC Data (Grid)				
Nominal Output Power	30 kW		50 KW	
Max. Output Apparent Power	30 kVA		50 kVA	
Nominal Grid Voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V			
Nominal Grid Frequency	50 Hz / 60 Hz			
Max. Output Current	45.6 A		76 A	
Power Factor	< 0.99 (0.8 leading - 0.8 lagging)			
Max. THD of Current	< 3%			
AC Data (Backup)				
Nominal Output Power	30 kW		50 KW	
Max. Output Power	105% continuously ; 160% for 2s			
Back-up Swtich Time	< 10ms			
Nominal Output Frequency	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V			
Max. Output Current	45.6 A		76 A	
Max. THD of Voltage	< 2%			
AC Data (Generator)				
Max. Input Power	30 kW		50 KW	
Nominal Input Voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V			
Nominal Input Frequency	50 Hz / 60 Hz			
Nominal Input Current	45.6 A		76 A	
Efficiency				
Max. Efficiency	97.8%			
European Efficiency	97.4%			
Charging/Discharging Max. Efficiency	98.5%			
General Parameters				
Dimensions (W x D x H)	530 x 290 x 880 mm			
Weight	73 kg			
Operating Temperature Range	-25 ~ 60 °C			
Operating Humidity Range	0 ~ 95%			
Noise Emission	62 dB			
Corrosion Protection Class	C5			
Compliance	IEC 62109, IEC61000, VDE 4105, VDE 4110, TOR-R25, G99 G100, EN50549-1&-10, C10/11, NC RFG			
Battery Technical Specifications				
Module Model	M38314-S			
Module Capacity	12.05 kWh			
Depth of Discharge (DoD)	95% on grid ; 90% off grid			
Nominal Voltage	38.4 V			
Max. Charging/Discharging Current	157A*			
Operating Temperature Range	-20 °C ~ 50 °C			
Cycle Life	8000 @ EOL 70% **			
Number of Battery Module	8 ~ 18***		9 ~ 18***	
Dimensions (W x D x H)	550 x 615 x 250 mm			
Weight	90 kg			
Compliance	IEC 62619, IEC 62040, IEC 61000-6-1/-2/-3/-4, UL9540A			

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

** Under specific test conditions.

*** Max. 12 battery modules per column, up to 2 columns.