



ALFA

SPECTRA All-in-One Energy Storage System

The ALFA SPECTRA is a fully integrated DC-coupled energy storage system combining an advanced hybrid inverter and high-capacity LiFePO₄ battery into a single compact unit. Designed for residential and commercial applications, it supports solar input, grid interaction, and seamless backup power. Featuring mobile app control, IP65 protection, and natural cooling, SPECTRA ensures smart, safe, and silent operation.

GENERAL DATA

Inverter Capacity	8 kVA (Hybrid)
System Type	DC Coupled
Solar PV Capacity	12 kW
Solar Voltage Range	150 – 500 V
Monitoring	Mobile App (WiFi)
Mounting	Wall or Floor
Communication	RS485 / CAN

BATTERY

Capacity	18 kW
Voltage	51.2 VDC
Max Charge Current	200 A
Max Discharge Current	200 A
Battery Chemistry	LiFePO ₄
Cycle Life	8000+ cycles @ 90% DOD

INVERTER OUTPUT

Nominal Power	8 kW
Output Voltage	230V AC
Output Frequency	50/60 Hz
Phase	Single Phase
Efficiency	> 97%
MPPTs	2 × 4 kW Inputs

ENVIRONMENT

Cooling	Natural (Fanless)
Operating Temp	-10°C to 50°C
Humidity	0% – 95% RH (non-condensing)
Protection Rating	IP65
Altitude	≤3000 m

PHYSICAL

Dimensions (mm)	1150 × 750 × 280
Weight	125 kg
Housing	Galvanized Steel

[Product Image]



12-Year Warranty

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