

freen

Home Energy Storage

# FREEN Sodium-ion 10 kW

## Datasheet

Save on energy costs with intelligent energy management, seamless renewable integration, and reliable power storage. The Freen Energy Storage Solution introduces the 10 kWh Sodium Battery Pack with integrated Battery Management System (BMS) to deliver consistent energy supply and independence, even during grid outages.



### Sodium-ion Battery Materials

Unlike lithium-ion, sodium-ion batteries use readily available sodium and eliminate the need for rare earth metals, significantly reducing the ecological footprint of production.



### Recycling Redefined

Every component is designed with recyclability in mind, contributing to a circular economy that minimizes waste.



### Perfect for Renewables

Engineered for seamless pairing with renewable energy sources like wind and solar, sodium-ion batteries ensure stable, long-term storage for fluctuating energy inputs.



### Home Battery Lifespan

A longer home battery lifespan not only ensures reliable energy storage for years but also supports sustainability by reducing waste and the environmental impact of frequent replacements.





# Technical Parameters

Battery module	FREEN Sodium-ion 10
Cell type	Sodium-ion
Module quantity	1
Rated capacity	210 Ah
Nominal energy	10.08 kWh
Usable energy	9.57 kWh
Nominal voltage	48 V
Operating voltage	32 – 62.4 V
Max. charging current	100 A
Max. discharging current	100 A
Rated charge / discharge power	4.8 kW
Max.charging power	4.8 kW
Max.discharging power	4.8 kW
Dimensions (L / W / H)	700 x 450 x 200 mm
Weight	79.2 kg
Battery module weight	75.2 kg
Depth of discharge	95 %
Installation location	Indoor
Mounting method	Floor mounted
Operating temperature range	Charge -10 °C – +55 °C, Discharge -40 °C – +60 °C
Storage temperature range	-10 °C – +35 °C,
Cooling concept	Active cooling
Degree of protection	IP65
Relative humidity	< 70 %
Communication	CAN
Protection	Charging over-voltage protection, discharging under-voltage protection, over-current protection, over-temperature protection, short-circuit protection
Certification	IEC62619 / EN61000 / VDE2510-50 / IEC62040 / UN38.3
Life cycle	> 5000 times
Round-trip efficiency	> 95 %



\* the specification in this datasheet can be adjusted by manufacturer