

Integrated PV-Storage-Diesel C&I ESS

Model: FRA-30-96
30kW/ 96kWh



- Highly Integrated: All-in-one cabinet
- PV-Storage: Dual MPPT, 38.4kW PV input
- Smart Climate: Air cooling + AC, -20~50° C. Multi-Protection: IP55, C3 anti-corrosion
- User-Friendly: Touch screen & multi-comms. Low Noise: ≤ 70dB, community-friendly

Battery Data

Cell Type	LFP/ 314Ah
Rated Energy	96kWh
Rated Voltage	307.2V
Battery Voltage Range	250V~ 850V
Cycle Life	8,000 Cycles
Max. charge/discharge rate	0.5P
Pack Configuration	1P96S

PV Input

Max PV Input Power	19.2kW+19.2kW
Max. PV Input Current	32A+32A (Dual Channels)
PV Voltage Range	250V~ 850V
Number of MPPTs	1
Inputs per MPPT	2

AC Side (Grid-Tied)

Rated Power	30kVA
Rated Current	43.5A
AC Rated Voltage	400V/ 230V
Wiring Method	3P+N/ 1P
Frequency	50Hz: 47Hz~52Hz/ 60Hz: 57Hz~62Hz
Power Factor	-0.8~0.8
THDi	<5% (at Loads Above 30%)

AC Side (Off-Grid)

Rated Power	30kW
Rated Current	43.5A
AC Maximum Current	48A
AC Rated Voltage	400V/ 230V
Wiring Method	3P+N/ 1P
Frequency	50/ 60Hz
Unbalanced Load	100%
THDv	<3% (Linear Load)

General Data

Dimensions (mm)	L700 x W1,235 x H2,135
Weight (kg)	~950kg
Grid Support	L/HVRT, active and reactive power control
Max Efficiency	96%
Operating temperature	-20°C ~50°C (Derating above 45°C)
Operating Humidity	0~95% RH (Non-condensing)
Safety Protection	Automatic Current Balancing in Parallel Operation, AC Overcurrent Protection, AC Short-Circuit Protection, Anti-islanding Protection, DC Reverse Connection Protection.
Ingress Protection	IP55
Anti-Corrosion Grade	C4
Cooling Method	Smart Air Cooling
Air Conditioner Power	2kW (Cooling), 1kW (Heating)
Noise	≤ 70dB
Elevation	3,000m (Derating above 2,000m)
Display	Touch Screen
Fire Protection	Aerosol, Multi-sensor/ Water Ingress Detector, Explosion-Proof Ventilation
Communication	Ethernet/ 4G/ RS485/CAN
Certifications	UN38.3, IEC62619(CB), CE-EMC

An outdoor all-in-one ESS cabinet integrating a 96kWh battery, 30kW inverter, and 38.4kW PV input. It provides a plug-and-play outdoor storage solution for SMEs, shops, or communities, enabling solar self-consumption, peak-valley arbitrage, and backup power.