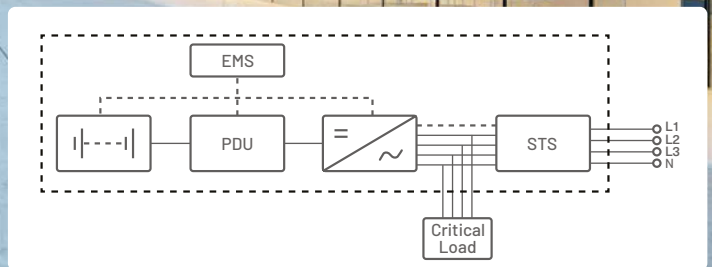


RI-ENERGYSET-3P-ESS-125-261-S



All in one 3 Phase battery and inverter cabinet 125kW/261kWh with integrated 175kW STS module

Product Description

The RI-ENERGYSET-3P-ESS-125-261-S series form part of Rayleigh Instruments growing family of renewable energy products.

This all in one outdoor (or indoor) battery and inverter solution with built-in 175kW STS module is an ideal option to bulky 'lorry container' BESS solutions. It not only offers the benefit of a more manageable size, it also offers future scalability.

- Versatile option to bulky battery container units
- All-in-one design with fully integrated Inverter
- Liquid Cooled
- Integrated STS module, seamless switching between on/off-grid modes (switching time <20ms)
- Safe and reliable operation
- Fire suppression system design
- Simple, user friendly operation and cloud control
- Expandable as required
- Efficient PV integration, supporting DC coupling or AC coupling
- Support 110% long-term overload
- 3L/N/PE output, transformerless design
- Supports 100% unbalanced loads

Technical Data - Battery Cabinet Parameters

RI-ENERGYSET-3P-ESS-125-261 -S	
System	
Rated Power [kW]	125
Nominal Energy [kWh]	261
Battery Technology	LFP(LiFePO4)
IP Protection	IP54 Battery IP55
Switch time	<20ms
Warranty	5 Years Product warranty, 10 Years Battery Performance warranty
Battery	
Nominal Energy of Module [kWh]	52.25
Module Configuration	1P52S
Number of Modules	5
Rated Voltage [V]	832
Voltage Range [V]	650...949
Max. Charging / Discharging Current [A]	200
Max. Charging / Discharging Power [kW]	138
AC Parameters (On-grid)	
Max.AC Input Power [kW]	175
Max. AC Input Current [A]	250
Rated AC Output Power [kW]	125
Rated AC Output Current [A]	180
Rated AC Voltage [V]	400 ±10%, 3L/N/PE
Rated Frequency [Hz]	50 / 60
Adjustable Power Factor [cosφ]	0.99/-1...1
THDi (@Rated Output)	<3%
System Efficiency	88%
AC Parameters (Off-grid)	
Rated AC Power [kW]	125
Rated AC Voltage [V]	400 ±10%, 3L/N/PE
Rated Frequency [Hz]	50/60
Rated AC Current [A]	180
Adjustable Power Factor [cosφ]	0.99/-1...1
THDv (@Linear Load)	<3%
Protection	
Battery Reverse Polarity Protection	Integrated
AC Overcurrent Protection	Integrated
AC Short-circuit Protection	Integrated
AC Overvoltage Protection	Integrated
DC Surge Protection	Integrated (Type II)
AC Surge Protection	Integrated (Type II)
Emergency Stop	Integrated

General Specification

Ambient Temperature Range [°C]	-25...+55 (>45° Derating)
Relative Humidity	5...95% (No Condensing)
Operation Altitude [m]	≤4000 (>2000 Derating)
Cooling	Liquid
User interface	WEB + APP
Communication	WiFi / 4G / Ethernet
Communication protocol	Modbus RTU, Modbus TCP
Weight [kg]	2620
Dimensions (W x H x D) [mm]	1100 x 2310 x 1400
Topology	Transformerless
Fire Protection	Pack/Cluster: Aerosol Water Interface Reserved

Conformity

Grid Regulation	IEC 61727, IEC 62116, EN50549-1, EN50549-2, EN 50549-PL
Safety Regulation	CE-LVD, CE-EMC, UN38.3

Model Selection Table

Description	Model
Call for Details	RI-ENERGYSET-3P-ESS-125-261-S