JRbatteries × RelyEZ

EN English

STORAGE, DISTRIBUTION AND CONTROL · 20-FT CONTAINER

VentureGrid

A complete microgrid, delivered in one container.

125 · 250 kW
Rated power, two models

261 · 522 kWh
Nominal energy

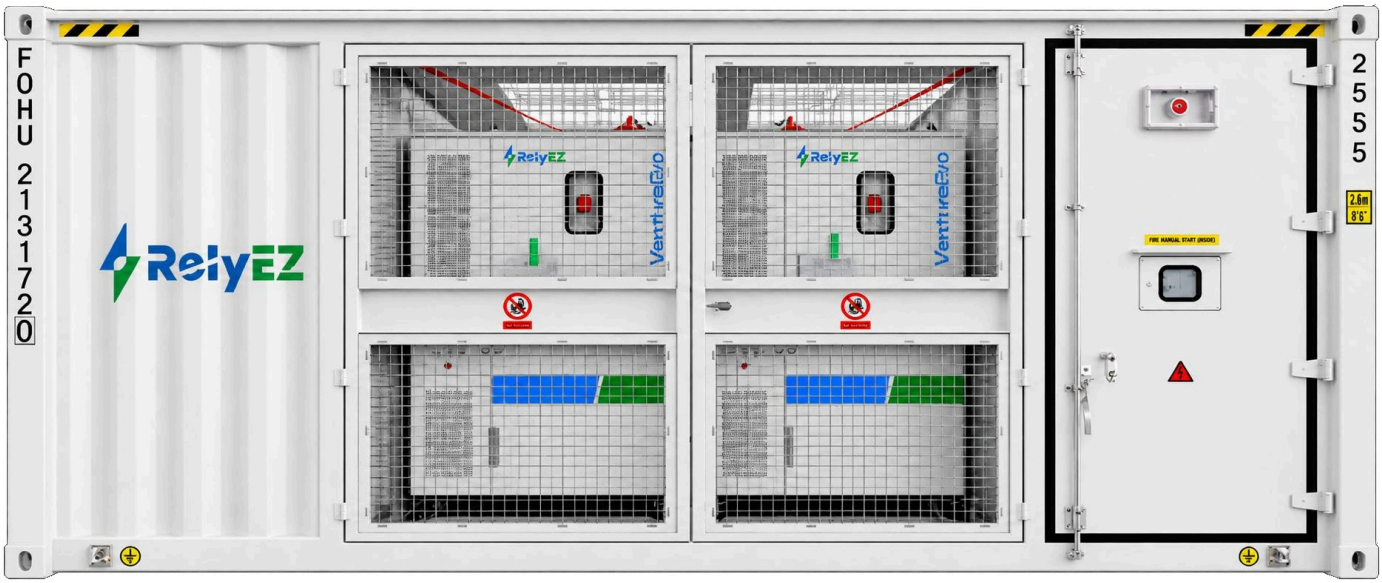
7 – 10 days
To complete the whole site

> 60 %
Smaller footprint than a distributed design

Plug and play
Battery, distribution and control arrive integrated and pre-commissioned at the factory. On site, you connect the solar, the generator and the load feeders — no extra low-voltage wiring.

A grid that holds on its own
The system forms the grid itself, restarts after a total blackout and coordinates panels, battery and diesel generator.

Sized for each site
Solar and generator inputs, load feeders: everything is rated to the project, from 30 to 250 kW off-grid.



Manufactured by RelyEZ

Supplied and supported by JRbatteries

jr-batteries.com/en

APPLICATIONS

Where to install it

Off-grid sites

Solar, battery and diesel generator power mines, islands, farms and villages with no grid access.

Backup for critical sites

With the optional automatic transfer switch, the battery keeps critical loads running: factories, hospitals, telecom sites.

More capacity, no grid works

Connected to the transformer's low-voltage bus, the battery covers demand peaks and defers the upgrade of the grid connection.

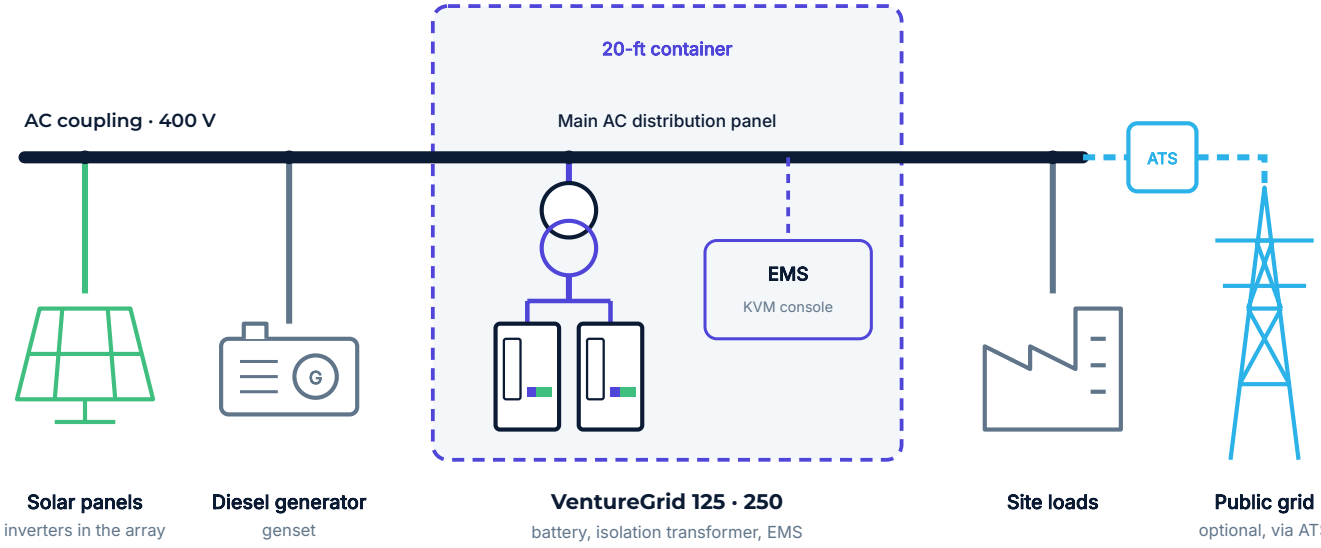
Surplus solar put to use

Daytime surplus is stored and released when needed; the rest can be exported to the grid.

ARCHITECTURE

Solar, generator and battery on one switchboard

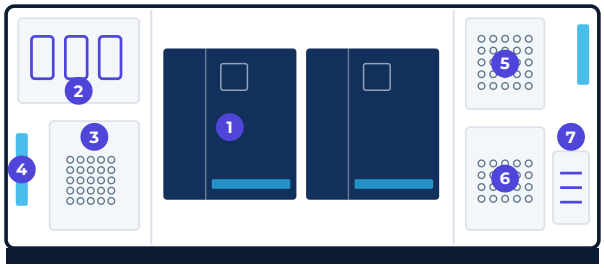
Panels, battery and diesel generator are AC-coupled on the container's switchboard; the PV inverters stay in the array, close to the strings. The isolation transformer mitigates harmonics and feeds the loads directly. As an option, an automatic transfer switch changes over between grid and generator.



Simplified diagram

INSIDE THE CONTAINER

Seven units, one container



Top view, schematic, not to scale

1. **Storage units** — LFP battery and AC/DC conversion
2. **Isolation transformer** — mitigates harmonics
3. **Main distribution panel** — solar and generator inputs, load feeders
4. **Thermal management** — zoned fans and air conditioning
5. **EMS cabinet** — controller and retractable KVM console
6. **Auxiliary panel** — supplies the control and auxiliary loads
7. **Auxiliary transformer** — dedicated to auxiliary power

SPECIFICATIONS

Technical characteristics

The two models

	VentureGrid 125	VentureGrid 250
Nominal energy	261 kWh	522 kWh
Rated power	125 kW	250 kW
Max. apparent power	137.5 kVA	275 kVA
Rated current (400 / 480 V)	180 / 150 A	360 / 300 A
PV input, customisable	50 – 150 kW	150 – 300 kW
Load feeders, customisable	50 – 150 kW	150 – 300 kW
Generator input, customisable	50 – 100 kW	100 – 200 kW
Weight	About 9.1 t	About 12.5 t

Battery

Chemistry	Lithium iron phosphate (LFP)
Cells	3.2 V / 314 Ah
Nominal voltage	1,000 V DC
Voltage range	680 – 1,000 V DC
Cycle life	≥ 8,000 cycles at 0.5P, 25 °C

Grid-tied and off-grid

Voltage	400 V (340 – 440 V) · 480 V (410 – 530 V)
Frequency	50 / 60 Hz (47 – 53 / 57 – 63 Hz)
AC system	3P + N + PE
THDi · power factor	< 3% · −1 to +1
Off-grid overload	110% continuous, 120% for 1 min

Installation

Format	20-ft high-cube container
Dimensions (L × W × H)	6,058 × 2,438 × 2,896 mm
Ingress protection	IP 54
Operating temperature	−30 to 55 °C
Isolation transformer	400/400 V · 480/480 V
Display	Rack-mount KVM console
EMS protocols	Modbus · IEC 61850 · IEC 60870-5-104
Control	Local and remote (cloud)



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Rooftop solar plant built by JR Énergie — Cournon-d'Auvergne, France

WORKING WITH JR

Your project, with JR Batteries

One point of contact, from sizing to operation. RelyEZ manufactures the system; JR Batteries supplies it and supports you at every step, with the expertise of our partner installer, JR Énergie.

JR BATTERIES

Your point of contact

Sizing, supply, logistics, compliance and end of life of the products.

RELYEZ

Manufacturer & technology partner

Assembler of cabinets and containers for storing electricity, from the cell up to the software layer.

JR ÉNERGIE

Partner installer

Studies, installation, grid connection, maintenance — 1,500+ plants in service in France since 2016.

HOW WE START

1 **Your profile**
site, activity, objective

2 **Your data**
load curves, generation, contracts

3 **Sizing study**
the right capacity for your site

4 **Financing & delivery**
options identified, supply and installation planned

Project financing support

JR Batteries and JR Énergie help identify financing options suited to your project: bank financing, French and European instruments, including Bpifrance solutions where eligible, and internationally funded reconstruction programmes. Financing remains subject to programme requirements and approval by the relevant financial institutions.

YOUR CONTACT

Philippe Laurence

JR Batteries — Groupe JR

philippe@jr-batteries.com
+33 6 70 48 95 48
jr-batteries.com/en

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Scan for the product page and a quote request