

iEZA Series

Range-Extended
Energy Storage Power
Cabinet



Product Introduction

The iEZA Series Range-Extended Energy Storage Power Cabinet integrates lithium iron phosphate (LFP) batteries, a battery management system (BMS), energy storage converter, fire detection and gas suppression system, liquid-cooling thermal management, diesel generator set, and dispatching & control system. It features reserved interfaces for photovoltaic (PV) integration and charging installation space. With rich preset operation modes, comprehensive protection functions, and excellent control performance, the system is designed to withstand harsh grid environments and is widely applicable in peak shaving and valley filling, dynamic capacity expansion, and off-grid power supply scenarios.

Key Features

Safe & Reliable

- High protection rating, suitable for harsh environments
- Three-level BMS protection strategy, ensuring cell safety
- Multi-layer protective coordination to prevent fault propagation

Flexible Deployment

- Highly integrated design combining storage, diesel, and charging in one unit; transportable by flatbed truck
- Pre-installed and pre-commissioned for fast on-site deployment
- Reserved interfaces for PV installation

High Efficient & Versatile

- Seamless switching between grid-connected and off-grid operation
- Supports diverse energy scenarios: grid outage, weak grid, PV power, etc.
- Hybrid diesel-storage power supply to maximize generation efficiency
- Compatible with high-power impact load starting

Smart & User-Friendly

- One-button start/stop
- Real-time remote monitoring of operating status
- Fault alarm notifications
- Cloud-based data storage

Specification of iEZA series

Item		iEZA-522KLB-520K	iEZA-1044KLB-650K
DC Side Parameters	Battery Type	Lithium Iron Phosphate (LFP), 314Ah	
	Rated Capacity	522.496 kWh	1044.992 kWh
	Rated Voltage	832 V	
	Operating Voltage Range	702-949 V	
	Charge/Discharge Rate	≤0.5 C	
	Depth of Discharge	95% DOD	
	Rated Charge/Discharge Rate	261.248 kW	522.496 kW
	Peak Discharge Power	520 kW	650 kW
AC Side Parameters (Grid Connection Port)	Grid Voltage	400 V (-10% to +15%)	
	Rated Power	520 kW	650 kW
	Rated Current	787 A	987 A
	Rated Frequency	50 Hz	
	Wiring Method	Three-phase four-wire	
	Power Factor	>0.99 (Adjustable 1 Leading ~ 1 Lagging)	
	THDi	<3% (Rated Power)	
AC Side Parameters (Load Port)	Grid/Off-grid Switching Time	20ms (Typical Value)	
	Maximum Output Power	650 kW	
	Overload Capacity	1.1In for 10 mins, 1.2In for 1 min	
	Rated Output Voltage	400 V (-10% to +15%)	
	Rated Output Frequency	50 Hz	
	Wiring Method	Three-phase four-wire	
	THDi	<3% (Rated Power)	
PV Interface Parameters	Rated Voltage	400 V (-10% to +15%)	
	Maximum Input Power	200 kW	
Diesel Generator System Parameters	Prime Power	100 kW	
	Standby Power	110 kW	
System Parameters	Cooling Method	Smart Liquid Cooling	
	Dimensions (W×D×H)	4600*2200*2600mm	6400*2200*2600mm
	Weight	≤11t	≤16t
	Protection Level (IP Rating)	IP54	
	Relative Humidity	≤95%, Non-condensing	
	Operating Temperature	-25℃~50℃ (>45℃ Derating)	
	Maximum Operating Altitude	4000m (>3000m Derating)	
	Cycle Life	6,000 Cycles @ 70% EOL	
	Fire Protection Configuration	Perfluorohexanone (PACK level)	