

From Diesel Generators to Clean Energy: How a 40kWh Battery is Powering a Mining Office in Cameroon

A mining company in Cameroon replaced noisy diesel generators with a 40kWh battery system. Learn how HighJoule's energy storage offers reliable, quiet, and clean power for remote and urban applications alike.



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A few weeks ago, I received a message from an old friend, Mr. Sun, in Cameroon, West Africa. He had recently launched a new mining company headquarters in Yaoundé, the capital city. Amidst the excitement of building a team and setting up operations, he ran into a very familiar challenge: the airport area experienced frequent power outages, sometimes without warning.

Like many others in the region, they relied on **diesel generators** as backup. But the constant **noise**, **fumes**, **and fuel logistics** were wearing them down. Frustrated, he said to me:

"Can you help me find a large power bank? Something clean and quiet—just not another diesel generator."

He was, of course, referring to a **battery energy storage system(BESS)**. And after reviewing his needs, my recommendation was clear: the **HighJoule** <u>HJ-Z24-40I 40kWh battery system</u>.

Why the HJ-Z24-40I Battery Is a Game-Changer

The **HJ-Z24-40I** is a **40kWh floor-mounted energy storage battery** with **up to 48kW of peak output**, specifically designed for high-demand use cases like his. It supports power input from **solar panels, grid electricity, or both**, offering flexibility and energy independence in one complete solution.

Specification	Details
Model	HJ-Z24-40I
Storage Capacity	40kWh
Output Power	24kW (Max 48kW)
Input/Output	Grid / Solar PV / Battery Hybrid
Installation	Indoor (Outdoor versions available)
Cooling	Air Cooling / Liquid Cooling (optional)
Dimensions	2000mm × 1550mm × 800mm

For Commercial Use: Quiet, Reliable Office Power

In my friend's case, the mining office occupies roughly **150-180m**², with around **10-15 staff**, using:

- Computers and network devices
- · Office lighting
- Air conditioning units
- Printers and communication systems

The 40kWh battery provides **stable power for essential operations** and can seamlessly **replace diesel generators**, all while:

· Eliminating generator noise



- Cutting out fuel and maintenance costs
- Supporting clean energy from rooftop solar

The system also offers **instant switching** during outages, keeping operations online and uninterrupted.

For Residential Use: Ideal for 4-6 BHK Homes

This same system is a perfect fit for large homes—4 to 6 BHK villas or townhouses—especially in offgrid or unstable grid areas. It supports:

- Multiple air conditioners
- Kitchen appliances
- Entertainment systems
- Smart home automation

Combined with solar panels, the 40kWh battery can keep a household running efficiently throughout the day and night.

For Remote or Outdoor Applications

The **outdoor-customized version** of this system is ideal for:

- Mining camps
- Telecom base stations
- Construction sites
- Emergency response centers

With optional **liquid cooling** and industrial-grade enclosures, it delivers **quiet, weather-resistant performance** in tough environments—just like those in West Africa.

40 kWh Commercial Battery System

Pricing & Global Support

Depending on configuration, cooling system, and shipping location, the **estimated cost ranges from \$9,500 to \$15,000**.

HighJoule serves clients across the USA, UK, Africa, and Europe, with engineering support, installation guidance, and after-sales service.

We also offer a full range of battery options:

Model	Capacity	Output
HJ-Z06-10I	10kWh	6kW (Max 9kW)
HJ-Z12-20I	20kWh	12kW (Max 24kW)
HJ-Z18-30I	30kWh	18kW (Max 36kW)



HJ-Z24-40I	40kWh	24kW (Max 48kW)
Custom	10-50kWh	Air / Liquid Cooling

Final Thoughts

For my friend in Cameroon, switching from diesel to a battery system wasn't just about convenience—it was a **long-term investment in sustainability and peace of mind**.

If you're facing similar challenges—unreliable grids, high fuel costs, or loud generators—it may be time to consider a modern <u>energy storage system</u>.

Contact HighJoule today for a tailored quote or to explore your options.

HighJoule - Smart Energy for a Cleaner, Quieter Future.

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