



Product Description

The Booster Series is a battery-powered system designed to optimize energy usage in peak shaving applications. It provides uninterrupted and stable power, reducing reliance on oversized generators and lowering operational costs. The system enables off-grid operation when necessary, minimizing excess power generation and improving energy efficiency.

Peak Power, Zero Compromise

Metrobit offers a robust and adaptable battery-powered energy system, designed to perform in diverse site conditions. With a plug-and-play configuration, the system enables rapid deployment and seamless site transitions.

Our battery-powered peak shaving cabinet introduces an innovative, sustainable, and efficient solution for powering energy-intensive construction equipment. Simply connect a 16A 480VAC power source to maintain optimal system performance and keep batteries fully charged. The system's backup battery power ensures uninterrupted operation for extended periods, even without an external power source.

Designed with a modular hardware configuration, the system allows for scalable power solutions, enabling users to upsize or downsize based on specific requirements. Additionally, customizable power connectors and sockets further enhance plug-and-play capabilities, providing a tailored and efficient energy solution for construction and industrial applications.

Key Features

- Cuts fuel use and emissions by minimizing generator size.
- Integrates easily with grid and off-grid setups without major upgrades.
- Built to handle extreme Middle Eastern and African climates.
- Uses high-temp batteries that last twice as long as standard lead-acid.
- Modular inverter design adapts easily to changing system needs.



Reduce Diesel
Generator Size



Reduce Fuel
Consumption



Reduce Carbon
Footprint



Reduce
Electricity cost



Reduce Noise



Power Supply
Guarantee



Ensure Safety

Applications

- **Tower Cranes:** Delivers peak power without running diesel generators 24/7.
- **Welding Machines:** Maintains a stable energy flow for precision and productivity.
- **Material Hoists:** Handles variable loads effortlessly for smoother operations.
- **Passenger Hoists:** Ensures safe, uninterrupted vertical transport on-site.
- **Bar Benders & Cutters:** Powers high-torque tools with zero flicker or delay.
- **Concrete Mixers & Pumps:** Supports consistent mixing and pumping even during grid fluctuations.
- **Lighting Systems:** Keeps the entire site well-lit with clean, stable power.
- **Power Tools & Grinders:** Protects sensitive equipment from voltage dips.
- **Cooling & Ventilation Fans:** Maintains airflow and comfort without straining the system.
- **Temporary Office Cabins:** Powers ACs, IT equipment, and lighting without overloading.

Examples of Other Applications

Industrial Welding



Industrial Motors



Passenger Hoist



Material Hoist



Technical Specifications

B1-Mini : Engineered for Europe, Middle East & Africa

AC Input Specifications

Nominal Voltage - VAC	400 V/ 3phase +N
Voltage Range	150 - 293 Vac (derating from 195 to 150 Vac)
Frequency Range	50 Hz (47 - 53 Hz) or 60 Hz (57 - 63 Hz)
Recommend Connection Current	16 A to 32 A connections
Maximum Current	145/P A
AC Connection	DG Socket/Terminals
Power Source	Grid or Diesel Generator

AC Output Specifications

Nominal Voltage - VAC	400 V 3Phase +N
Frequency Range	50 or 60 Hz
AC Connection	Camlock/BusBar Terminals
Max Rated Supply Current	250 A (MCCB)

General Data : Model No.

B1 Mini

Power Rating	80 KW
Nominal Current	116/P A
Short Time Overload	125% (15 seconds) across all models
Peak Current	145/P A
Inverter Modules	4X20KW
Weight	3200 kg

Mechanical Data

Dimensions L×W×H (mm)	1283 x 1972 x 1139
Operating Temperature	-20°C to 55°C
Cooling	Recirculation Air-conditioning with integrated heater
Number of Cooling Units	1 (+1 Optional)
Standards - Safety/Grid Interaction	IEC62040-1 / IEC60950/ EN 50272-2
Standards - EMC	EN300386V1.6.1 / EN61000-1-2-3-4
Cabinet Rating	IP 55

DC Battery Specifications

Nominal Voltage - VDC	416V
Capacity Installed	71.4 kWh
Useable Capacity	57.12 kWh (80% DOD)
Energy Storage Chemistry	AGM High Temperature Deep Cycling

*Specifications are subject to change without prior notice