

B2-V





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.















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

B2-V: Engineered for Europe, Middle East & Africa

400 V/ 3phase +N

AC Input Specifications

Nominal Voltage -VAC

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	
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	
Frequency Range AC Connection	50 or 60 Hz Camlock/BusBar Terminals	

General Data : Model No.	B2V-100	B2V-12U	B2V-160	B2V-200
Power Rating	100 KW	120 KW	160 KW	200 KW
Nominal Current	145/P A	174/P A	232/P A	290/P A
Short Time Overload	125% (15 seconds) across all models			
Peak Current	180/ P A	217/P A	289/P A	361/P A
Inverter Modules	5×20KW	6×20KW	8×20KW	10×20KW
Weight	5435 kg	5461 kg	5513 kg	5565 kg
Mechanical Data				

Dimensions W×D×H (mm) 2590 x 1596 x 2458 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

IP 55		
DC Battery Specifications		
408V		
138.72 KWh		
110.98 KWh (80% DOD)		
AGM High Temperature Deep Cycling		

^{*}Specifications are subject to change without prior notice

