



# BMG165 (Bi-Directional MicroGrid)

The BMG165 is a versatile bi-directional microgrid in a box. Bring your own battery for grid forming and following applications.

Its integrated high-frequency transformer provides electrical isolation between the DC and AC sides while enabling 480V three-phase operation across a wide battery state-of-charge. Mode selection allows power flow in either direction depending on application needs.

Built with BorgWarner's Viper SiC power module for industry-leading efficiency and durability.

Output Power Continuous	165kW
AC Voltage Range, L-N	100Vrms to 277Vrms
AC Frequency Modes	50 and 60 Hz
AC Connector	MIL-DTL-22992 Class L 52-13
DC Voltage Range	200Vdc to 850Vdc
DC Bus Capacitance	700μF
DC Connector	PowerLok 500 G2
Weight	40Kg
Bounding Box	70cm x 50cm x 31cm
Ambient Air Temperature	-40°C to 45°C

## FEATURES

- 7-inch color touchscreen (glove-friendly) for mode selection, monitoring, and diagnostics
- Supports unbalanced AC loads
- Self-contained thermal management system
- Mountable in commercial vehicle chassis
  - ISO 16750 shock and vibe compliant
  - IP69K-sealed electronics
- Over-the-air (OTA) update capability
- Supports both grid-tied and off-grid operation

