

BGM-500 BATTERY GROUND FAULT MONITOR
Guide Specification 1.0 – 9/2013

Model# BGM-500

Part 1 - GENERAL

1.1 Summary

1.1.1 This specification describes an on line stationary ground fault monitoring device capable of detecting DC short circuit paths wherein electrical current from a DC battery plant deviates from the intended DC circuit and creates a conductive path from the battery system to ground. This conductive path is created by materials internal to the battery (cell or jar) leaking, wicking or connecting to the battery rack or cabinet; this conductive path can also be created by an inadvertent connection of the battery posts, buss bar or cable to the battery rack or cabinet.

1.1.2 The BGM-500 system is comprised of the following components.

- BGM-500 controller (1 per rectifier/charger)
- Solid Core DC Current Transducer and (4) wire integrated CT Cable

1.2 System Description

1.2.1 The system shall be capable of monitoring the following DC plant conditions:

a. DC ground leakage current from 0-500mA DC

1.2.2 The system will continuously monitor the DC buss data real time; additionally all data will be collected from the DC plant via actual measurements.

1.2.3 The system is designed to operate with any UPS/rectifier and charging system; additionally the system will operate with any advanced charging techniques

1.3 The BGM-500 can monitor each battery string individually or multiple strings if they have a common ground at the DC disconnect.

1.3.1 Each system will have the following factory communication interfaces

- USB port connection for set up and calibration (telnet client required)
- Integral Ethernet card for remote data acquisition
- Programmable dry contacts (no/nc)
- Modbus over TCP/IP
- SNMP
- Integrated Web page on the BGM-500 for Alarm/date/time set up
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1.4 Power Requirements

The system shall be supplied with 100-240 VAC Switching Power supply with 12 volt DC output

1.5 Data Presentation and Software

No proprietary software will be required, all measurements will be displayed as they are made.

2.1 Installation

2.1.1 The BGM-500 can be installed in any location that can accommodate the 6 hole base plate and mounting pattern. The controller and power supply can also be mounted in a wall mounted NEMA 1 enclosure

2.1.2 No trim pots or dip switches will be required

3.1 Service Capabilities

The manufacturer will provide a network of direct and factory authorized on site service technicians capable of providing the following services

- Installation
- Startup
- Commissioning/Testing support with report documentation
- Owner Operator Training
- Preventative Maintenance
- Time and Material Services

Services should be available within 24 hours of request

The Manufacturer will also provide the following in-house services

- Technical Support
- Remote monitoring Services
- Remote Analysis

4.1 Procurement

4.1.1 Product support information may be procured from:

Wilson Engineered Systems, Inc.
11501 Columbia Park Dr. West, Bldg 100
Jacksonville, FL 32258
(904) 880-0118
www.wilsonengineered.com/Lit/BTECH/Broch_BGM.pdf

4.1.2 Please forward purchase orders to:

gmilliken@wilsonengineered.com