

# PowerGuard

#### CRANKING BATTERY DISCHARGE PROTECTION

Merlin Power System's PowerGuard is a single box solution for preventing engine batteries from discharging to a level where the vehicle will not start.

Once installed, PowerGuard constantly monitors battery voltage. When its protection threshold voltage has been reached, the product's internal timer is started. If the voltage does not recover during this timed period, PowerGuard's contactor isolates the batteries to prevent further power drain.

PowerGuard is available for use with vehicle electrical systems up to 300 A and 600 A.

### FLAT BATTERY PROTECTION

PowerGuard prevents flat batteries, which helps limit vehicle downtime and saves money on unnecessary battery replacement.

#### PC CONFIGURABLE

PowerGuard can be configured using a PC for different vehicle and battery types.

#### MANUAL AND FULLY AUTOMATIC OPERATION

PowerGuard automatically isolates batteries in response to its threshold voltage setting. Power can then be reconnected through the use of a simple reset switch installed on the vehicle dashboard or, for fully automatic operation, through an engine cranking signal.

#### <u>REMOTE BATTERY ISOLATION</u>

PowerGuard replaces the existing battery on / off switch allowing batteries to be switched from a remote dashboard location.

#### SAFETY FEATURES AND SIMPLE DIAGNOSTICS

For safety reasons, PowerGuard will not disconnect the batteries if the engine is running. PowerGuard also comes with PC-based diagnostics and data logging for easy vehicle troubleshooting.

#### Low Power Consumption

PowerGuard's power consumption is extremely low compared to that of other competitive products.



#### **SPECIFICATIONS**

Part Numbers: PGD-7001 (300 A) and -7002 (600 A)

Size: 6.18" W x 6.26" D x 3.50" H

Weight: 4.19 lbs. (300 A) 4.85 lbs. (600 A)

Nominal Power Consumption: 20 mA

Normal Voltage Operating Range: 8 to 40 VDC

**Operating Temperature:** -25° C to 105° C

Storage Temperature: -55° C to 150° C

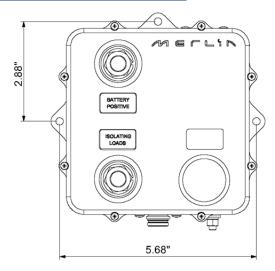
EMI Specifications: Designed to MIL-STD-461F

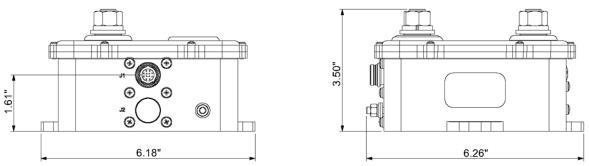
Environmental Specifications: Designed to MIL-STD-810G



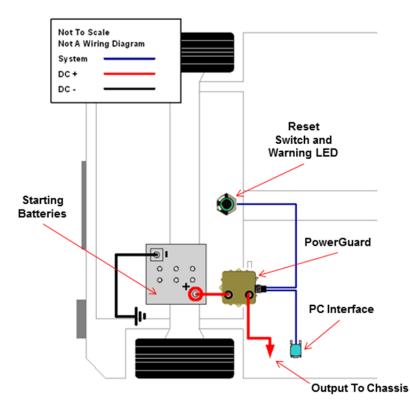


## **OUTLINE/INSTALLATION DRAWING**





## SYSTEM OVERVIEW



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