

Battery Monitor Inductive Module



Introduction

The E-PLEX® 331BMI battery monitor is an inductive monitor that senses both current and voltage output. The battery monitor is bi-polar in that the E-PLEX® network reveals if the battery is charging or discharging. Put the positive battery cable through the center of E-Plex battery monitor and secure it to the cable. Orient the 331BMI's 1/4 " terminals away from the battery post for proper current direction indication by the E-PLEX® system.

The battery monitor is available in two configurations, the 331BMI-01 has a single reference voltage wire for applications that have the battery negative terminal in common with the E-PLEX® return. The 331BMI-02 is an isolated version with 2 reference wires for applications that have multiple batteries where the battery monitored cannot be tied back to the E-PLEX® return. The wire is required to determine the differential. Calibration is provided through the E-Logic Software.

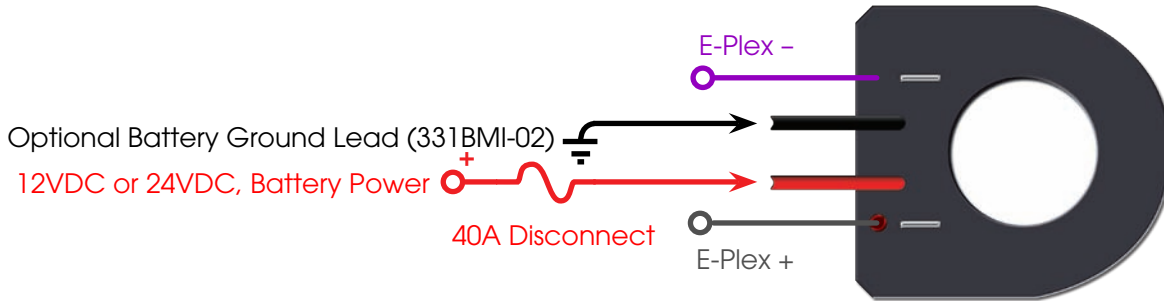
Key Features

- ◆ 100 / 200 amp monitor
- ◆ "Engine cranking" amps capable
- ◆ Charging and load current sensing to and from battery
- ◆ Voltage output sensing from battery

Design Specifications

- ◆ Shock : 11 milliseconds half-sine pulse, IEC 68-2-27
- ◆ Vibration : Tested to Lloyds Register Approval Vibration Test 2
- ◆ Moisture resistance : IP67
- ◆ PCB characteristics : UL94V-0
- ◆ Operating humidity: 0% to 100% (condensing)
- ◆ Operating temperature: -40°C to 60°C
- ◆ Storage Temperature: -40°C to 85°C

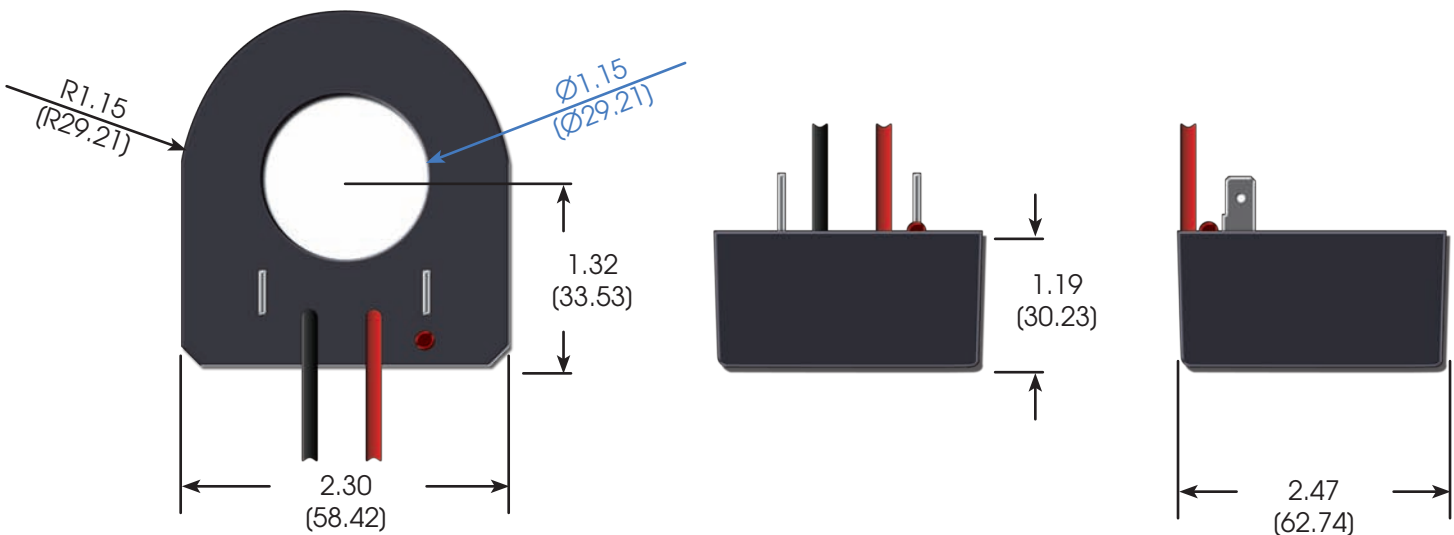
Typical Wiring Diagram



Description	Minimum	Maximum
Voltage	0 Volts DC	50 Volts DC
Current Measurement, Total	1.0 Amps	200 Amps
E-PLEX® Bus Input Voltage	10 Volts DC	30 Volts DC
E-PLEX® Bus Input Current	20 milliAmps	30 milliAmps
Maximum Engine Cranking Amps	Unlimited	Unlimited

331BMI-01 has a single reference voltage wire for applications that have the battery negative terminal common with the E-PLEX® return. The 331BMI-02 is an isolated version with 2 reference wires for applications that have multiple batteries where the battery monitored may not be tied back to the E-PLEX® return. The wire is required to determine the differential.

Dimensional Diagram



Dimensional Diagram

Part Number	Description
331BMI-01	Single reference wire, battery negative in common with E-PLEX® return
331BMI-02	Two reference wires, battery negative differs from E-PLEX® return

