

Battery Monitor Inductive Module



Introduction

The E-Plex 331BMI battery monitor is an inductive monitor that senses both current and voltage. 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 centre of E-Plex battery monitor sensor, the sensor can be either secured to the cable or mounted on a bulkhead. Orientate the sensor with the arrow away from the battery for proper current direction indication by the E-Plex system.

The 331BMI has a reference voltage input for applications that have the battery negative terminal in common with the E-Plex return.

Key Features

- +/- 300 amp monitor.
- “Engine cranking” amps capable.
- Charging and load current sensing to and from battery.
- Voltage output sensing from battery.
- Independent sensor and interface.
- Split core sensor for ease of maintenance.
- Internal diameter 30mm.
- LEN value 3.
- Standard EP3 connection.

Electrical Specifications

Voltage Reading Range	0 – 32V DC
Len rating	3
Current Rating	-300 to +300

Physical Specifications Interface Module

Front Bezel Material	Aluminum
Back Case Material	ABS
Operating Temperature	-20°C- 50°C (-4°F - 122°F)
Storage Temperature	-30°C- 85°C (-22°F - 185°F)
Weight	150g (5.25oz)
Overall Length	118mm (4.64")
Overall Height	41mm (1.61")
Overall Depth (including Connectors)	95mm (3.74")
Mounting Hole Size	M4

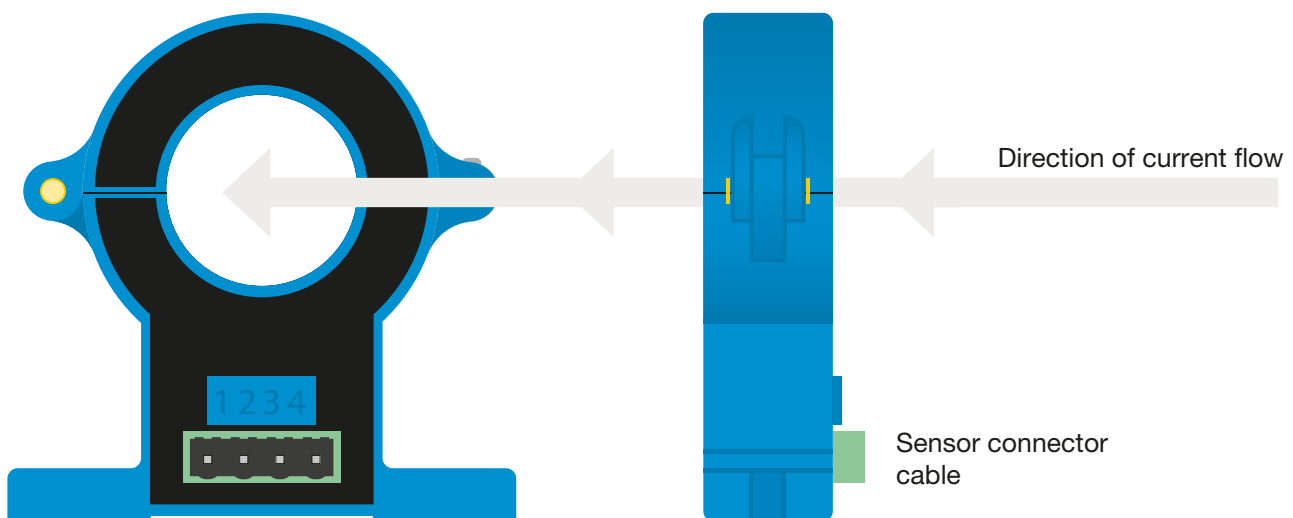
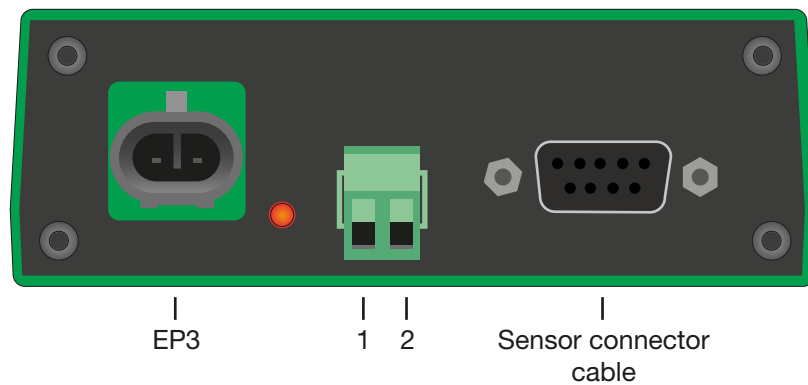
Physical Specifications Sensor Module

Case Material	ABS
Operating Temperature	-20°C- 50°C (-4°F - 122°F)
Storage Temperature	-30°C- 85°C (-22°F - 185°F)
Weight	150g (5.25oz)
Overall Length	80mm (3.15")
Overall Height	80mm (3.15")
Overall Depth (excluding Connectors)	20.4mm (0.8")
Mounting Hole Size	M4
Measurement aperture	65mm (2.56")

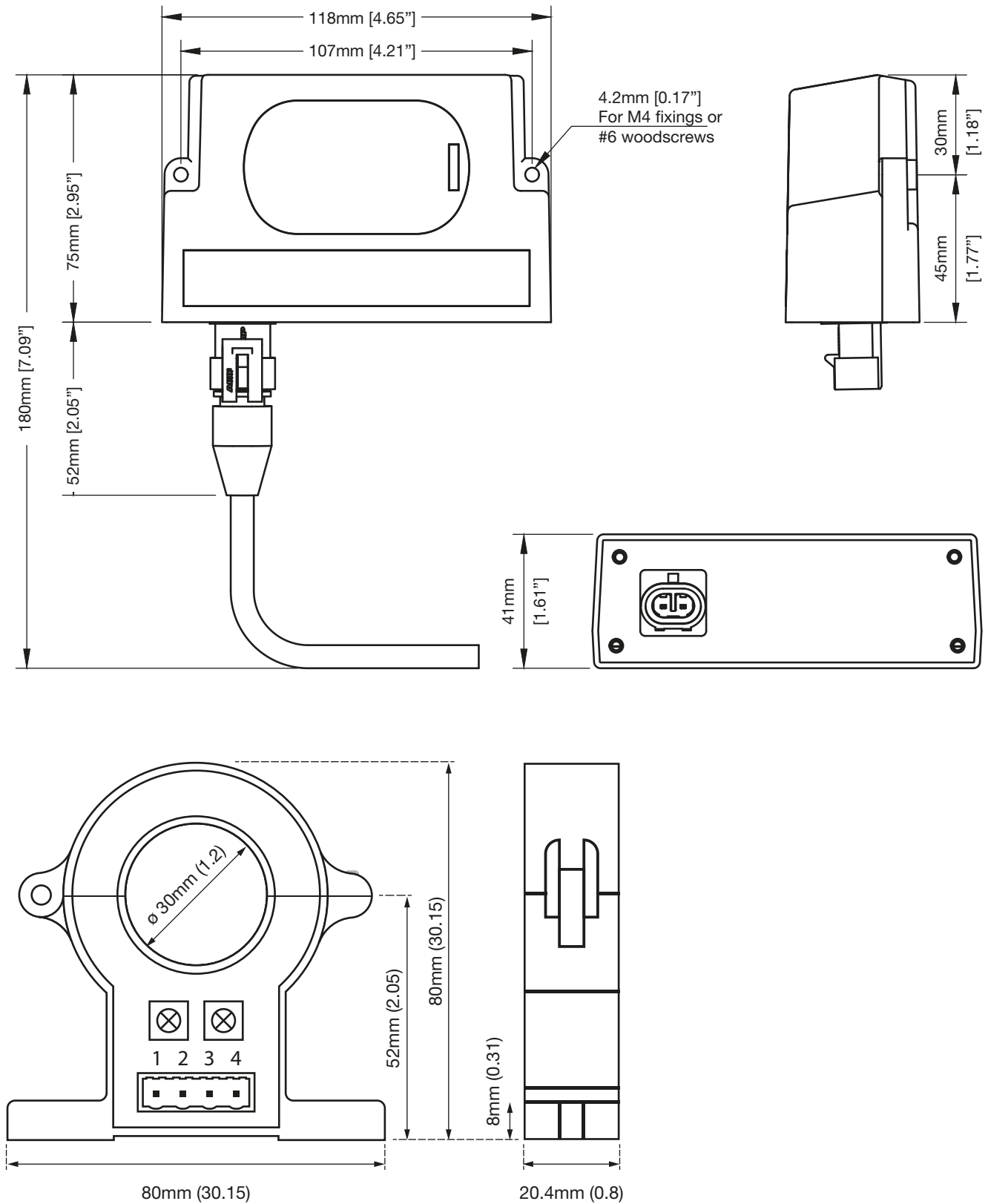
Connectors

Current Sensor Terminal Connector	DB9 Female Connector with screw clamps
Voltage Terminal Connector Specifications	Phoenix Contact 2 Way Screw Clamp Board Connector
Wire gauge	0.2mm ² (24AWG) Min to 2.5mm ² (12AWG) Max
Wire Strip Length	5 – 7 mm (.19" - .27")
Communications Connectors Specifications	EP3

Connection	Specifications	In / Out	Remarks
1	+V Supply	I	0 -32V DC
2	Ground	I	0V (Eplex Common)



Dimensional Diagram



Ordering Information

Description	Part Number
331BMI Battery Monitor Inductive module	EP3-331BMI-E
331BMI Replacement Sensor	SP-CT-331BMI
331BMI Replacement Sensor cable	SP-CA-331BMI-E
331BMI Replacement Voltage Connector	CO-PH-T/B-2WAY



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