

Graphite® Module: J1939 Protocol



J1939 Protocol Communication

The GMJ1939 plug-in module expands the communication capabilities of our Graphite series HMI operator interface panels by seamlessly integrating with J1939 protocol networks.

Red Lion's GMJ1939 module provides easy Graphite HMI integration with J1939 protocol networks, and allows for translation of more than 300 different protocols. Configure the GMJ1939 module using Red Lion's Crimson® software, which makes setup simple using an intuitive graphical user interface with drag and drop functionality.



Applications

- Transportation
- Agriculture
- Manufacturing
- Construction
- Oil & gas

Product Highlights

- Seamless J1939 network integration
- Support for over 300 different protocols
- Provides all-in-one solution

Features & Benefits

- J1939 Protocol Conversion
 - Easily integrates Graphite HMIs into J1939 protocol networks
 - Converts between J1939 and more than 300 different protocols
- All-in-One Solution
 - Removes need for external devices and communication gateways
 - Cost-effectively saves space and time
- -40° to 75°C T_{AMB} Operating Temperature
 - Reliably works in harsh environments
- Powered from Graphite Host
 - Simplifies deployment by eliminating external power requirement
- Easily Programmed
 - Seamless configuration using Red Lion's Crimson desktop software

Graphite Module: J1939 Protocol Ordering Guide and Specifications

Ordering Guide

Part Number	Description
GMJ19390	Graphite Module, J1939 Protocol Interface

Module Specifications

Power

Power will be supplied by the Graphite host device. Some modules, depending on usage may consume high levels of power. This may limit the total number of modules that can be installed on a single Graphite host. Check the Graphite module and Graphite host data sheets for specific usage and power requirements.

GMJ1939 Max Power: 1.2 W

Communications

J1939 Port: The J1939 port has format and baud rates that are software programmable up to 250K baud and is digitally isolated. 124 ohm, 1W termination is provided through a switch. This port may be configured for various J1939 protocols.

Isolation from GMJ1939 Communication ports to Graphite host device: 1000 VDC for 1 minute.

Environmental Conditions

Operating Temperature Range: -40 to +75 °C T_{AMB} , or lowest range among equipment used in your Graphite system. Consult the user manual or www.redlion.net/OptTemp for further details.

Storage Temperature Range: -40 to +85 °C T_{AMB}

Operating and Storage Humidity: 85% max relative humidity, non-condensing

Altitude: Up to 2000 meters

Certifications and Compliances

CE Approved

EN 61326-1 Immunity to Industrial Locations

IEC/EN 61010-1

RoHS Compliant

ATEX/UKEX Approved

Ⓜ II 3 G Ex nA IIC T4 Gc

DEMKO 14 ATEX 1387X

EN 60079-0, -11, -15, -31

UL23UKEX2879X

IECEX Approved

Ex nA IIC T4 Gc

IECEX UL 15.0035X

IEC 60079-0, -11, -15, -31

India PESO Approved:

A/P/HQ/MH/104/7441 (P549599)

UL Listed: File #E302106

UL Hazardous: File #E317425

ABS Type Approval for Shipboard Applications

Construction

Case body is all metal construction.

Connections

Removable wire clamp screw terminal block.

Wire Gage: 28-14 AWG (0.32 mm - 1.63 mm) terminal gage wire.

Torque: 1.95-2.21 inch-lbs (0.22 - 0.25 N-m)

Mounting

Screws to host.

Weight

6.9 oz (196 g)

Warranty

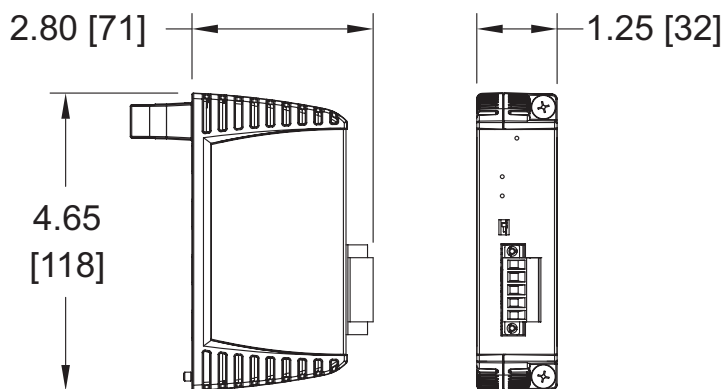
2 years on design and manufacturing defects.

Specifications are subject to change.

Visit www.redlion.net for more information.

Graphite Module: J1939 Protocol Dimensions

Dimensions In inches [mm]





www.redlion.net
[contact us](#)

Red Lion is focused on being THE Industrial Data Company™. We empower industrial organizations around the world to unlock the value of data by developing and manufacturing innovative products and solutions to access, connect and visualize their information. Red Lion's global manufacturing and support facilities serve customers in major industry segments with solutions for cloud connectivity, edge intelligence, industrial Ethernet switches, panel meters and operator panels. Red Lion makes it easy to gain real-time data visibility that drives productivity. Red Lion is part of Spectris plc, the experts in providing insight through precision measurement.

©2023 Red Lion Controls, Inc. All Rights Reserved. The terms Red Lion, the Red Lion logo, Graphite, Crimson and THE Industrial Data Company are trademarks or registered trademarks of Red Lion Controls. All other marks are the property of their respective owners.