# Graphite<sup>™</sup> Module: PROFIBUS® Protocol

Red Lion Automation Series



## **PROFIBUS Protocol Communication**

The GMPB plug-in module expands the communication capabilities of our Graphite HMI operator interface panels by seamlessly integrating with PROFIBUS DP protocol networks.

Red Lion's GMPB module provides easy integration of Graphite HMIs with PROFIBUS Decentralized Periphery "DP" protocol networks, allowing translation to more than 300 machine protocols. Configure the GMPB module using Red Lion's Crimson® software, which makes setup simple via an intuitive graphical user interface with drag-and-drop functionality.



#### **APPLICATIONS**

- > Factory Automation
- > Manufacturing
- > Oil & Gas

#### **PRODUCT HIGHLIGHTS**

- > Seamless PROFIBUS DP Network Integration
- > Automatic Baud Rate Detection
- > Support for Over 300 Machine Protocols
- > All-in-One Solution

### **FEATURES & BENEFITS**

- > PROFIBUS DP Protocol Conversion
  - Easily integrates Graphite units into PROFIBUS DP protocol networks
  - 9-pin serial connector for easy installation
  - Automatic baud rate detection from 9.6 KBaud to 12 MBaud
  - Converts between PROFIBUS and more than 300 machine protocols
- > All-in-One Solution
  - Removes need for external devices and communication gateways
  - Cost-effectively saves space and time

- > -40° to 75°C Operating Temperature
  - Reliably works in harsh environments
- > Powered from Graphite Host
  - Simplifies deployment by eliminating external power
- > Easily Programmed
  - Seamless configuration using Red Lion's Crimson desktop software



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## **PROFIBUS Protocol Communication Specifications**

#### **POWER**

GMPB Max Power: 2.6 W (supplied by Graphite host device)

#### **COMMUNICATION PROPERTIES**

PROFIBUS Protocol Port: PROFIBUS DP per EN 50 170 Baud Rates: 9.6 KBaud to 12 MBaud - auto detection Station Address: programmable range from 1 to 125 Isolation from Graphite Host 500 Vrms VDC for 1 minute Output Power: +5 VDC @ 90 mA max. on the D-Sub connector pins 5 (GND) and 6 (+5 V)

#### **CERTIFICATIONS AND COMPLIANCES**

Product Safety:

UL Safety - Class I, Division 2, Groups A, B, C, D, Class II, Division 2, Groups F and G, Class III Hazardous Locations

EN 61326-1 to Industrial Locations IEC/EN 61010-1 RoHS Compliant

#### **ENVIRONMENTAL**

Operating Temperature Range: -40° to +75°C Storage Temperature Range: -40° to +85°C

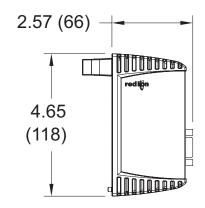
Operating and Storage Humidity: 85% max relative humidity,

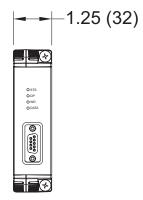
non-condensing, from 0° to +50°C Altitude: Up to 2000 meters

#### **ORDERING GUIDE**

PART NUMBER	DESCRIPTION
GMPBDP00	Graphite Module, PROFIBUS Protocol Interface

#### **DIMENSIONS** In inches (mm)







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As the global experts in communication, monitoring and control for industrial automation and networking, Red Lion has been delivering innovative solutions for over forty years. Our automation, Ethernet and cellular M2M technology enables companies worldwide to gain real-time data visibility that drives productivity. Product brands include Red Lion, N-Tron and Sixnet. With headquarters in York, Pennsylvania, the company has offices across the Americas, Asia-Pacific and Europe. Red Lion is part of Spectris plc, the productivity-enhancing instrumentation and controls company. For more information, please visit www.redlion.net.

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