

General Specifications

F3LB01-0N PROFIBUS-DP Interface Module

FA-M3

GS 34M6H34-01E

General

The PROFIBUS-DP Interface module is a PROFIBUS-DP master module to be installed in an I/O slot of the FA-M3R range-free controller.

The PROFIBUS-DP Interface module can control and communicate with a variety of sensors, actuators, and other remote I/O devices in the field.

PROFIBUS is a vendor-independent, open fieldbus standard (EN50170), which finds wide applications in factory automation and process automation. PROFIBUS-DP is the most popular bus among the PROFIBUS family.

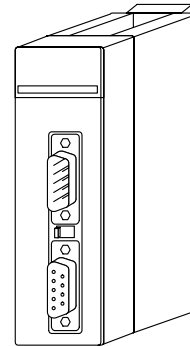
Features

- Up to 121 slaves can be connected.
- 9.6 kbps to 12 Mbps transmission rate.
- 8192 I/O points (4096 inputs and 4096 outputs).
- Supports multi-master configuration for distributed control.
- Allows I/O data synchronization among slaves through commands.
- Diagnosis function provides detailed error information on master and slaves.

Specifications

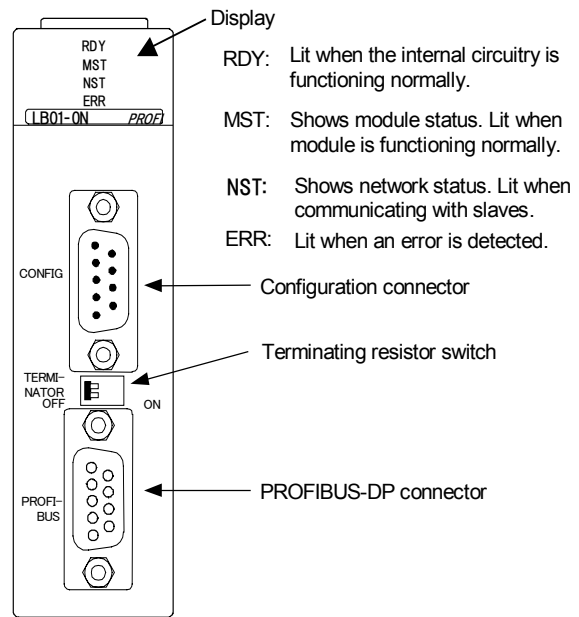
Item	Specifications	
Interface	PROFIBUS-DP DPM1 (Class 1) compliant	
Transmission medium	Special cable (containing two signal lines)	
Transmission rate/ Transmission distance	Transmission Rate	Transmission Distance
	9.6 kbps	1200 m
	19.2 kbps	1200 m
	93.75 kbps	1200 m
	187.5 kbps	1000 m
	500 kbps	400 m
	1500 kbps	200 m
	3M bps	100 m
	6M bps	100 m
	12M bps	100 m
	Electrical standard	EIA RS-485 (Configuration connector: EIA RS-232-C)
Connection mode	Bus connection	
Maximum number of nodes	125 (including this module itself)	
Number of I/O points	8192 I/O points (4096 inputs and 4096 outputs)	
Terminating resistor	220 Ω (built-in resistor should be enabled by switch when module is connected at the end of a bus)	
Network configuration	Configurable from a PC using proprietary PROFIBUS Configurator software available from HMS Industrial Networks AB	
Operating temperature range	0°C to 45°C	
Current consumption	610 mA	
External dimensions	28.9 (W) × 100 (H) × 83.2 (D) mm *	
Weight	170 g	

* Outside dimensions excluding protrusions (for details, see the External Dimensions diagram).



Components and Functions

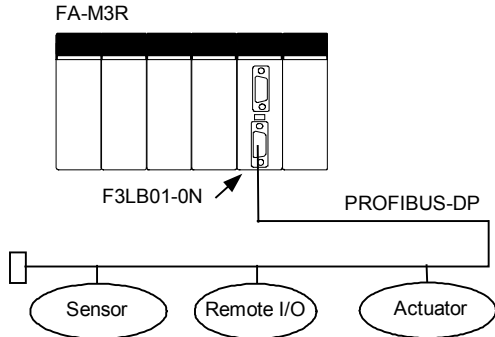
Front view



External Connection

PROFIBUS-DP Connector

Connection example



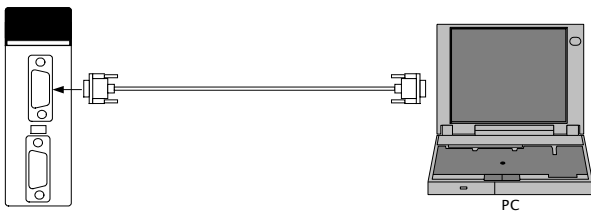
Use PROFIBUS-DP cables and connectors (EN50170 compliant) for connection between the module and its slaves. For details on PROFIBUS-DP, contact:

PROFIBUS International
 Support Center
 Haid-und-Neu-Str. 7
 76131 Karlsruhe
 GERMANY
 Phone: +49 721 9658 590
 Fax: +49 721 9658 589
 e-mail: pi@profibus.com
 URL: <http://www.profibus.com>

Configuration Connector

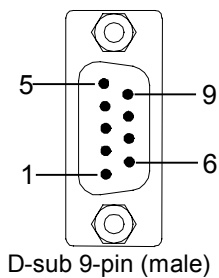
Connection example

Use an RS-232-C crossed cable to connect the configuration connector and the serial port of a PC.



Connector Pin Assignment

Configuration Connector



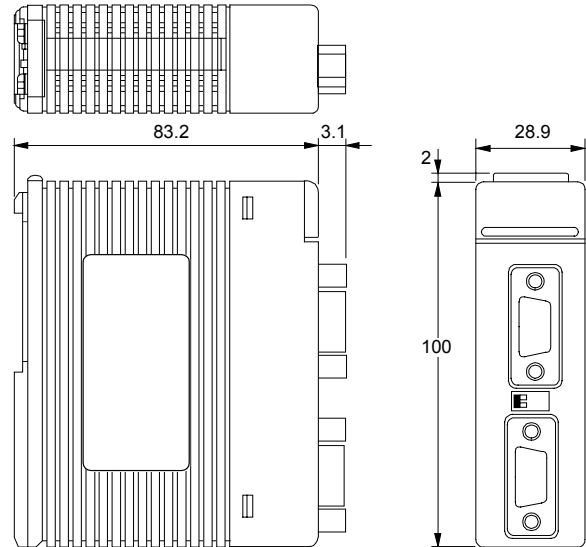
Operating Environment

There is no restriction on the type of CPU modules that can be used with this module.

Model and Suffix Codes

Model	Suffix Code	Style Code	Option Code	Description
F3LB01	-0N	•••	••••	1 PROFIBUS-DP port

External Dimensions



Configurator

Slave stations must be first registered, or configured from a PC using Configurator, a commercially available software application. The recommended configurator is KONF-PDP from HMS Industrial Networks. For details on KONF-PDP, contact:

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 Pilefeltsgatan 93-95
 302 50 Halmstad Sweden
 Tel: +46 35 17 29 00
 Email: sales@hms-networks.com
 URL: <http://www.hms.se/>