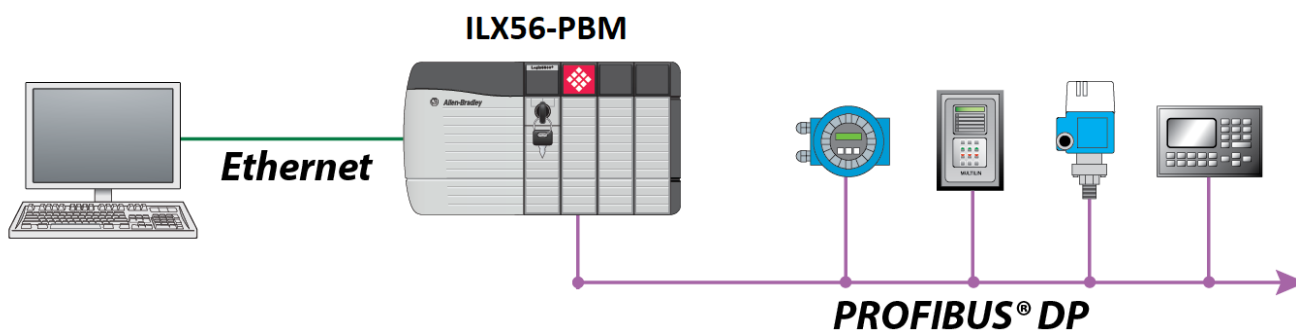# PROFIBUS DPV1 Master/Slave for ControlLogix®
ILX56-PBM

The ILX56-PBM PROFIBUS DPV1 Master/Multi-Slave module allows Rockwell Automation® ControlLogix® processors to communicate with various PLCs and devices using the PROFIBUS DP protocol. As a PROFIBUS DP Master, the module can transfer up to 5000 bytes of cyclic I/O data with various slave devices on the network.

Or you can use the module as a PROFIBUS DP multi-slave, where the module can emulate up to 10 individual nodes on a PROFIBUS DP network, allowing for more cyclic I/O data transfer.

With the ILX56-PBM module, ControlLogix® processors can easily communicate with devices supporting PROFIBUS DPV0 and DPV1 protocol. And through premier integration tools such as a custom Add-On Profile, project-specific Add-On Routines, and advanced tools such as PROFIBUS DP packet capture utility, you can minimize the time required to get a PROFIBUS DP network configured in a ControlLogix® environment.

In addition, with the use of multiple I/O connections back to the ControlLogix® processor, this module provides data update rates that will meet even the most demanding applications.

Features

♦ **AOP and AOI:** Module communication is integrated within Studio/RSLogix™ 5000 using a sample Add-On Instruction (AOI), and custom configuration utility created Add-On Routines to reduce commissioning time.

♦ **Autoscan:** The Autoscan feature reduces startup times and simplifies troubleshooting by scanning the PROFIBUS network and uploading slave device addresses and configuration information. (Reads and maps nodes automatically to the module.)

♦ **ComDTM:** Allows remote Ethernet connectivity with Asset Management Software, significantly lowering maintenance costs. You can configure, commission, maintain and diagnose your fieldbus devices throughout their entire lifecycle with this comprehensive, fully integrated engineering and maintenance environment.

♦ SD card slot (SD card optional) is used for storing configuration files in the event of a disaster.

♦ **Redundancy:** Two modules can be used along with the custom Add-On Routine to allow for a redundant PROFIBUS DP network for high availability systems.

PROFIBUS DP Master Specifications

Specification	Description
Slaves	Maximum 125
Input/Output	Maximum 244 Bytes per Slave
Input Data	Maximum 5000 Bytes
Acyclic Data	DPV1
Status data	88 Bytes
Output data	Maximum 5000 Bytes
DPV1 Services	Class 1 Read/Write Class 1 Alarm Class 2 Initiate/Read/Write/Abort
Services	Global-Control, Slave-Diagnostic, Set-Parameter
Sync, Freeze Command	Supported
Baud rate	9.6 kBaud, 19.2 kBaud, 45.45 kBaud, 93.75 kBaud, 187.5 kBaud, 500 kBaud 1.5 MBaud, 3 MBaud, 6 MBaud, 12 MBaud

PROFIBUS DP Slave Specifications

Specification	Description
Slaves	Emulate up to 10 slaves
Input/Output	Maximum 244 Bytes per Slave
Input Data	Maximum 2440 Bytes
Acyclic Data	DPV1
Status data	88 Bytes
Output data	Maximum 2440 Bytes
DPV1 Services	Class 1 Read/Write, Class 1 Alarm
Services	Global-Control, Slave-Diagnostic, Set-Parameter
Sync, Freeze Command	Supported
Baud rate	9.6 kBaud, 19.2 kBaud, 45.45 kBaud, 93.75 kBaud, 187.5 kBaud, 500 kBaud 1.5 MBaud, 3 MBaud, 6 MBaud, 12 MBaud. Auto-detection mode is supported

Hardware Specifications

Specification	Description
PROFIBUS Interface	RS-485, Max. 12 Mbps, potential free, according EN 50170
Power Supply	450 mA @ 5Vdc, 2 mA @ 24 Vdc
Dimensions	Standard 1756 Single-slot module
Burst	EN 61000-4-4, 2 kV, 5 kHz
Surge	EN 61000-4-5, 2 kV common mode, 1 kV differential mode
ESD	EN 61000-4-2, 4 kV contact, 8 kV air, 4 kV indirect
Radiated/Conducted Immunity	EN 61000-4-3, 10 V/m, 30 to 1000 MHz, 80% AM, 1 kHz sine wave EN 61000-4-6, 10 V, 0,15 to 80 MHz
Radiated/Conducted Emission	EN 55011 Class A
Vibration/Shock (operating)	IEC 600068-2-6, 10 to 500 Hz, ± 0,75 mm, ± 2 g, 1 Octave/min IEC 600068-2-27, 30 g, 11 ms
Operating Temperature	0°C to 60°C (32°F to 140°F)
Relative Humidity	5 to 95% (non-condensing)

Agency Approvals & Certifications

Please visit our website: www.prosoft-technology.com