

# DATASHEET

## PROFIBUS DPV1 Master Communication Module MVI56-PDPMV1

The PROFIBUS DPV1 Master module is a powerful communication interface for ControlLogix<sup>®</sup> processors. Developed under license from Rockwell Automation, the module incorporates proprietary backplane technology that enables powerful data exchange with ControlLogix processors.

The module supports complete Master specifications according to IEC 61158. Acyclic parameter data can be transferred with Class 1 or Class 2 DPV1 services, allowing processors to easily communicate with slave devices supporting PROFIBUS DPV0/V1 protocol.

The module acts as an input/output module between the PROFIBUS network and the ControlLogix processor. Data transfer from the processor is asynchronous with the I/O data transfer on the PROFIBUS network.



### General Specifications

- Single slot - 1756 backplane compatible
- The module is recognized as an Input/Output module and has access to processor memory for data transfer between processor and module
- Ladder Logic is used for data transfer between module and processor. Sample ladder file (add-on instruction) included.
- Local or remote rack
- Configurable I/O backplane sizes allow optimal performance for remote rack applications

### General Specifications - PDPMV1

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## Functional Specifications

The PDPMV1 PROFIBUS Master module acts as a PROFIBUS network scanner, transferring input and output data between PROFIBUS devices and processor data memory over the backplane.

- Master Busview configuration interface via included ProSoft Configuration Builder software (Part Number PSW-PCB)
- Project-unique GSD file import library
- Monitoring and modification of process data and DPV1 acyclic data
- Multi-drop on a PROFIBUS DPV1 network with other compatible devices
- Automatic project documentation
- Automatic Bus Parameter calculation
- Online slave diagnostics
- Supports all standardized baud rates, up to 12 Mbps
- Supports extended diagnostic data (DPV1)
- Multiple Masters can be placed in a single rack
- CRC checksum determination of slave configuration consistency to processor
- Master Status LED indicators for Operations, Network Communication, Master Token-Hold and Network Configuration
- FDT/DTM PROFIBUS Master transport communication DTM software included (Part Number PSW-CDTM-PDPM)

## PROFIBUS Master Specifications

- Up to 125 slaves can be connected with a repeater
- Up to 1536 cyclic bytes input and 1536 bytes output data
- Supports Extended Diagnostic Data
- RS-485 optically isolated PROFIBUS interface with on board DC-DC converter
- Acyclic communications (DPV1), Read and Write
- Alarm handling (DPV1)
- Supports Sync and Freeze commands
- Supports PROFIdrive 3.1 compliant parameter read and write operations
- Supports Multicast and Broadcast telegrams (DPV1)

## PROFIBUS Master Port

- DB-9F optically isolated RS-485
- Ready, Run, Error and Token LED Indicators
- PROFIBUS DPV1 RS-485 interface with a 9-pin D shell female connector and isolated opto-couplers



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## Hardware Specifications

Specification	Description
Backplane Current Load	800 mA @ 5 VDC 3 mA @ 24 VDC
Operating Temperature	0°C to 60°C (32°F to 140°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Shock	30 g operational 50 g non-operational Vibration: 5 g from 10 Hz to 150 Hz
Relative Humidity	5% to 95% (with no condensation)
LED Indicators	Module Status Backplane Transfer Status Application Status Serial Activity and Error LED Status
<b>Debug/Configuration port (CFG)</b>	
CFG Port (CFG)	RJ45 (DB-9M with supplied cable) RS-232 only CIPConnect® Ethernet routing using 1756-ENBT, 1756-EN2T or similar
Shipped with Unit	RJ45 to DB-9M cables for each port 6-foot RS-232 configuration cable

## Agency Approvals & Certifications

Please visit our website: [www.prosoft-technology.com](http://www.prosoft-technology.com)



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MVI56-PDPMV1

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