



PROFIBUS DPV1 Master Module

PTQ-PDPMV1

The PROFIBUS DPV1 Master Module is a powerful communication interface for Quantum platform processors. Developed under license from Schneider Electric, the module incorporates proprietary backplane technology that enables powerful data exchange with Quantum processors.

The PROFIBUS DPV1 Master Communication Module is designed according to IEC 61158 specifications and has been tested and certified according to PTO guidelines to guarantee proper interoperability on a PROFIBUS network. 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.

Features and Benefits

- The module is built on Siemens ASIC ASPC2 Step E with Infineon C165 Microprocessor
- The firmware is flash-upgradable
- The PROFIBUS DPV1 module allows for slave messaging, diagnostics and alarm handling, and notification
- Adheres to the Unity HEC Hot Standby Functional Specifications
- Cyclic Data: (Process I/O data) 1536 bytes of input and 1536 bytes of output data
- Configure PTQ module and PROFIBUS network over Ethernet

General Specifications

- Single Slot - Quantum backplane compatible
- The module is recognized as an Options module and has access to PLC memory for data transfer
- Configuration data is stored in non-volatile memory in the ProTalk module
- Configuration software for Microsoft Windows XP, 2000 and NT is included with the module.
- Up to six modules can be placed in a rack
- Local rack - The module must be placed in the same rack as processor.
- Compatible with common Quantum / Unity programming tools.
 - UnityPro XL
 - Concept
 - ProWORX
- Quantum data types supported: 3x, 4x
- High speed data transfer across backplane provides quick data update times.
- Sample ladder file available.

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With the growing usage of the PROFIBUS DPV1 protocol in the industrial marketplace, this product has a wide variety of application uses. Industries that use this technology include:

- Power and distribution applications
- Petrochemical
- Water and Gas Applications
- SCADA and DCS applications
- Manufacturing and Factory Automation Applications

How to Contact Us: Sales and Support

All ProSoft Technology® products are backed with unlimited technical support. Contact our worldwide Technical Support team directly by phone or email:

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Hardware Specifications

Specification	Value
Operating Temperature	0 to 60°C (32 to 140°F)
Storage Temperature	-40 to 85°C (-40 to 185°F)
Relative Humidity	5% to 95% (non-condensing)
Vibration	Sine vibration 4-100 Hz in each of the 3 orthogonal axes
Shock	30G, 11 mSec. in each of the 3 orthogonal axes
Dimensions (HxWxD), Approx.	250 x 103.85 x 40.34 mm 9.84 x 4.09 x 1.59 in
LED Indicators	Module Status Backplane Transfer Status Serial Port Activity LED Serial Activity and Error LED Status Master Status Operations Network Drop Communication Master Token-Hold Master database configuration

Debug/Configuration Ports

Configuration Serial Port (PRT1)	DB-9M PC Compatible RS-232 only No hardware handshaking
Configuration Ethernet Port	RJ45 Connector Link and Activity LED indicators

Application Port

PROFIBUS Master Port	DB-9F Optically Isolated RS-485 Ready, Run, Error and Token LED Indicators
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Functional Specifications

- Easy-to-use drag and drop Busview configuration interface via ProSoft Configuration Builder software (see PSW-PCB Datasheet)
- Monitor/Modify of process data and DPV1 acyclic data with online slave diagnostics
- Supports PROFIBUS PA slaves on the network through DP/PA coupler or link
- Supports up to 125 slave devices with repeaters
- Supports extended diagnostic data (DPV1)
- Supports all standardized baud rates, up to 12 Mbits/s
- Auto baud detection at all valid PROFIBUS DPV1 rates
- Supports PROFIdrive 3.1 compliant parameter read and write operations
- Supports Sync and Freeze commands
- Alarm indications and confirmations handling (DPV1)
- Supports Multicast and Broadcast telegrams (DPV1)

- CRC checksum determination of slave configuration consistency to processor
- FDT/DTM PROFIBUS master transport communication DTM software included (see PSW-CDTM-PDPM)

Hot Standby

- Hot Standby features supporting the SE 140 671 CPU
- Supports a single PTQ-PDPMV1 module per rack
- Diagnostic and status words are provided for Active Primary and Passive Secondary master health status
- PROFIBUS switchover time will be nominal 100 ms not to exceed 300 milliseconds
- Cable break detection with segmented network slave quantity information
- PROFIBUS health messages are generated from secondary master via FDL ping services
- No setup parameters required. Module automatically detects Hot Standby system

Physical

- PROFIBUS DPV1 RS-485 interface with a 9-pin D shell female connector and isolated Opto-Couplers
- Master Status LED Indicators for Operations, Network Drop Communication, Master Token-Hold

Additional Products

ProSoft Technology offers a full complement of hardware and software solutions for a wide variety of industrial communication platforms. Visit our web site at <http://www.prosoft-technology.com> for a complete list of products, including:

PTQ-PDPS	PROFIBUS DP Slave Communication Module
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Ordering Information

To order this product, please use the following:

PTQ-PDPMV1 PROFIBUS DPV1 Master Module

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft distributors near you, go to <http://www.prosoft-technology.com>

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