

For your automation solutions  
**PROFIBUS DP V1 module**  
on **Modicon Quantum**  
All the *efficiency* of a winning  
partnership



Schneider Electric  
and ProSoft Technology



Merlin Gerin  
Square D  
Telemecanique

**Schneider**  
 **Electric**  
*Building a New Electric World*

# PROFIBUS DP module



Schneider Electric and ProSoft Technology have combined their expertise to create a new dedicated automation offer for process applications. The result of this collaboration, the PROFIBUS DP V1 module, is available for the entire Modicon Quantum range, in the Unity Pro and Concept programming environments. Tested and certified by Schneider Electric, this module is compatible with the PROFIBUS DP V1 standard and marketed by ProSoft Technology.



## Modicon Quantum, optimized for Process applications

**Modicon Quantum has been enhanced with a new entry-level processor and new, high-performance processors ideal for complex processes.** Modicon Quantum processors offer users optimum cycle times combined with even more communication functions, diagnostics, memory flexibility (PCMCIA) and data storage. With the addition of a new redundancy module, your system availability is assured by Modicon Quantum.

## PROFIBUS DP V1, an open and adapted fieldbus

**PROFIBUS DP V1 and PROFIBUS PA (recommended for applications in hazardous areas) is the leading fieldbus in the process automation market.**

- It offers several user benefits:
- Its specially adapted physical layer ensures intrinsic safety
  - Connected devices can be adjusted during bus operation
  - A wide range of compatible equipment available due to its openness

## Modicon Quantum and PROFIBUS DP, a long-term alliance

This new offer has brought about rapid change, with the main developments focusing on compatibility with the Modicon Quantum Hot Standby offer and meeting the requirements of fully redundant architectures.



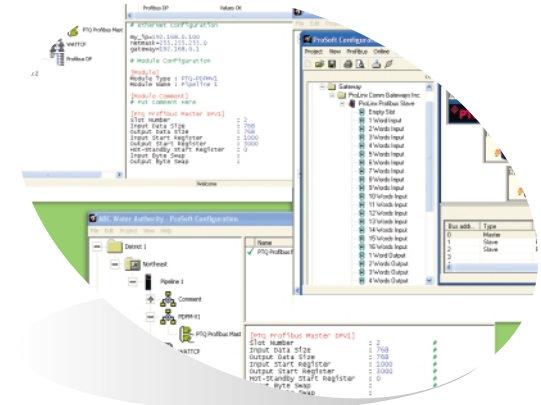
Symbol	Type
LOCK	<EFB>
BOOL_16	Array [0..15] of BOOL
DITY	<EFB>
EXTINP	<EFB>
FLIN	<EFB>
FLININEFB	<EFB>
GENDT	<EFB>
GENDT_DINT	<EFB>
GENDT_INT	<EFB>
GENDT_LDIINT	<EFB>
GENDT_LIINT	<EFB>
INTSTATE	<EFB>

## A complete offer

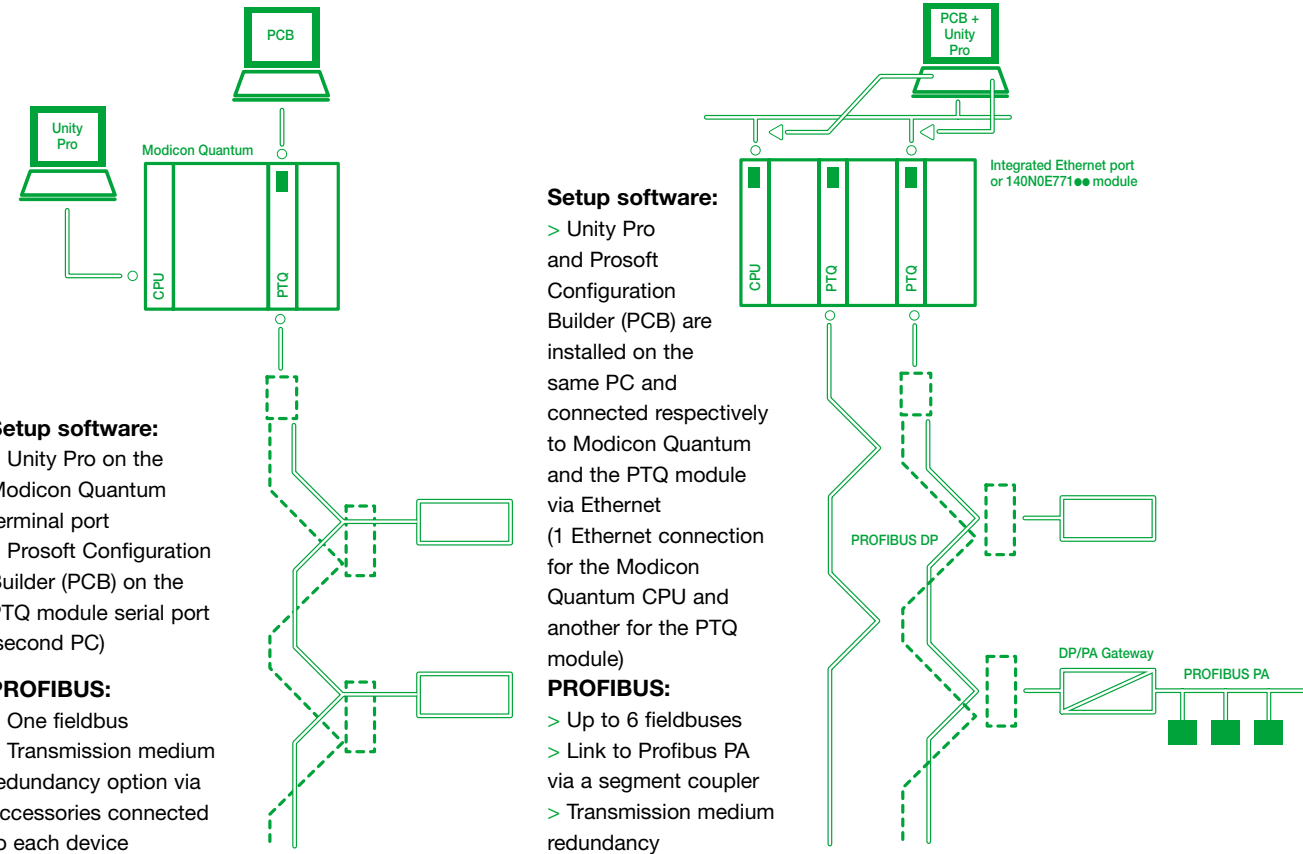
**The offer includes the following components to meet your application requirements as closely as possible:**

- **Prosoft Configuration Builder (PCB) software**  
This helps you configure and diagnose the PROFIBUS bus and slave parameters, as well as connect the PROFIBUS I/O cyclic variables to the Modicon Quantum PLC internal registers.
- **The PTQ-PDPMV1 module**  
This standard format Modicon Quantum in-rack module includes a PROFIBUS interface and an Ethernet port or serial link for connection to the PC supporting the configuration software.
- **DFBs\***  
Designed for setting equipment parameters, these DFBs manage acyclical messages.
- **An Ethernet Straight, an Ethernet Cross-over and a serial link cable for connecting the PC**
- **A documentation CD-ROM**

\* Derived Function Blocks



## Ideal for simple applications or the most sophisticated architectures



**Setup software:**

- > Unity Pro on the Modicon Quantum terminal port
- > Prosoft Configuration Builder (PCB) on the PTQ module serial port (second PC)

**PROFIBUS:**

- > One fieldbus
- > Transmission medium redundancy option via accessories connected to each device

**Setup software:**

- > Unity Pro and Prosoft Configuration Builder (PCB) are installed on the same PC and connected respectively to Modicon Quantum and the PTQ module via Ethernet (1 Ethernet connection for the Modicon Quantum CPU and another for the PTQ module)

**PROFIBUS:**

- > Up to 6 fieldbuses
- > Link to Profibus PA via a segment coupler
- > Transmission medium redundancy

## Technical characteristics



<b>PTQ-PDPMV1</b>	PROFIBUS DP V1 master module, class 1
<b>PROFIBUS interface</b>	Isolated RS 485, 9-pin SubD connector
<b>Configurator interface</b>	9-pin SubD RS232 serial link or Ethernet RJ45
<b>Transmission speed</b>	9.6 Kbps to 12 Mbds
<b>Number of I/O</b>	Up to 125 slaves 1536 input bytes 1536 output bytes
<b>Services</b>	Implicit exchange of cyclic process variables with Modicon Quantum registers Explicit exchanges of acyclic variables via a mailbox and DFBs Support of SYNC and FREEZE modes
<b>Standards</b>	IEC 61158 / EN 50170 / PROFIBUS PNO / PTO CE, UL, CSA
<b>Operating temperature</b>	0 to 60°C
<b>Relative humidity</b>	5 to 95% (non-condensing)



### Global presence in 130 countries

- Permanent availability, worldwide. With more than 5000 sales outlets in 130 countries, you will always find a complete range of products that meets your needs and conforms to local standards.
- Technical support wherever you are. Schneider Electric provides technical assistance around the world, with experts at your service to help you achieve the optimum solution for your particular application.

[www.schneider-electric.com](http://www.schneider-electric.com)  
[www.telemecanique.com](http://www.telemecanique.com)



### Collaborative Automation Partner Program

- A network of industrial partners offering products and services complementary to the Schneider Electric offer.

[www.collaborativeautomation.com](http://www.collaborativeautomation.com)



### A single partner providing communications solutions for the automation industry

ProSoft Technology serves the automation industry's communications and specialized applications needs with high quality products, application expertise, and technical support. With their home office in Bakersfield, California, ProSoft Technology is committed to providing localized sales and support to customers worldwide. Sales, application engineering, and support services are provided internationally by 400 exclusive distributors served by Regional Area Offices in North America, Latin America, Europe and Asia Pacific.

Facilitated by an extremely active product development program and customer recognition of their product quality, ProSoft Technology now has three product families:

- ProLinX: Stand-alone industrial gateways offering communication solutions between different networks
- ProTalk: In-rack interface modules for Telemecanique Modicon Quantum
- RadioLinX: Wireless industrial communication networks

[www.prosoft-technology.com](http://www.prosoft-technology.com)

#### Schneider Electric Industries S.A.S.

Registered office

89, bd Franklin Roosevelt  
F 92500 Rueil-Malmaison  
Cedex FRANCE

[www.schneider-electric.com](http://www.schneider-electric.com)  
[www.telemecanique.com](http://www.telemecanique.com)

The products featured in this document are subject to change at any time with regard to appearance, performance or use. Their description can under no circumstances be deemed to be contractual in nature.  
Design : Pema-Cohérents  
Photos : Schneider Electric