





# Modbus Master/Slave to PROFIBUS DP Master Gateway 5104-MCM-PDPM

The MCM-PDPM modules are the ideal solution for the many applications where Modbus connectivity can be used to integrate a PROFIBUS DP Slave device into a system. The Modbus Master/Slave gateway is a powerful module designed with Client and Server support, enabling easy connection to Rockwell Automation PLCs (CLX, SLC, PLC, CPLX, and similar devices). In combination with the PROFIBUS DP Slave device support, the module provides a very powerful interface to the many PROFIBUS devices which are in use in the industrial marketplace today. Applications for the module are found in most industries, especially Manufacturing, Oil and Gas, Electrical Power and Food Processing.

## **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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# Modbus Master/Slave to PROFIBUS DP Master Gateway

## 5104-MCM-PDPM

The ProLinx Modbus Master/Slave to PROFIBUS Master Gateway creates a powerful connection between devices on a Modbus network and a PROFIBUS DP Slave device. This stand-alone DIN-rail mounted protocol gateway provides one serial port and one PROFIBUS Master DB9F port.

The Modbus protocol driver supports Master and Slave implementations of the protocol. All Modbus serial ports are individually configurable, providing a very powerful and flexible host or device interface solution.

The PROFIBUS DP Master protocol driver supports Master implementations of the protocol on either a Mono-Master or Multi-Master network.

#### Modbus Master/Slave

The Modbus driver provides extensive support for both the Master and the Slave implementations of the protocol. The serial port(s) on the gateway can be individually configured to support the Modbus protocol (Master or Slave, RTU or ASCII, Baud rate, etc.).

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General Parameters – Mo	
Communication	Baud Rate: 110 to 115K baud
parameters	Stop Bits: 1 or 2
	Data Size: 7 or 8 bits
	Parity: None, Even, Odd
	RTS Timing delays: 0 to 65535 ms
Error Checking	RTU mode (binary) with CRC-16
	ASCII mode with LRC error checking
Floating Point	Floating point data movement supported,
-	including configurable support for Enron
	implementation
Function Codes	1: Read Output Status
	2: Read Input Status
	3: Read Multiple Data Registers
	4: Read Input Registers
	5: Write Single Bit
	6: Write Single Data Register
	15: Write Multiple Bits
	16: Write Multiple Data Register
Modbus Master	
Command List	Up to 100 command per master port, each
	fully configurable for function, slave address,
	register to/from addressing and word/bit
	count.
Polling of command list	Configurable polling of command list,
3	including continuous and on change of data,
	and dynamically user or automatic enabled.
Modbus Slave	
Node address	1 to 247 – software selectable



#### **PROFIBUS DP Master**

The PROFIBUS Master protocol driver exists as a single port implementation. The driver can be configured as a Class 1 PROFIBUS Master to continuously interface with other PROFIBUS slave devices. The unit is also used for configuration of the nodes on the PROFIBUS network. It provides access to both standard as well as extended diagnostic information.

General Parameters	
Communication parameters	Baud Rate: 9.6 kbit/s – 12 Mbit/s
PROFIBUS Master	
Command List	Read Diag
	Global Cmd
	Read Cntrs
	Reset Cntrs
Node address	0 - 125 – software selectable.
Status Data	Error codes, counters and port status available per configured slave on the network.

# **General Specifications**

The ProLinx Communication Modules provide connectivity for two or more dissimilar network types. The modules, encased in sturdy extruded aluminum, are stand-alone DIN-rail mounted protocol gateways, providing communication between many of the most widely used protocols in industrial automation today.

# **Hardware Specifications**

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Specification	Description
Power Supply	24 VDC nominal
	18 to 36 VDC allowed
	Positive, Negative, GND Terminals
	2.5 mm screwdriver blade
Current Load	500 mA max@ 24 VDC
Operating Temperature	–20 to 50°C (–4 to 122°F)
Storage Temperature	–40 to 85°C (–40 to 185°F)
Relative Humidity	5 to 95% (non-condensing)
Dimensions	Standard: 5.20H x 2.07W x 4.52D in.
	(13.2cmH x 5.25cmW x 11.48cmD)
	Extended: 5.20H x 2.73W x 4.52D in.
	(13.2cmH x 6.934cmW x 11.48cmD)
LED Indicators	Power and Module Status
	Application Status
	Serial Port Activity LED
	Serial Activity and Error LED Status
Configuration Serial Port	DB-9M RS-232 only
	No hardware handshaking
Ethernet Port (Ethernet	RJ45 Connector
modules only)	Link and Activity LED indicators
Application Serial Ports	RS-232/422/485
	RS-232 handshaking configurable
	RS-422/485 screw termination included

Specification	Description
Serial Port Isolation	2500V RMS port signal isolation per UL 1577
	3000V DC min. port to ground and port to logic power isolation
Shipped with Each Unit	Mini-DIN to DB-9M serial cables
	4 ft RS-232 configuration cable
	2.5mm screwdriver
	CD (docs and Configuration utility)
	RS-422/485 DB-9 to Screw Terminal
	Adaptor (1 or 4, depending on ports)

# **ProSoft Configuration Builder**

ProSoft Configuration Builder (PCB) provides a quick and easy way to manage module configuration files customized to meet your application needs. PCB is not only a powerful solution for new configuration files, but also allows you to import information from previously installed (known working) configurations to new projects.

## **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.

## **Ordering Information**

To order this product, please use the following:

5104-MCM-PDPM Modbus Master/Slave to PROFIBUS DP

Master Gateway

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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