





### DF1 Master/Slave to PROFIBUS DP Master Gateway 5104-DFCM-PDPM

The DFCM-PDPM modules are the ideal solution for the many applications where DF1 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.

# 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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# DF1 Master/Slave to PROFIBUS DP Master Gateway

### 5104-DFCM-PDPM

The ProLinx DF1 Master Slave to PROFIBUS DP Master Gateway creates a powerful connection between devices on a DF1 network and PROFIBUS DP slave devices. This stand-alone DIN-rail mounted protocol gateway provides one serial port and PROFIBUS DP Master port.

The DF1 protocol driver supports Master or Slave implementations of the protocol on each DF1 port. All DF1 ports are individually configurable.

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

### **DF1 Master/Slave**

The DF1 Master/Slave Protocol driver provides extensive support for both Master and Slave implementations of the protocol. The serial port on the gateway is user-configurable to support the DF1 protocol (Master or Slave, Error Checking, Baud rate, etc).

General Parameters	
Communication parameters	Local Station ID: 0 to 254
	Ports 1 to 3 Baud Rate: 110 to 115K baud
	Stop Bits: 1
	Data Size: 8 bits
	Parity: None, Even, Odd
	RTS Timing delays: 0 to 65535 ms
Error Checking	BCC and CRC
Miscellaneous	Full hardware handshaking control, providing radio, smart modem and Multi- drop support
	Floating point data supported

### **DF1 Master Protocol Specifications**

The ports on the module can be individually configured as Master ports. When configured in master mode, the DFCM module is capable of reading and writing data to remote DF1 devices.

DF1 Master Driver	
DF1 Modes	Full-Duplex – Master (Module generates commands)
	Half-Duplex – Polling
Command List	Up to 100 commands per Master port, each fully-configurable for function, slave address, register to/from addressing and word/bit count
Polling of Command List	User-configurable polling of commands, including disabled, continuous, and on change of data (write only)

# **DF1 Slave Protocol Specifications**

The ports on the module can be individually configured to support the Slave mode of the DF1 protocol. When in slave mode, the module can accept DF1 commands from a master to read/write data stored in the module's internal registers.

DF1 Slave Driver	
DF1 Modes	Full Duplex – Slave (not peer mode)
	Half Duplex – Polled
Configurable parameters per slave port	Data Table File Start (File N[x] 0 to 999)
	Data Table File Size (1 to 1000 words)
	Data Table location in database (0 to 3999)

# **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

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)

Specification	Description
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
comiguration contain ort	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
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-DFCM-PDPM DF1 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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