





# DNP 3.0 Slave to PROFIBUS DP Master Gateway 5104-DNPS-PDPM

The DNPS-PDPM modules are the ideal solution for the many applications where DNP connectivity can be used to integrate a PROFIBUS DP Slave device into a system. The DNP 3.0 Slave gateway is a powerful module designed with Client 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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# DNP 3.0 Slave to PROFIBUS DP Master Gateway

#### 5104-DNPS-PDPM

The ProLinx DNP 3.0 Slave to PROFIBUS DP Master Gateway creates a powerful connection between devices on a PROFIBUS network and DNP devices. This stand-alone DIN-rail mounted protocol gateway provides one serial port and one DB9F port configurable for PDPM.

The DNP 3.0 Slave protocol driver supports Slave implementations of the protocol on one port. This port is fully configurable.

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

## **DNP 3.0 Slave**

The DNP 3.0 Slave driver provides extensive support for Slave implementations of the protocol. The serial port on the gateway is user-configurable to support the DNP 3.0 protocol (Slave, Error Checking, Baud rate, etc).

| <b>General Parameters</b> |  |
|---------------------------|--|
| Internal Database         | Binary Inputs: 0 to 500 word count         |
|                           | Analog Inputs: 0 to 500 points             |
|                           | Counters: 0 to 250 points                  |
|                           | Binary Outputs: 0 to 200 word count        |
|                           | Analog Outputs: 0 to 500 points            |
|                           | Binary Input Events: 0 to 100 event buffer |
|                           | Analog Input Events: 0 to 100 event buffer |
| Communication             | Baud Rate: 110 to 115K baud                |
| parameters                | Stop Bits: 1                               |
|                           | Data Size: 8 bits                          |
|                           | Parity: None                               |
|                           | RTS Timing delays: 0 to 65535 ms           |
| DNP Mode                  | DNP 3.0 Slave – Level 2                    |
|                           |  |
| DNP Slave                 |  |
| Node address              | 0 to 65534 (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 VDC to 36 VDC allowed  |  |
|                          | Positive, Negative, GND Terminals                                     |  |
|                          | 2.5 mm screwdriver blade  |  |
| Current Load             | 500 mA max @ 24 VDC   |  |
| Operating Temperature    | 32° F to 122° F (0° C to 50° C)                                       |  |
| Storage Temperature      | -40° F to 185° F (-40° C to 85° C)                                    |  |
| Relative Humidity        | 5% to 95% (with no condensation)                                      |  |
| Dimensions               | Standard: 5.20H x 2.07W x 4.52D in.<br>(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     | DB-9M RS-232 only   |  |
| Port                     | 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) |
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# **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-DNPS-PDPM** DNP 3.0 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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