



## DNP 3.0 over Ethernet to PROFIBUS DP Slave Gateway 5205-DNPSNET-PDPS

*The DNPSNET-PDPS modules are the ideal solution for the many applications where DNP over Ethernet connectivity can be used to integrate a PROFIBUS DP master device into a system. The DNP over Ethernet gateway is a powerful module designed with both Client and Server support, enabling easy connection to other DNP devices. In combination with the PROFIBUS DP Slave support, the module provides a very powerful interface to the many PROFIBUS master 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.*

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## DNP 3.0 over Ethernet to PROFIBUS DP Slave Gateway

### 5205-DNPSNET-PDPS

The ProLinx DNP over Ethernet to PROFIBUS DP Slave Gateway creates a powerful connection between devices on a DNP over Ethernet network and a PROFIBUS master device. This stand-alone DIN-rail mounted protocol gateway provides one Ethernet port and one PROFIBUS DP Slave configurable DB9F port.

The ProLinx module supports the DNP 3.0 protocol as a server using the TCP and UDP protocols using service port 20000. This port is fully configurable.

The PROFIBUS DP Slave protocol driver supports the PROFIBUS V0 Slave implementation, providing powerful data transfer capability between the ProLinx module and Siemens PLCs or other hosts. User configurable data mapping and DP port operation make the interface an easy to use and powerful data transfer tool.

### DNP 3.0 TCP/IP Server

The DNPSNET protocol driver exists as a single service port (DNPSNET port 20000) implementation that supports a single TCP port connection and multiple UDP ports on a TCP/IP Ethernet network. The DNPSNET port operates as a server, supporting the DNP 3.0 protocol in a Level 2 implementation using the DNP User Group recommended extension for use on LAN/WAN.

#### General Parameters

Internal Database	Binary Inputs: 8000 points (500 words) Analog Inputs: 500 points Counters: 250 (500 words) Binary Outputs: 2000 points (125 words) Analog Outputs: 500 points
DNP Mode	DNP 3.0 Slave – Level 2

#### DNP Server

Service Port	20000
Protocols	TCP (1 connection) and UDP
Node address	0 to 65534 (software selectable)

The DNPSNET module accepts DNP commands to control and monitor the data stored in the DNP databases. These data are passed between the module and the other protocol on the ProLinx module.

### PROFIBUS DP Slave

The PROFIBUS DP Slave driver gives access to the ProLinx unit's internal database via 244 bytes of Input data and 244 bytes of Output data (maximum 400 bytes total). These Input and Output data blocks are mapped by the user within the ProLinx module's data memory

allowing the user maximum flexibility and data transfer with other protocols.

#### General Parameters

GSD File	PRLX05A5.GSD Downloadable from ProSoft Technology web site
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#### PROFIBUS Specifications

Communication parameters	Baud Rate: 9.6 kbit/s – 12 Mbit/s
Supported I/O length	244 bytes Input data 244 bytes Output data 400 bytes total
Supported PROFIBUS DP features	PROFIBUS V0 Slave using Siemens SPC3 chipset Freeze Mode Sync Mode Auto Baud Setting
Configurable Parameters	PROFIBUS Node Address: 1 to 125 Data byte swapping Action on loss of PROFIBUS connection Comm Fail Timeout Multiplier Status Data location in Internal Database

### 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)
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 modules only)	RJ45 Connector Link and Activity LED indicators

Specification	Description
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:

**5205-DNPSNET-PDPS** DNP 3.0 over Ethernet to PROFIBUS DP Slave 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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May 03, 2007