



## Modbus Plus to PROFIBUS DP Slave Gateway

### 5305-MBP-PDPS

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

The Modbus Plus protocol driver supports both Master and Slave implementations of the protocol on the DB9 Female Modbus Plus port. The Modbus Plus 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.

### Modbus Plus

The Modbus Plus protocol driver operates as a single peer-to-peer Modbus Plus Port with dual media-redundant connectors which are not configurable as separate ports.

### Modbus Plus to PROFIBUS DP Slave Gateway 5305-MBP-PDPS

*The MBP-PDPS modules are the ideal solution for the many applications where Modbus Plus connectivity can be used to integrate a PROFIBUS DP master device into a system. The Modbus Plus gateway is a powerful module designed with both Master and Slave support, enabling easy connection to other Modbus devices (Modicon processors and many others). In combination with the PROFIBUS DP Slave support, the module provides a very powerful interface to the many PROFIBUS DP 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.*

### 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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#### General Parameters

|                       |  |
|-----------------------|--|
| Modbus Function Codes | 3: Read Multiple Data Registers (MSTR 2)<br>16: Write Multiple Data Register (MSTR 1)<br>Global data read (32 words max.)<br>Global data write (32 words max.) |
|-----------------------|--|

|               |         |
|---------------|---------|
| Address Scope | 1 to 64 |
|---------------|---------|

#### Modbus Plus Functioning as a Master

|                         |   |
|-------------------------|---|
| Command List            | Up to 200 commands on the master port, fully configurable for function, slave address, register to/from addressing and word count |
| Polling of command list | Configurable polling of command list, including continuous and on change of data  |

#### Modbus Plus Functioning as a Slave

|              |                               |
|--------------|-------------------------------|
| Node address | 1 to 64 – software selectable |
|--------------|-------------------------------|

### 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<br>Downloadable from ProSoft Technology web site   |
| PROFIBUS Specifications        |   |
| Communication parameters       | Baud Rate: 9.6 kbit/s – 12 Mbit/s   |
| Supported I/O length           | 244 bytes Input data<br>244 bytes Output data<br>400 bytes total  |
| Supported PROFIBUS DP features | PROFIBUS V0 Slave using Siemens SPC3 chipset<br>Freeze Mode<br>Sync Mode<br>Auto Baud Setting   |
| Configurable Parameters        | PROFIBUS Node Address: 1 to 125<br>Data byte swapping<br>Action on loss of PROFIBUS connection<br>Comm Fail Timeout Multiplier<br>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<br>18 to 36 VDC allowed<br>Positive, Negative, GND Terminals<br>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.<br>(13.2cmH x 5.25cmW x 11.48cmD)<br>Extended: 5.20H x 2.73W x 4.52D in.<br>(13.2cmH x 6.934cmW x 11.48cmD) |
| LED Indicators                        | Power and Module Status<br>Application Status<br>Serial Port Activity LED<br>Serial Activity and Error LED Status                               |
| Configuration Serial Port             | DB-9M RS-232 only<br>No hardware handshaking  |
| Ethernet Port (Ethernet modules only) | RJ45 Connector<br>Link and Activity LED indicators  |
| Application Serial Ports              | RS-232/422/485<br>RS-232 handshaking configurable<br>RS-422/485 screw termination included  |

| Specification          | Description  |
|------------------------|--|
| Serial Port Isolation  | 2500V RMS port signal isolation per UL 1577<br>3000V DC min. port to ground and port to logic power isolation  |
| Shipped with Each Unit | Mini-DIN to DB-9M serial cables<br>4 ft RS-232 configuration cable<br>2.5mm screwdriver<br>CD (docs and Configuration utility)<br>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:

5305-MBP-PDPS Modbus Plus 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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