



# Modbus Plus to DNP 3.0 Master Gateway

## 5301-MBP-DNPM

The ProLinx Modbus Plus to DNP Master Gateway creates a powerful connection between devices on a Modbus Plus network and DNP slave devices. This stand-alone DIN-rail mounted protocol gateway provides one DNP 3.0 Master configurable serial port and one Modbus Plus 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 DNP 3.0 Master protocol driver supports Master implementations of the protocol on one port. This port is fully configurable.

## 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 DNP 3.0 Master Gateway 5301-MBP-DNPM

*The MBP-DNPM modules are the ideal solution for the many applications where Modbus Plus connectivity can be used to integrate DNP slave devices 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 DNP 3.0 Master device support, the module provides a very powerful interface to the many DNP slave 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) 16: Write Multiple Data Register (MSTR 1) Global data read (32 words max.) 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
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## DNP 3.0 Master

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

### General Parameters

Internal Database	Binary Inputs: 0 to 500 word count Analog Inputs: 0 to 500 points Counters: 0 to 250 points Binary Outputs: 0 to 500 word count Analog Outputs: 0 to 500 points
DNP Mode	DNP 3.0 Master – Level 2
DNP Object Support	DNPM Driver Manual contains full Object Definition documentation

### DNP Master

Node address	0 to 65534 – software selectable
Slave count	Up to 40 slave devices
Command count	Up to 300 user defined commands to interface with remote slave devices

## 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

Specification	Description
Configuration Serial Port	DB-9M RS-232 only No hardware handshaking
Ethernet Port (Ethernet modules only)	RJ45 Connector 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:

**5301-MBP-DNPM** Modbus Plus to DNP 3.0 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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