



## IEC 60870-5-101 Slave to PROFIBUS DP Master Gateway 5104-101S-PDPM

*The 101S-PDPM modules are the ideal solution for the many applications where IEC 101 Slave connectivity can be used to integrate a PROFIBUS slave device into a system. The IEC60870-5-101 Slave gateway is a powerful module designed with Slave support, enabling easy connection to an IEC 101 master device. In combination with the PROFIBUS DP Master support, the module provides a very powerful interface to the many PROFIBUS DP 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:

#### Asia Pacific

+603.7724.2080, asiapc@prosoft-technology.com  
Languages spoken include: Chinese, Japanese, English

#### Europe – Middle East – Africa

+33 (0) 5.34.36.87.20, support.EMEA@prosoft-technology.com  
Languages spoken include: French, English

#### North America

+1.661.716.5100, support@prosoft-technology.com  
Languages spoken include: English, Spanish

#### Latin America (Sales only)

+1.281.298.9109, latinam@prosoft-technology.com  
Languages spoken include: Spanish, English

#### Brasil

+55-11.5084.5178, eduardo@prosoft-technology.com  
Languages spoken include: Portuguese, English

## IEC 60870-5-101 Slave to PROFIBUS DP Master Gateway

### 5104-101S-PDPM

The ProLinx IEC60870-5-101 Slave to PROFIBUS DP Master Gateway creates a powerful connection between devices on an IEC 101 network and a PROFIBUS slave device. This stand-alone DIN-rail mounted protocol gateway provides one PROFIBUS DP Master configurable DB9F port and one IEC 101 Slave configurable serial port.

The IEC 60870-5-101 Slave protocol driver supports Slave implementations of the protocol. The serial port is user-configurable, providing a very powerful and flexible host or device interface solution.

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

### IEC 60870-5-101 Slave

The 101S module acts as an input/output module between the IEC 60870-5-101 and other protocols and networks, as well as several proprietary interfaces.

General specifications include:

- User-definable module memory usage
- Storage of IEC time used in module is available in the database
- Protocol implementation conforms to the IEC 60870-5-101 specification with fully configurable parameters
- Priority Queues
- Invalid Bit Monitoring
- Supports Balanced and Unbalanced Mode
- Supports CP24 and CP56 time formats for events
- Event generation configurable per point or data type

#### General Parameters

Communication parameters	Baud Rate: 110 to 19,200 baud Stop Bits: 1 or 2 Data Size: 5 or 8 bits Parity: None, Even, Odd RTS Timing Delays: 0 to 65535 ms
--------------------------	---

#### IEC 60870-5-101 Slave

Configurable Parameters	Data link address length Common Address of ASDU length Inform. Object Address length Select/Operate Timeout Event Scan delay Use Balanced Mode Short Pulse Time Long Pulse Time Time DB Offset
-------------------------	--

## 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)
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:

**5104-101S-PDPM** IEC 60870-5-101 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>

### Distributors:

Place your order by email or fax to:

**North American / Latin American / Asia Pacific**  
orders@prosoft-technology.com,  
fax to +1 661.716.5101

**Europe**  
europe@prosoft-technology.com,  
fax to +33 (0) 5.61.78.40.52

Copyright © ProSoft Technology, Inc. 2000 - 2007. All Rights Reserved.  
May 03, 2007