

DATASHEET

EtherNet/IP[™] to Modbus® TCP/IP Communication Gateway PLX31-EIP-MBTCP

ProSoft Technology's EtherNet/IP[™] to Modbus® TCP/IP communication gateway allows high-speed bi-directional data transfers between EtherNet/IP[™] enabled controllers or devices and Modbus® TCP/IP controllers or devices. Our Modbus® TCP/IP driver features multiple client and server functionality, for faster data transmission.

In addition, the gateway includes several features, including data prioritization, that allow for simplified integration, reduced commissioning time and optimized performance.





Features

- Data prioritization: Multiple I/O connections allow you to set RPIs for status and/or control data, optimizing Ethernet bandwidth.
- Includes an embedded EDS Add-On Profile, allowing for simplified integration and reduced commissioning time.
- Includes a SD card slot (SD card optional) for storing configuration files. This can be used for disaster recovery.
- ProSoft Discovery Service: This utility allows your PC to see the gateway and change its default IP address without being on the same subnet.

Specifications

EtherNet/IP™ Specifications

Specification	Description
Number of Class 3 Server Connections	5
Supported PLC Types	PLC2, PLC5, SLC, CLX, CMPLX, MICROLX
Supported Message Types	PCCC and CIP
Class 3 Client	Connected - 2
Connections	Unconnected - 1
Number of Class 1 I/O	2
Connections	
I/O connection sizes	248/248
Max RPI time	5 ms per connection
CIP Services Supported	0x4C - CIP Data Table Read 0x4D - CIP Data Table Write
Command List	Support for 100 commands per Client, each configurable for command type, IP address, register to/from addressing and word/bit count.
Command Sets	PLC-2/PLC-3/PLC5 Basic Command Set PLC5 Binary Command Set PLC5 ASCII Command Set SLC500 Command Set

Modbus® TCP/IP Specifications Specification Description 15: Force (Write) Multiple Coils Supported Modbus 1: Read Coil Status **Function Codes** 2: Read Input Status 16: Preset (Write) Multiple 3: Read Holding Registers Holding Registers 4: Read Input Registers 22: Mask Write Holding Register 5: Force (Write) Single Coil (Slave Only) 6: Preset (Write) Single 23: Read/Write Holding Holding Register Registers (Slave Only) Supported Clients 10 MBAP - 5 Supported Servers Encapsulated - 5 Command List Up to 160 fully configurable Client commands Status Data Error codes reported individually for each command Command List Polling Each command can be individually enabled or disabled; write-only-on-data-change is available



Where Automation Connects™

Global Distribution

ProSoft Technology[®] products are distributed and supported worldwide through a network of over 500 distributors in over 50 countries. Our knowledgeable distributors are familiar with your application needs. For a complete list of distributors, go to our web site at:

www.prosoft-technology.com

Global Support

We are there for you

All ProSoft Technology products are backed with free technical support. Contact our worldwide Technical Support team directly by phone or email.

Global Offices

We are where you are

ProSoft Technology has regional offices worldwide available to help you with all your industrial application needs. If you need help choosing a ProSoft Technology solution for your particular application check out our contact information under distributor sales on the web site at:

www.prosoft-technology.com

Whether your application is large or small, our technical professionals are there to help you choose the right communication solution.

Hardware Specifications

Specification	Description
Power Supply	24 VDC nominal
	10 to 36 VDC allowed Positive, Negative, GND Terminals
Current Load	24 VDC nominal @ 300 mA
	10 to 36 VDC @ 610 mA maximum
Operating Temperature	-25°C to 70°C (-13°F to 158°F)
Storage Temperature	-40°C to 80°C (-40°F to 176°F)
Shock	IEC 60068-2-27; 15G @ 11ms, 3-Axis (Operational) IEC 60068-2-27; 30G @ 18ms, 3-Axis (Non-Operational)
Vibration	IEC 60068-2-6; 5G @ 10 to 150 Hz
Relative Humidity	5% to 95% RH with no condensation
Dimensions (H x W x D)	5.38 x 1.99 x 4.38 in 13.67 x 5.05 x 11.13 cm
LED Indicators	Configuration (CFG), Error (ERR), Power (PWR), Hardware Fault (FLT), Network Status (NS), EtherNet/IP™ Class I or Class III Connection Status (EtherNet/IP Only) Module Status (MS), Module Configuration Status (EtherNet/IP Only) Ethernet Communication Port Link/Activity, and 100 mbit
Ethernet Port	10/100Mbit half-duplex RJ45 Connector Electrical Isolation 1500 Vrms at 50 to 60 Hz for 60 seconds, applied as specified in section 5.3.2 of IEC 60950: 1991 Ethernet Broadcast Storm Resiliency is less than or equal to 5000 [ARP] frames-per-second and less than or equal to 5 minutes duration
Shipped With Each Unit	2.5 mm screwdriver ProSoft Solutions DVD
	J180 Power Connector
	5' straight-through Ethernet cable

Agency Approvals and Certifications

Agono y Approvalo ana ooranoanono	
ATEX Zone 2	
CB Safety	
CE Mark	
UL/cUL Class 1 Div 2	



Additional Products

ProSoft Technology[®] offers a full complement of hardware and software solutions for a wide variety of industrial communication platforms. For a complete list of products, visit our web site at: www.prosoft-technology.com

Ordering Information

To order this product, please use the following:

EtherNet/IP™ to Modbus® TCP/IP Communication Gateway

PLX31-EIP-MBTCP

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft Technology distributors near you, go to:

www.prosoft-technology.com and select *Where to Buy* from the menu.

Copyright © 2015 ProSoft Technology, Inc. All Rights Reserved. 5/26/2015

Specifications subject to change without notice.