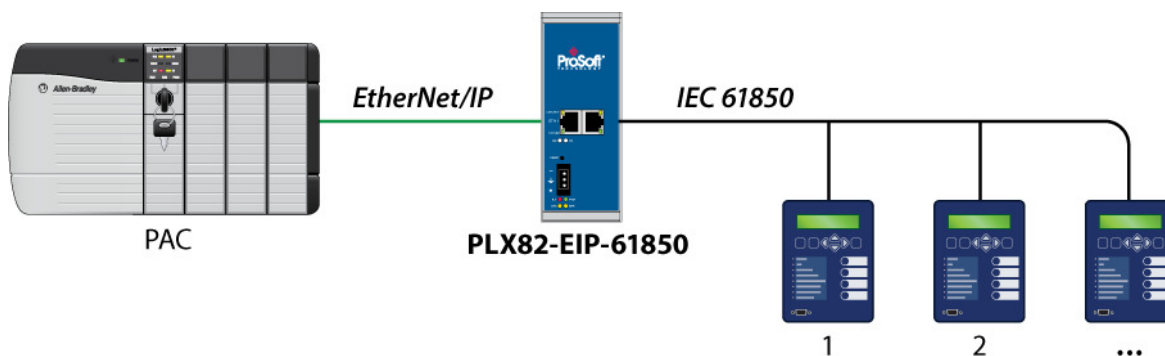# DATASHEET

EtherNet/IP™ Server to IEC 61850 Client Gateway
PLX82-EIP-61850

The ProSoft Technology® EtherNet/IP™ to IEC 61850 communication gateway allows Rockwell Automation PACs to interface with IEC 61850 Intelligent Electronic Devices (IED) such as substation power monitors and relays. The gateway acts as a 61850 Client polling the devices on your network.

The two ports allow the IEC 61850 and EtherNet/IP™ protocols to reside on separate subnets.

Features

♦ The supplied configuration software enables you to import all of your relevant IED tags into your Logix controller tag database, reducing configuration time and errors

♦ Multiple EtherNet/IP I/O connections give you large amounts of data to transfer in a real time environment

♦ Standards-based identification of device types simplifies implementation and maintenance

Configuration

ProSoft Configuration Builder (PCB) provides a PC-based software configuration solution for quick and easy management of gateway configuration files, as well as viewing communication and network diagnostics. 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.

Specifications – IEC 61850 Client

- Supports up to 20 IEDs on the network with a maximum of 300 data attributes each (max number of data attributes is determined by user configured data types and size of user configured data points
- Send commands from the PLC or PAC to the IED using Control Types
  - o Direct-with-Normal-Security
  - o Select Before Operate (SBO)-with-Normal-Security
  - o Direct-with-Enhanced Security
  - o Select Before Operate (SBO)-with-Enhanced-Security

Specification	Description
ACSI Basic Conformance	
SCSMs supported	SCSM: IEC 61850 8.1(MMS) used
ACSI Model Conformance	
Reporting	Buffered Report Control Block (BRCB)
	Unbuffered Report Control Block (URCB)
GOOSE	entryID, DataRefInc
Control	Direct-with-Normal-Security
	SBO-with-Normal-Security
	Direct-with-Enhanced-Security
	SBO-with-Enhanced-Security
Logical Nodes	IEC 61850 Logical Nodes, including Logical Nodes for Hydro Power Plants and Logical Nodes for Wind Power Plants
Configurable Parameters	MMS Command Delay
Status Data	Status available per node
	Report and GOOSE status available
	High-level status data available from Ethernet/IP Client through the Ethernet/IP server (for example PLC or PAC)

Specifications – SNTP/NTP Client

The gateway supports a Simple Network Time Protocol (SNTP/NTP) client service that can synchronize the gateway's time by periodic update requests to a Coordinated Universal Time (UTC) system. The user can configure the SNTP/NTP server details in ProSoft 61850 Configuration Manager. The resolution of the time is in milliseconds (ms).

Specification	Description
Configurable Parameters	SNTP/NTP server synchronization rate in minutes
	SNTP/NTP server address

Hardware Specifications

Specification	Description
Power Supply	24 VDC nominal
	10 to 36 VDC power input allowed
	Positive, Negative, GND Terminals
	2.5 mm screwdriver blade
Current Load	200 mA max @ 24 VDC
	150 mA max @ 32 VDC
	450 mA max @ 10 VDC
Operating Temperature	-25°C to 70°C (-13°F to 158°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Relative Humidity	5% to 95%, with no condensation
Dimensions	11.99 x 4.82 x 10.62 cm
H x W x D	4.72 x 1.90 x 4.18 in
Shock	IEC 60068-2-27; 15G @ 11ms (Operational)
	IEC 60068-2-27; 30G @ 18ms (Non-Operational)
Vibration	IEC 60068-2-6; 5G, 10 to 150 Hz
LED Indicators	ERR, CFG, FLT, PWR
Ethernet Ports (E1, E2)	10/100 Base-T half duplex RJ45 Connector Link and Activity LED indicators
	Electrical Isolation 1500 V rms at 50 to 60 Hz for 60 s, applied as specified in section 5.3.2 of IEC 60950: 1991
	Ethernet Broadcast Storm Resiliency = less than or equal to 5000 [ARP] frames-per-second and less than or equal to 5 minutes duration
Shipped with Each Unit	One - Ethernet straight-through cables (gray)
	One - J180 screw terminal plug
	One - ProSoft Solutions DVD
	One - HRD250 screwdriver

Agency Approvals and Certifications

Agency
ATEX
CSA-CB Safety
CE
GOST-R
UL/cUL

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™ Server to IEC 61850 Client Gateway

PLX82-EIP-61850

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 *How to Buy* from the menu.