



## Communication Solutions for **Rockwell Automation®** Users



**ProSoft**  
TECHNOLOGY



## Leverage the IIoT

Collect, store, and analyze data to realize measureable business improvements.

There's operational data within nearly every piece of equipment in your business – and you can use it to make changes that will positively affect your facility. ProSoft's in-chassis modules and standalone gateways have been used for nearly 30 years to connect disparate equipment, the first step on the path to showing ROI from your Connected Enterprise.

After **connecting your equipment** with a ProSoft solution, you'll:

- **Transmit the data** to your secure MES or ERP system via an OPC UA gateway. (Psst – ProSoft's OPC UA Server gateway supports EtherNet/IP™ as well, ensuring smooth data transmission from your factory floor to your storage space.)
- Then you'll **analyze the data** to recognize trends over time. Depending on the area(s) you'd like to focus on, you could look at information about everything from backlog levels to energy usage. Study the information to see where changes make the most sense based on your facility's goals.
- Finally, you'll **take action based on that data**, and see if there is a measureable difference from your historical numbers.

**THE BEST IIoT STEPS**  
for your operation  
[psft.com/DB4](http://psft.com/DB4)



# Secure Remote Connectivity

ProSoft's suite of remote connectivity solutions is designed to help you gain secure, streamlined access to your remote equipment from one cloud-native platform that you can access from anywhere, reducing your support travel costs.

## ProSoft Connect Platform

- Uses your PC's operating-system VPN, which minimizes the need for user-installed software
- EasyBridge™ technology enables your PC to act like it is connected directly to a switch on the remote network
- Allows software tools, such as RSWho and Studio 5000, to work without routing
- Virtual Lockout-Tagout™ gives the end user complete control of access to remote equipment
- Power User Plans available for organizations that have multiple projects – organize and secure access to each one
- Multi-layered defense-in-depth approach keeps your data and equipment safe
- No software to install or maintain

## Persistent Data Network

- Simple, Secure, Managed always-on remote infrastructure communications network
- Access via ProSoft Connect platform to monitor and troubleshoot each site in your network

## Gateways

### Industrial Cellular Gateway (ICX35-HWC)

- 4G LTE cellular or wired access via WAN/LAN port; Ethernet port available for Internet connection or SIM card; monitor via ProSoft Connect

### Network Bridge (PLX35-NB2)

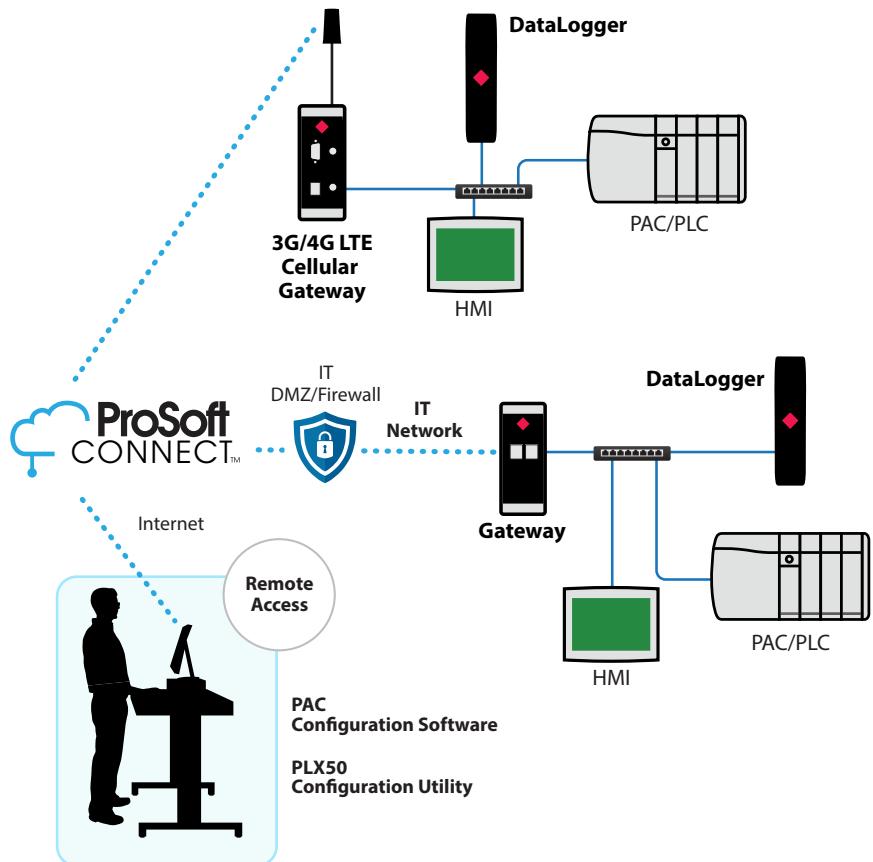
- Wired remote access; monitor via ProSoft Connect

### Data Logger (PLX51-DL-232)

- Ideal for remote sites with limited communications that need to log data
- Can help OEMs identify operational issues and improve OEEData can be downloaded as a .csv file
- Support for 200 tags
- Minimum log interval: 50 milliseconds

### Data Logger Plus (PLX51-DLPLUS-232)

- Features support for JSON interface, enabling easy exporting of logged data to business CRM systems; features an integrated webserver to trend variables and upload logged data



### CASE STUDY

Being able to securely troubleshoot through a Web platform provided flexibility.

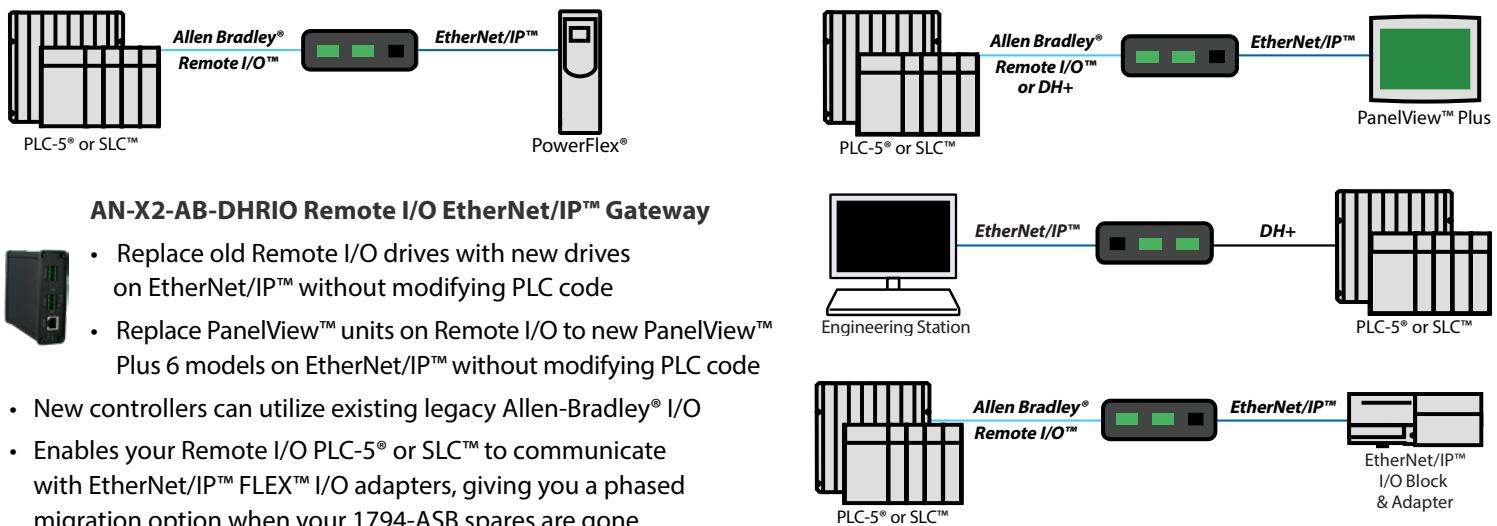
[psft.com/DCF](http://psft.com/DCF)

### PROSOFT SOLUTIONS

for Secure Remote Connectivity  
[psft.com/DB6](http://psft.com/DB6)

# Legacy Rockwell Remote I/O and DH+™ Modernization Solutions

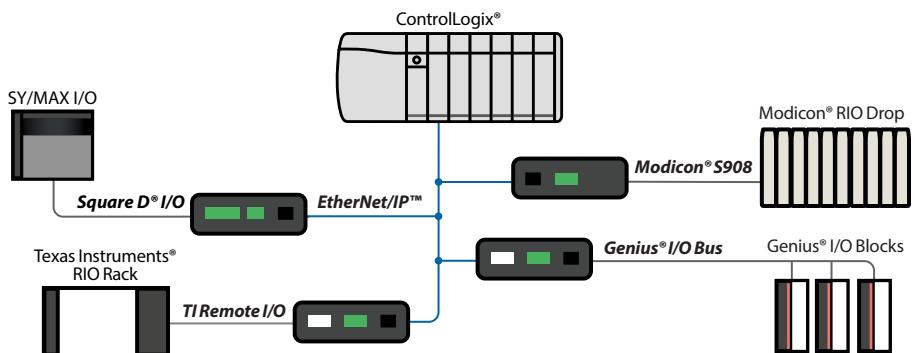
Modernize your legacy control system in phases with OpEx dollars



## Legacy Competitive PLC Modernization Solutions



- Enables Allen-Bradley® PAC via EtherNet/IP™ to control I/O devices on legacy networks
- Enables a phase-based approach for migrating legacy control systems
- Monitor mode enables testing & verification of PAC logic before controlling I/O

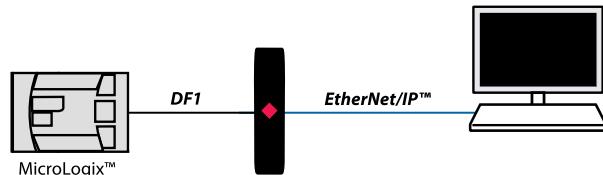


## 1761-NET-ENI Replacement – Update Your Legacy DF1 Systems

Need a 1761-NET-ENI now that it's been discontinued? The Routing Module can be used in nearly every application as the NET-ENI. Now you can modernize your legacy DF1 control system in phases using your OpEx budget.



- Intelligent routing to ControlLogix® or CompactLogix™ from PLC-5®, SLC™, MicroLogix™ controllers
- Direct-to-tag technology simplifies data mapping, reducing configuration time



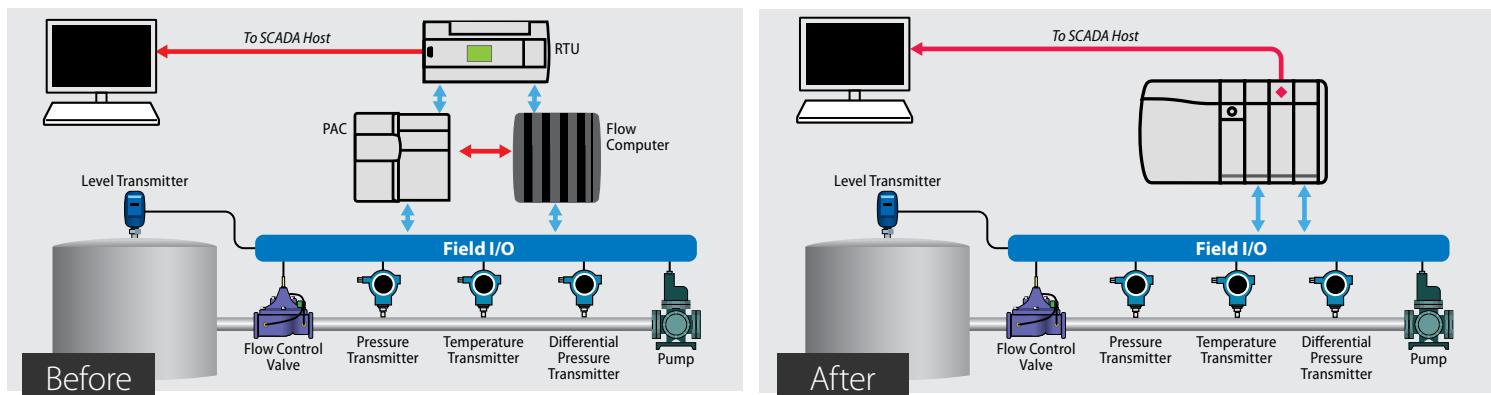
**DCS MIGRATION SOLUTIONS**  
are also available at [psft.com/DB3](http://psft.com/DB3)

### CASE STUDY

American Castings estimates they saved over \$100,000 in lost production and implementation time, as well as 140 hours of troubleshooting and rewiring work.  
[psft.com/DCD](http://psft.com/DCD)

# In-Chassis Flow Computer Solutions

## For Multi-Well Pad and LACT Applications



ControlLogix®

- Supports 8-16 meter runs with 4 streams per meter run for the measurement of hydrocarbon gases and liquids
- In-chassis solution brings data directly into your ControlLogix® or CompactLogix™; helps minimize cabinet space
- Pair with Rockwell Automation's distributed I/O capability + ProSoft's wireless radios to reduce wiring to transmitters and I/O devices
- Includes the use of EAFC Manager, a free Windows 7-based tool for configuration, reporting, and monitoring; hourly or daily archives with user-selected data are available



CompactLogix™

- NMI certified for OIML, WELMEC, and MID type approval (AGA/API)
- No additional licensing fee for liquid meter runs
- Add another AFC card in same chassis if more Meter runs are required
- Secure Data archiving / meter run
- Archive records stored in non-volatile memory in module
- Archive data cannot be altered/changed
- Integration to SCADA with Modbus/Enron Modbus support (Cynet, Autosol, and FlowCal)
- System designs can support more than 80 metering locations

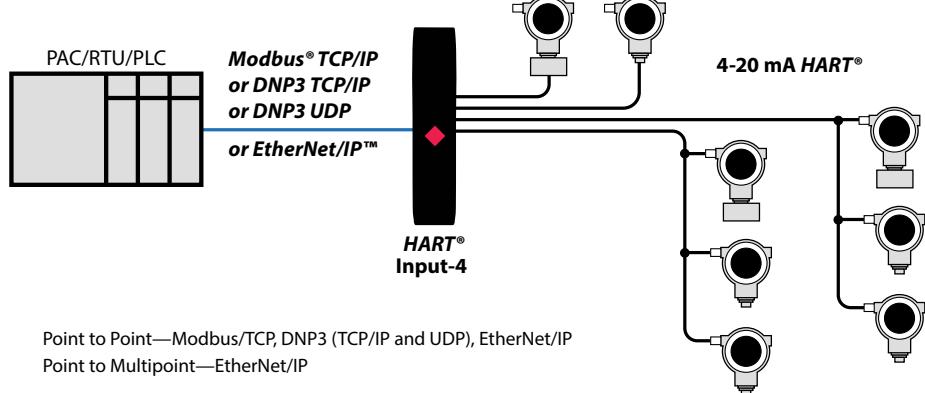
## HART Solutions

Gain additional diagnostic information from your distributed process equipment – and boost efficiency as a result.

**FIND OUT HOW  
YOU'LL BENEFIT**  
[psft.com/DCB](http://psft.com/DCB)

### CASE STUDY

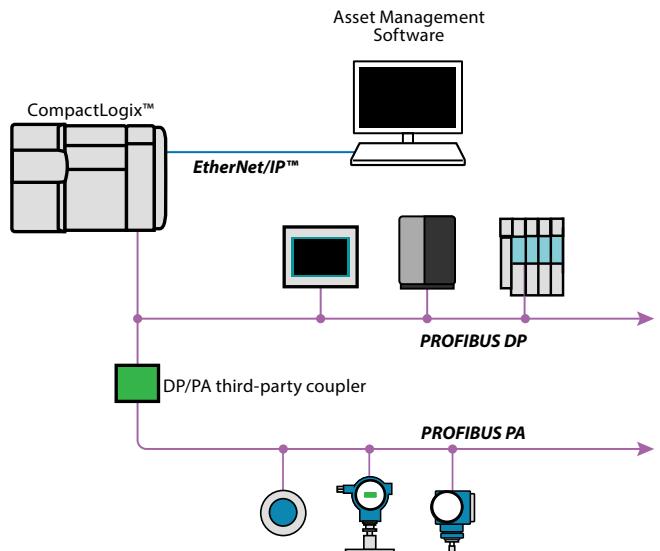
The flow computers helped Pelican Gathering decrease the number of components, minimize their panel space, and streamline integration.  
[psft.com/DCE](http://psft.com/DCE)



# PROFIBUS Solutions



- Remote configuration and diagnostics
- Solutions for PROFIBUS DP-V0 and PROFIBUS DP-V1
- Multi-Slave gateway solutions for large data transfers
- Support for PROFIBUS DP Master or PROFIBUS DP Slave connectivity
- Supports PA devices through third-party coupler
- DTM pass-through support

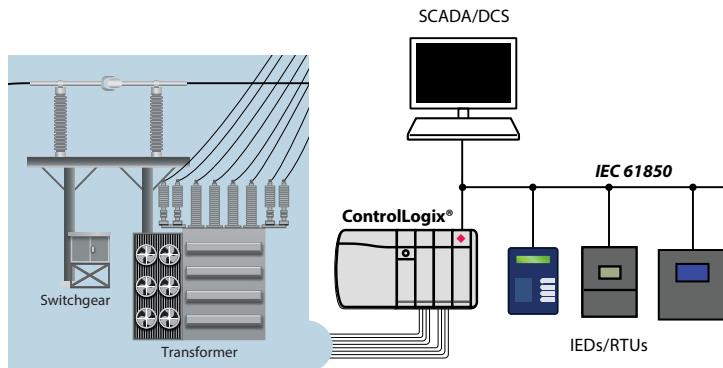


# IEC 61850 & DNP3 Solutions



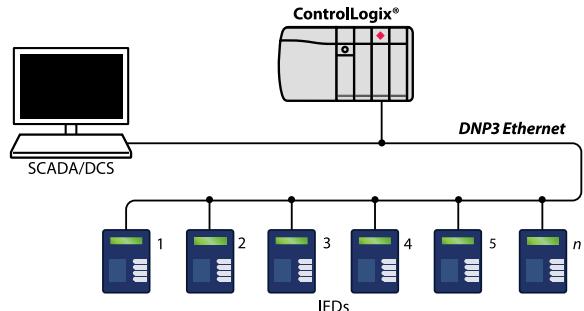
## IEC 61850

- The ControlLogix® PAC is able to emulate multiple Intelligent Electronic Devices on an IEC 61850 network
- Add-On Instruction provides logical definitions for I/O module status and control data, easing configuration and maintenance
- ProSoft Discovery Service (PDS) software initially sets the module's IP address, so you don't have to change your PC to the default subnet of the module



## DNP3 Ethernet Module Features

- Ethernet Client supports up to 40 DNP3 Ethernet server devices such as RTUs, IEDs, and various protection relays
- Up to 20,000 points of data
- DNP3 Ethernet server allows the unit to interface to other client devices such as SCADA and DCS systems

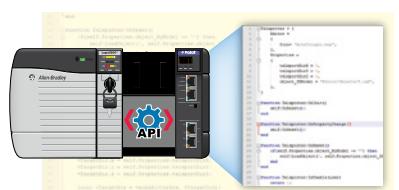


# C/C++ Solutions

When you need another processor, but don't want to add a PAC or PC



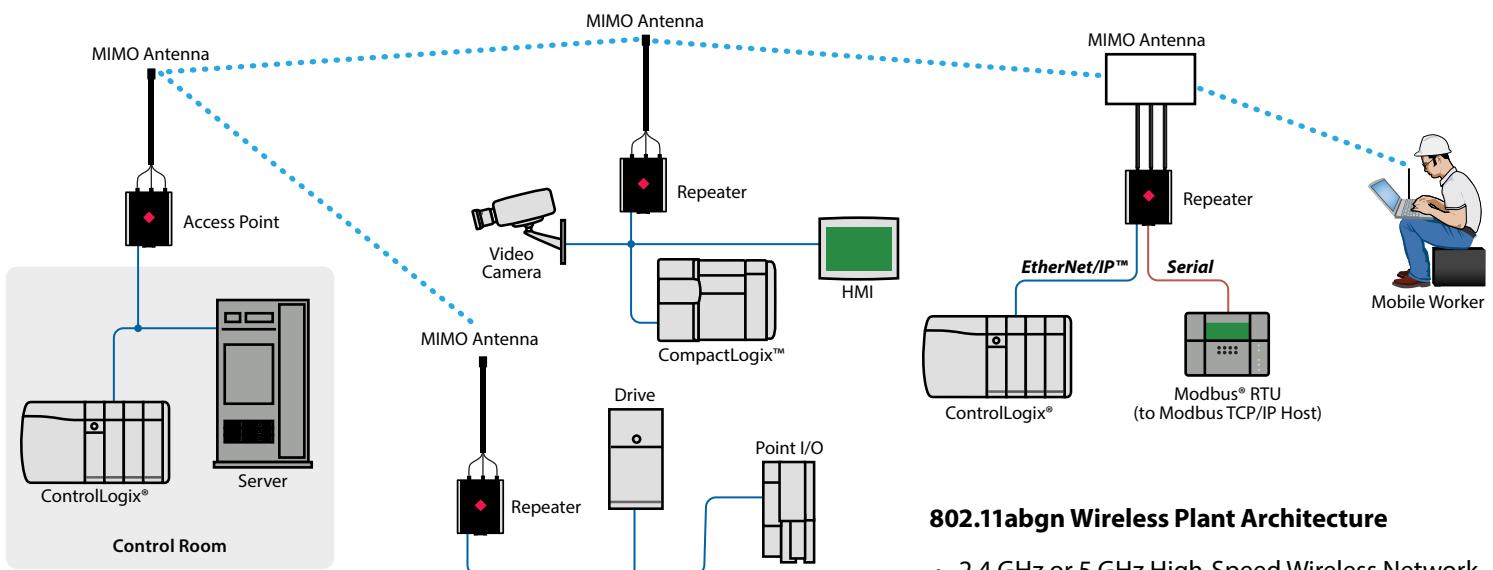
- Ideal for custom algorithm applications
- Linux Virtual Machine (VM) and C/C++ development environment provided on separate DVD
- VM contains preinstalled toolchain and libraries
- In-chassis solution simplifies your site and brings data directly into your ControlLogix® or CompactLogix™; helps minimize cabinet space



# 802.11n (abgn) Fast Industrial Hotspots

- Ultra-Fast access point switchover times of less than 10 ms are perfect for applications such as automated storage-retrieval systems, AGVs, and automotive skillet lines
- EtherNet/IP™ embedded object and Modbus® agent support lets users get radio diagnostics into their PAC/PLC, where the information can be analyzed and acted upon, helping to reduce downtime
- WPA/WPA2-Personal (PSK, AES and/or TKIP); WPA/WPA2-Enterprise (IEEE 802.1X/RADIUS, AES and/or TKIP)
- Secure digital configuration storage for quick field replacement
- Radios support wireless safety Ethernet networks, ideal for automated material handling applications

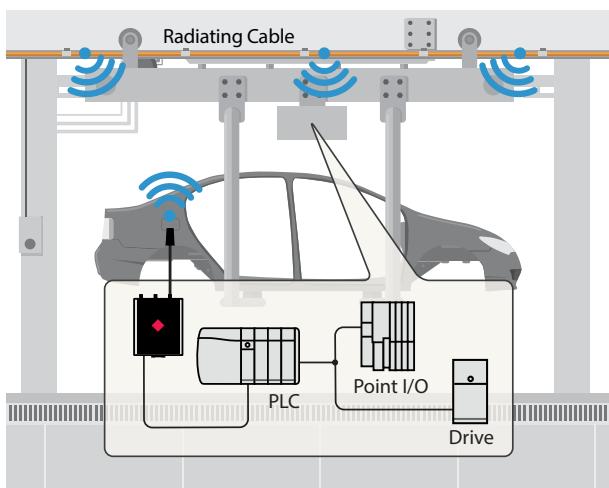
**2.4 GHz and 5 GHz High-Power Industrial Hotspots are also available for longer-distance applications.**



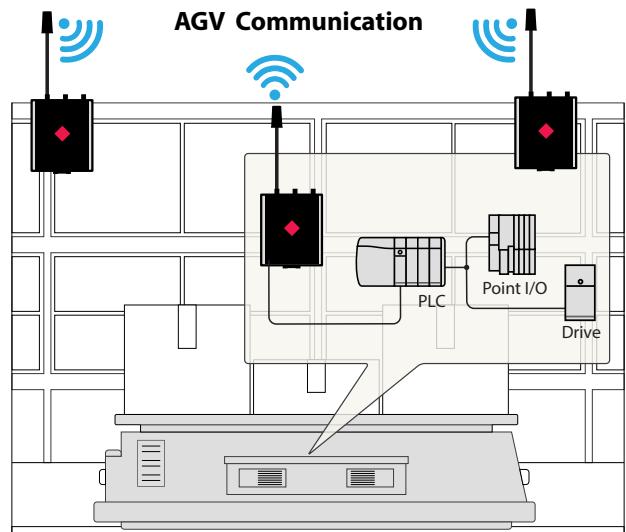
## 802.11abgn Wireless Plant Architecture

- 2.4 GHz or 5 GHz High-Speed Wireless Network

### Automotive Skillet Line Communication



### AGV Communication



# Radiating Cable 2.4 and 5 GHz Band

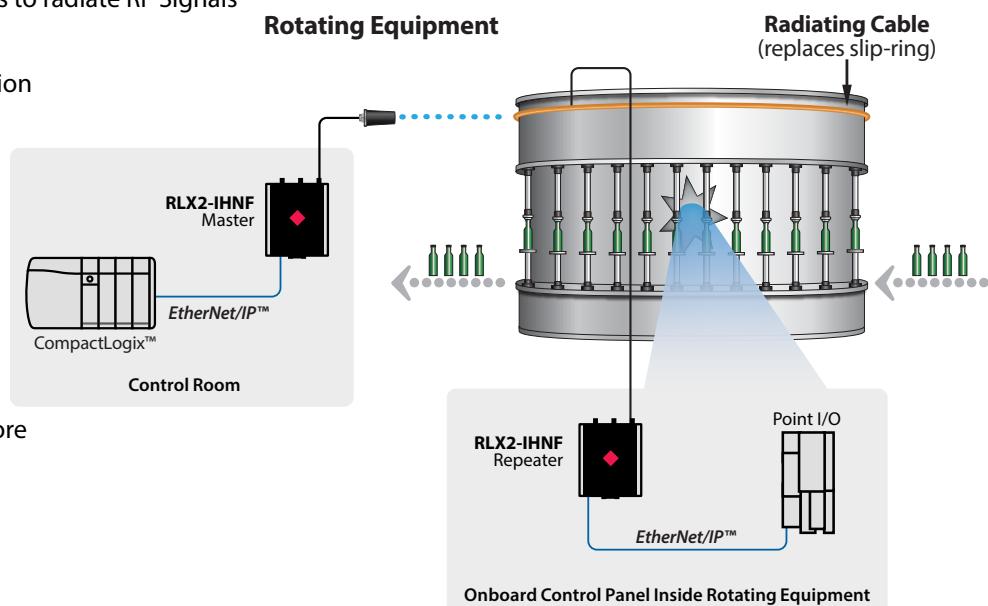
Acting as a long, flexible antenna, Radiating Cable is an alternative to traditional RF antenna systems.

## Features

- Special coaxial shield design uses slots to radiate RF Signals
- Available in variable lengths
- Pre-assembled cable for easy installation
- Frequency Range: 2.4 GHz, 5 GHz to 6 GHz

## Benefits

- Wireless signal more stable in terms of response time – useful in communicating with I/O
- Used in metallic environments, rotating/spinning machines, conveyors, AGV, warehousing, and more

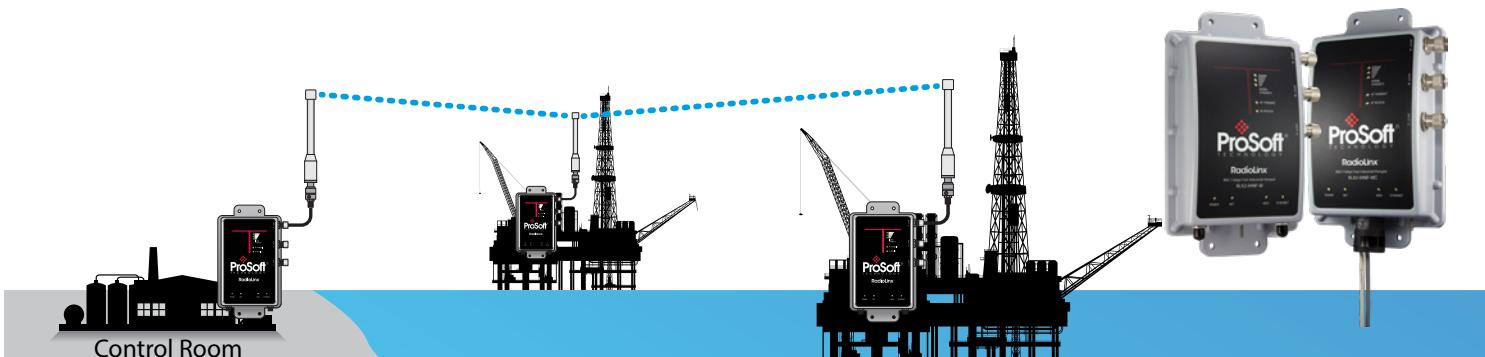


## HOW TO BENEFIT

from radiating cable  
[psft.com/CXL](http://psft.com/CXL)

# 802.11n (abgn) Fast Watertight Industrial Hotspots

- IP67 water/dust rated
- Designed for extreme temperatures (-40° to +70°C), high vibration/shock and hazardous locations (UL C1D2, ATEX Zone 2)
- Ultra-Fast Roaming with under 10 ms switchover times maintains connections for moving machines/platforms
- Power over Ethernet (PoE)
- QoS and VLAN for optimum traffic management
- WPA/WPA2-Personal (PSK, AES and/or TKIP)
- WPA/WPA2-Enterprise (IEEE 802.1X/RADIUS, AES and/or TKIP)



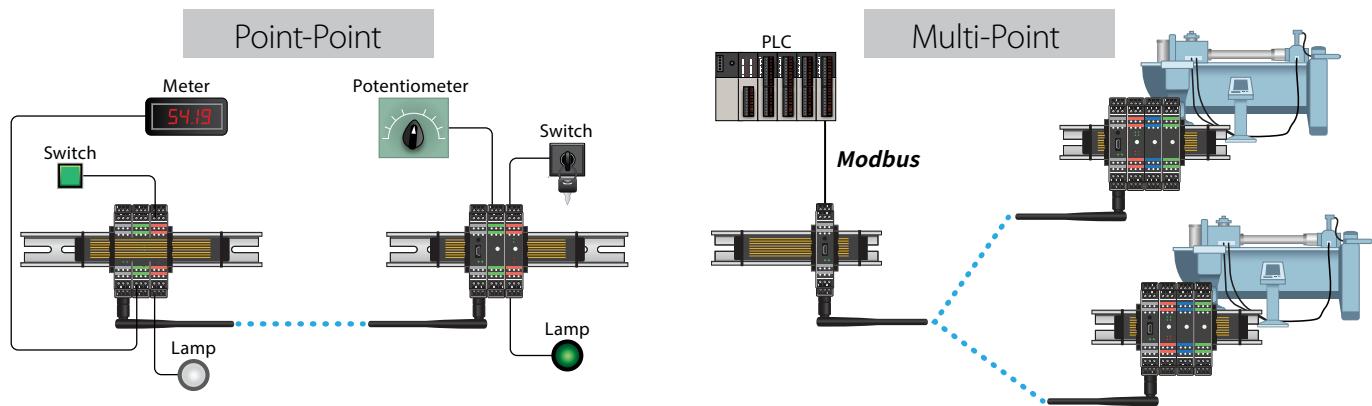
# Wireless I/O

What would you monitor if you didn't have to worry about the cost of running wire?



Whether you have a point-to-point application or many distributed I/O devices, our Wireless I/O solutions are a great alternative to running long wire runs. Eliminate trenching, running conduit, and the need for permits. The system can be expanded as your I/O needs grow.

- Bi-directional
- 868 MHz, 900 MHz or 2.4 GHz
- Each radio can connect up to 16 I/O modules
- Available as Analog I/O 0-10 V, Analog I/O 4-20 mA & Digital/Discrete I/O

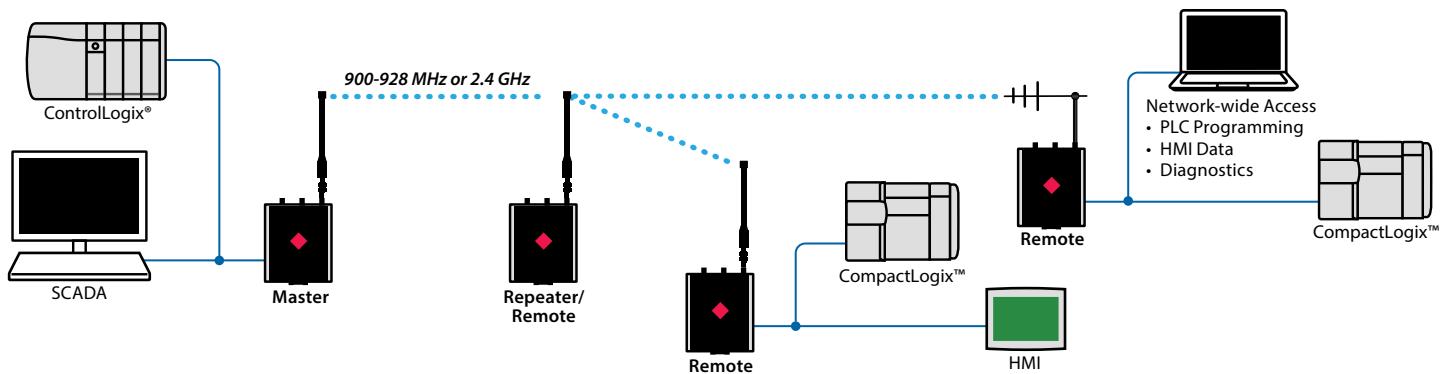


## Ethernet Frequency Hopping Radios

Available in 900 Mhz or 2.4 Ghz



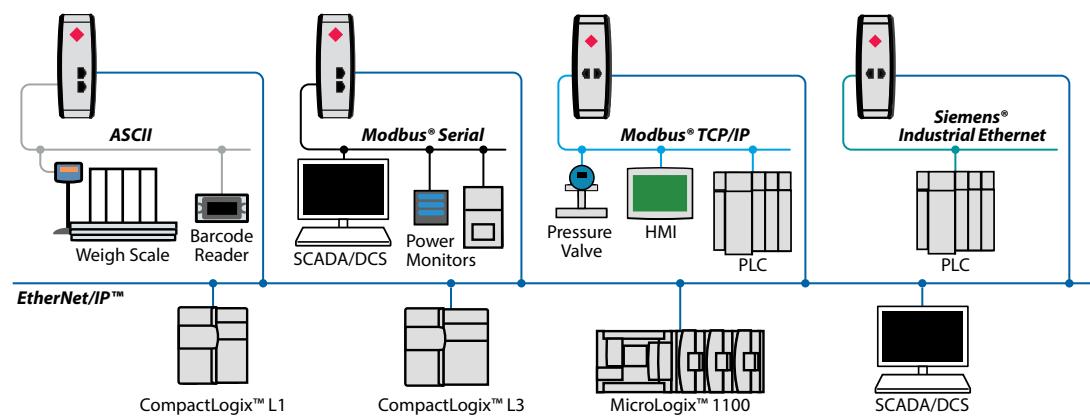
- License-free wireless communications for Ethernet devices
- Integrated Repeater Mode to extend range and work around obstructions
- Up to 1.1 Mbps RF data rate
- Smart Switch enables automatic peer-to-peer packet routing and optimizes RF performance
- ControlScape radio management software provides configuration and online diagnostics



# Ethernet and Serial Gateway Solutions

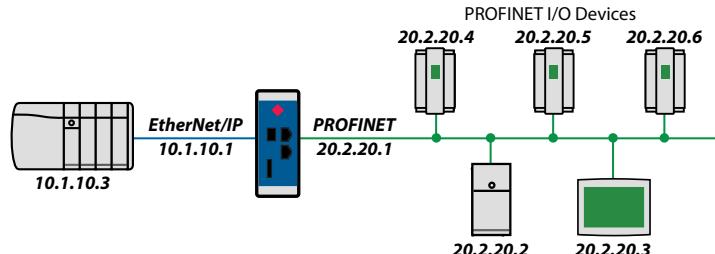
ProSoft Technology's stand-alone, DIN-rail mounted industrial gateways provide a means to read or write data from devices on dissimilar protocols. All gateways come with our ProSoft Discovery Service feature. With PDS, you don't have to change your PC to the default subnet of the module, saving you time during setup.

- Gateways with two Ethernet ports allow you to isolate networks, passing only the data you want between devices
- EtherNet/IP gateways support multiple I/O connections for fast real-time data
- Remote configuration and diagnostics via Ethernet
- SD Card slot for disaster recovery of configuration data
- Up to four Serial ports

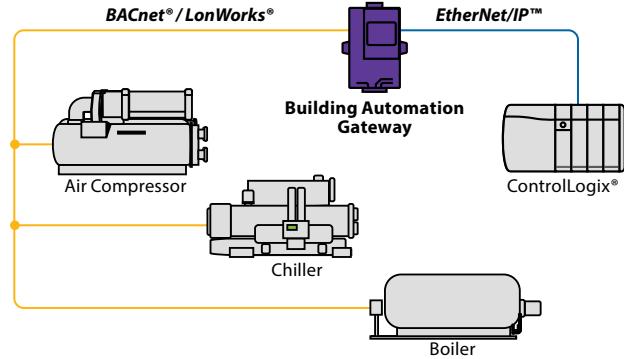


## EtherNet/IP to PROFINET Gateways

Controller and Device versions

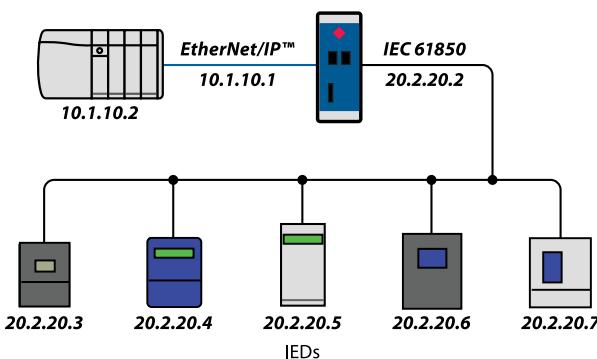


## Building Automation Gateways



## IEC 61850 Gateway Features

- Fast, real-time data transfers with a maximum of 10,000 bytes in and 9,920 out (PLX82) or 5,000 bytes in and 4,960 out (PLX81)
- Polls up to 20 IEC 61850 server devices
- Application-specific Add-On Instructions are automatically generated
- IEC 61850 IED tags are created in your Studio 5000®/RSLogix 5000™ Project, reducing configuration time and errors



PROFIBUS DP  
& many other  
protocols are  
also available.

# Serial & Ethernet Modbus® Solutions



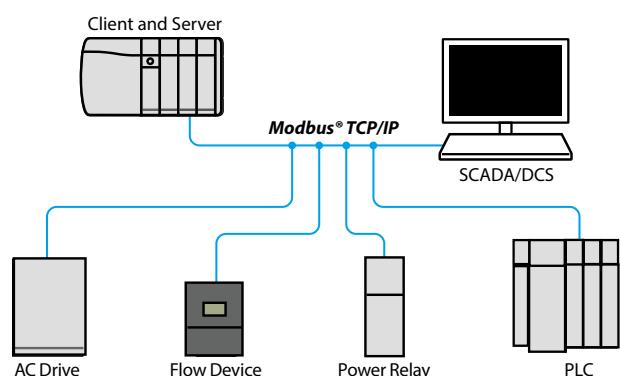
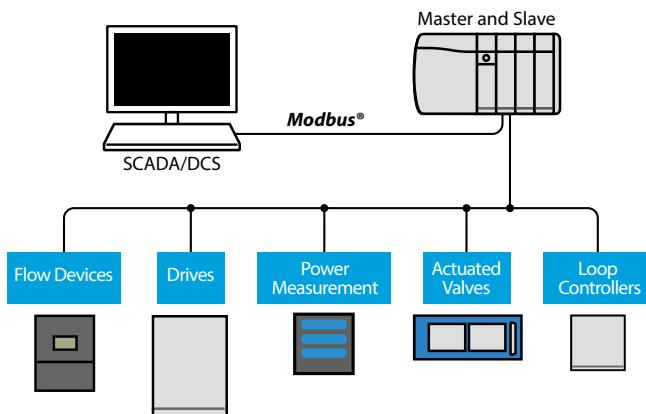
## Modbus® Serial

- Module configuration stored within the Studio 5000®/RSLogix™ 5000 project (ACD file) for simplified disaster recovery
- Add-On Profile (AOP) improves integration into Studio® 5000®/RSLogix™ 5000
- Add-On Instruction (AOI) reduces configuration effort and simplifies maintenance



## Modbus® TCP/IP

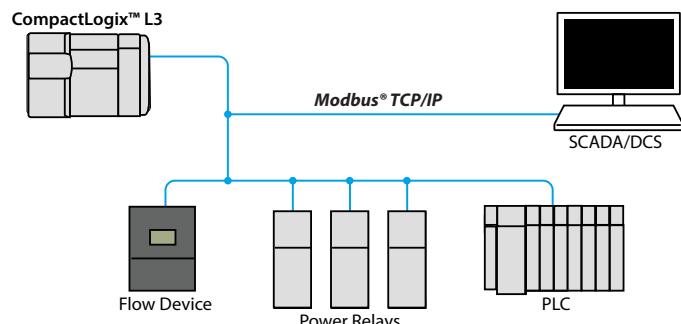
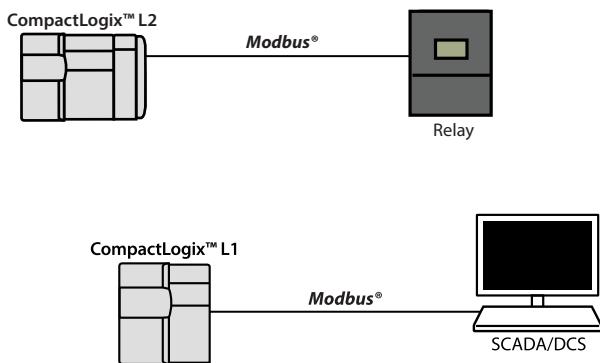
- Fast Multi-Server/Multi-Client capabilities
- Add-On Instruction (AOI) reduces configuration effort and simplifies maintenance



# Scalable Modbus® & Modbus® TCP Solutions for CompactLogix™



- Enhanced modules allow up to 10,000 I/O words
- Lite modules allow up to 240 I/O words
- Integrated Modbus® Serial communications in 1734 Point I/O™ applications





Platform	ControlLogix®	CompactLogix™ or MicroLogix™ 1500	Point I/O
<b>Protocol/Application</b>			
AGA/API Gas & Liquid Flow Computer	MVI56E-AFC	MVI69E-AFC	
Moore APACS+ I/O	CLX-APACS		
ASCII	MVI56E-GSC MVI56E-GSCXT	MVI69-GSC	
BASIC	MVI56-BAS		
'C' Programmable	MVI56E-LDM		
DF1	MVI56-DFCMR		
DNP3 Serial	MVI56-DNP	MVI69-DNP	
DNP3 Ethernet	MVI56E-DNPNET	MVI69-DNPNET	
EtherNet/IP™		MVI69-DFNT	
FA Control/Network	MVI56E-FLN		
Fisher PROVOX Control Bus I/O	CLX-PVX		
GE Ethernet Global Data	MVI56-EGD	MVI69-EGD	
Generic Ethernet ASCII	MVI56-GEC	MVI69-GEC	
Honeywell® IPC-620 Serial I/O Bus	CLX-422-IPC		
IEC 60870-5-101 Slave	MVI56-101S	MVI69-101S	
IEC 60870-5-101 Master	MVI56-101M		
IEC 60870-5-104 Server	MVI56-104S	MVI69-104S	
IEC 61850 Server	MVI56E-61850S		
Limitorque Master	MVI56-LTQ		
Modbus® Serial	MVI56E-MCM MVI56E-MCMR MVI56E-MCMXT	MVI69E-MBS * MVI69L-MBS *	ILX34-MBS232 ILX34-MBS485
Modbus® Plus	MVI56-MBP		
Modbus® TCP/IP	MVI56E-MNET MVI56E-MNETC MVI56E-MNETR MVI56E-MNETCR MVI56E-MNETXT	MVI69E-MBTCP * MVI69L-MBTCP *	
PROFIBUS DP Master	MVI56-PDPMV1	ILX69-PBM *	
PROFIBUS DP Slave	MVI56-PDPS	ILX69-PBS *	
Siemens® 3964R	MVI56-S3964R	MVI69-S3964R	
Siemens® Industrial Ethernet	MVI56E-SIE		

\* CompactLogix™ ONLY

Have a legacy product that's no longer on these charts?

ProSoft can help you migrate to a newer solution with expanded functionality.

Learn more about solutions for legacy controllers at [psft.com](http://psft.com) or by contacting your local ProSoft office.

Many of ProSoft's in-chassis and gateway modules for Rockwell Automation systems feature Add-On Instructions or Add-On Profiles to help you increase efficiency and reduce configuration. Learn more: [psft.com/DCC](http://psft.com/DCC)

Protocol/Application						
Application / Protocol	Allen-Bradley® Remote I/O™	ASCII	'C' Programmable Serial	DFT Master/Slave	DNP3 Serial	DNP3 Ethernet
Allen-Bradley® Remote I/O™						5210-DFT-RIO
ASCII			5102-DFCM-ASCII3			PLX31-EIP-ASCII PLX31-EIP-ASCII4
BACnet®/IP			PS-QS-1010-0781 (250 Point) PS-QS-1510-0781 (500 Point)			PS-QS-1010-0780 (250 Point) PS-QS-1510-0780 (500 Point)
BACnet® MS/TP			PS-QS-1010-0781 (250 Point) PS-QS-1510-0781 (500 Point)			PS-QS-1010-0780 (250 Point) PS-QS-1510-0780 (500 Point)
DFT Master/Slave			5102-DF53-DFM 5102-MCNA4-DFC04 PLX51-DL-22	5102-DNPM-DFC03 5102-DNPS-DFC03		PLX51-DFT-ENI PLX51-DFT-MSG 5202-DFT-DFCM4
DNP3 Serial			5102-DNPM-DFC03 5102-DNPS-DFC03			5201-DFT-DNP4 5201-DFT-DNP5
DNP3 Ethernet						5201-DFT-DNP3NET
EtherNet®	5210-DFT-RIO	PLX31-EIP-ASCII PLX31-EIP-ASCII4	PLX51-DF1-ENI 5202-DFT-DFCM4 PLX51-DF1-ENI PLX51-DF1-MSG	5201-DFT-DNPM 5201-DFT-DNPS	PLX51-HART-4I	PLX51-HART-4I
HART® Analog					PLX51-HART-4I	PLX51-HART-4I
HART® Multi-drop					PLX51-HART-4I	PLX51-HART-4I
IEC 60870-5-101 Slave			5102-DFCM3-101S			5201-DFT-104S
IEC 60870-5-104 Server						PLX81-EIP-61850 PLX82-EIP-61850
LonWorks™			PS-QS-1011-0781 (250 Point) PS-QS-1511-0781 (500 Point)		PS-QS-1011-0783 (250 Point) PS-QS-1511-0783 (500 Point)	5102-MCM-HART
Metasys® N2			PS-QS-1010-0782 (250 Point) PS-QS-1510-0782 (500 Point)		PS-QS-1010-0782 (250 Point) PS-QS-1510-0782 (500 Point)	PLX31-EIP-MBTS PLX31-EIP-MBTS4
Modbus® Serial		5102-MCNA4-ADM4	5102-DFPM-MC03 5102-DNPS-MC03	5201-DNPM-MCM 5202-DNPS-MCM4	5201-MNET-DNPM 5201-MNET-DNPS	PLX32-EIP-MBTCP PLX32-EIP-MBTCP-UA
Modbus® TCP/IP	5210-MNET-RIO	5201-MNET-ASCII 5202-MNET-ADM4	5201-MNET-DFCM 5202-MNET-DFC04	5201-MNET-DNPM 5201-MNET-DNPS	5201-MNET-DNP3NET	PLX32-EIP-MBTCP-UA 5507-PDP5-HART
OPC UA						PLX32-EIP-MBTCP-UA
PROFIBUS DP		5105-ASCII-PDPS	5104-DFCM-PDPM 5105-DFCM-PDPS	5105-DNPS-PDPS	5205-DNP3NET-PDPS	5204-DNP3NET-PDPS 5205-DNP3NET-PDPS
PROFINET						PLX31-EIP-P-NET PLX32-EIP-P-NET PLX82-EIP-P-NET
Siemens® Industrial Ethernet						PLX31-EIP-SIE PLX32-EIP-SIE



