

INDUSTRIAL > COMMUNICATION SOLUTIONS FOR ENCOMPASS™

**Rockwell
Automation**

**Encompass™
Product Partner**

Global



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*DeviceNet is a registered trademark of Open DeviceNet Vendor Association

INDUSTRIAL > COMMUNICATIONS SOLUTIONS FOR ENCOMPASS™



Our long history of innovation has created value for the Molex and Rockwell Automation partnership and their customers. Molex has over 60 communication products in the Encompass Program, including network interface cards, PLC/PAC communication modules, diagnostics and unique remote scanners. The people at Molex take pride in creating innovative products that allow customers to solve difficult applications.



Global Service

Molex has a significant Sales and Customer Service presence in all global markets. In addition, several Technical Support locations in North America, Europe and Asia mean that customers can receive timely answers to their questions or issues.

Europe, Asia e-mail: ic.support.eu@molex.com

North America e-mail: ic.support.na@molex.com

North America Phone Support: 1-877-427-0850

Web Support:

<http://www.molex.com/molex/mysst/doCenter.action>

Industries we serve:

- Automotive
- Oil and gas
- Water and wastewater
- Consumer and packaged goods
- Mining, minerals and cement
- Metals
- Semi-conductors



Industrial Communication Solutions

For Rockwell Automation's Encompass Program



Empowering the Communication Interface

As part of the family of communication solutions, our products bring together years of experience working with innovating and developing solutions for industrial networks and fieldbuses. Globally recognized product lines applicom®, SST™ and Direct-Link™ are the powerhouses of the Brad communication portfolio, enabling hundreds of thousands of automation systems to communicate and gather valuable information through communications software, network interfaces, Ethernet switches, remote scanners and diagnostic tools.

Diagnostic Tools

eNetMeter™

Continuously monitors a DeviceNet* network and sends up to 2,333 DeviceNet parameters over EtherNet/IP to a PLC or PC monitoring system. The information can be read directly by an EtherNet/IP master. Optionally, data can be accessed through NetAlytix™ software, a DLL interface or an OPC server.

NetMeter®

Hand-held device which connects to DeviceNet as required. AutoSearch mode makes this easy to use for the novice, while Expert mode allows closer examination of some 677 key DeviceNet measurements as compared to the DeviceNet specification.

Power-Monitor®

Monitor DeviceNet power quality at any cable junction.



Software Development Kits

EtherNet/IP Stacks

EtherNet/IP source code stacks are the most open, powerful and cost-effective solutions for manufacturers who want to embed EtherNet/IP protocol into industrial controllers and field devices.

CIP Safety Stacks

CIP Safety Stack software solution allows industrial-device manufacturers embedding CIP Safety technology quickly and economically within their products.



Remote Scanners

DeviceNet Remote Scanner

Control I/O devices connected to DeviceNet without the need of a local PC. Remote DeviceNet Scanners can be connected back to a PC residing on an Ethernet network through an Ethernet switch.

PROFIBUS Remote Scanner

Connect PROFIBUS I/O devices to RA Logix processors using EtherNet/IP. Easy to integrate within a Logix system using both RSLogix5000 and the SST PROFIBUS Console software.



Network Interfaces

PC Interfaces

Connect PC-Based Control, HMI / Operator Interface, or SCADA applications to an industrial network including Data Highway Plus, DeviceNet, PROFIBUS, EtherNet/IP, Serial, and Ethernet TCP/IP (Siemens, Schneider, Omron, Mitsubishi).

PLC Communication Modules

Connect an Allen-Bradley CompactLogix, ControlLogix or SLC 500 to industrial networks including AS-Interface, Modbus TCP, Siemens Industrial Ethernet S5/S7, Modbus Serial and PROFIBUS.



Software Drivers

Software drivers provide data acquisition between Windows PC-Based applications and industrial devices connected to Ethernet TCP/IP and Serial networks.

SST™ Communication Module for Rockwell ControlLogix

112073 Modbus/TCP, Siemens Industrial Ethernet and Modbus Serial Protocols

Features and Benefits

Connects your Allen-Bradley ControlLogix to a Modbus/Siemens Ethernet or Modbus Serial network

Direct I/O mapping, no ladder logic to write for configuration and data transfer between module and CLX processor

Paging access (AOI provided), with up to 32K words shared for Input, Output and Status data

Industry leading performance, I/O data refresh every PLC cycle

Fully integrated into the Rockwell Automation environment

- Remote configuration and monitoring via Rockwell RSLinx™
- Add-On-Profile for Rockwell RSLogix5000

User-friendly configuration tool with intuitive graphical interface

Siemens S7 (S7-1200, S7-200, S7-300, and S7-400) Client and Server modes

Siemens S5 Client and Server modes

Specifications

Description

RLL support: Remote configuration and monitoring via RSLinx

Add-On-Profile for Rockwell® RSLogix5000

USB port for user configuration and firmware upgrade

Engineering console simplifies user configuration and diagnostic

Supports multiple modules in a chassis

Supports local and remote chassis

Easy diagnostics: Built-in LEDs and 4 character display

SST-ESR2-CLXT-RLL eXTreme

Same specifications as SST-ESR2-CLX-RLL plus:

Conformal coating

eXTreme components

Ambient operating temperature: -25 to 70° C

Included Hardware/Software

128 MB of onboard memory

8 MB of flash memory

(user configuration data and firmware)

CPU data exchange:

96 Input bytes + 496 Output bytes

32,000 Word Registers via AOI

USB port:

Type A

USB 2 and 1.1 compatible

Communication:

1x Ethernet, 10/100 Mbps, RJ45

2x Serial, 110 bps to 115.2 kbps, RS232/RS485/RS422, RJ45 (DB9 male supplied cable)

OS supported: Windows XP, 7 (64-bit), Vista,

8 (32, 64-bit)

Compatible Protocols

Modbus Master (RTU or ASCII)

Modbus Slave (RTU or ASCII)

Modbus TCP and UDP Client and Server

Siemens S7 and S5 Client and Server

Conformance

RoHS compliant

CE

cULus listed

Class I Div 2, Groups A,B,C,D

Marine (RINA)

Korea CC

Ex (ATEX)

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SST-ESR2-CLX-RLL



SST-ESR2-CLXT-RLL eXTreme module



Cyclic Function Screen Showing Data Overlapping Errors, Data mapping, Table Areas, Message Details



SST™ Communication Module for Rockwell ControlLogix

112073 Modbus/TCP, Siemens Industrial Ethernet and Modbus Serial Protocols

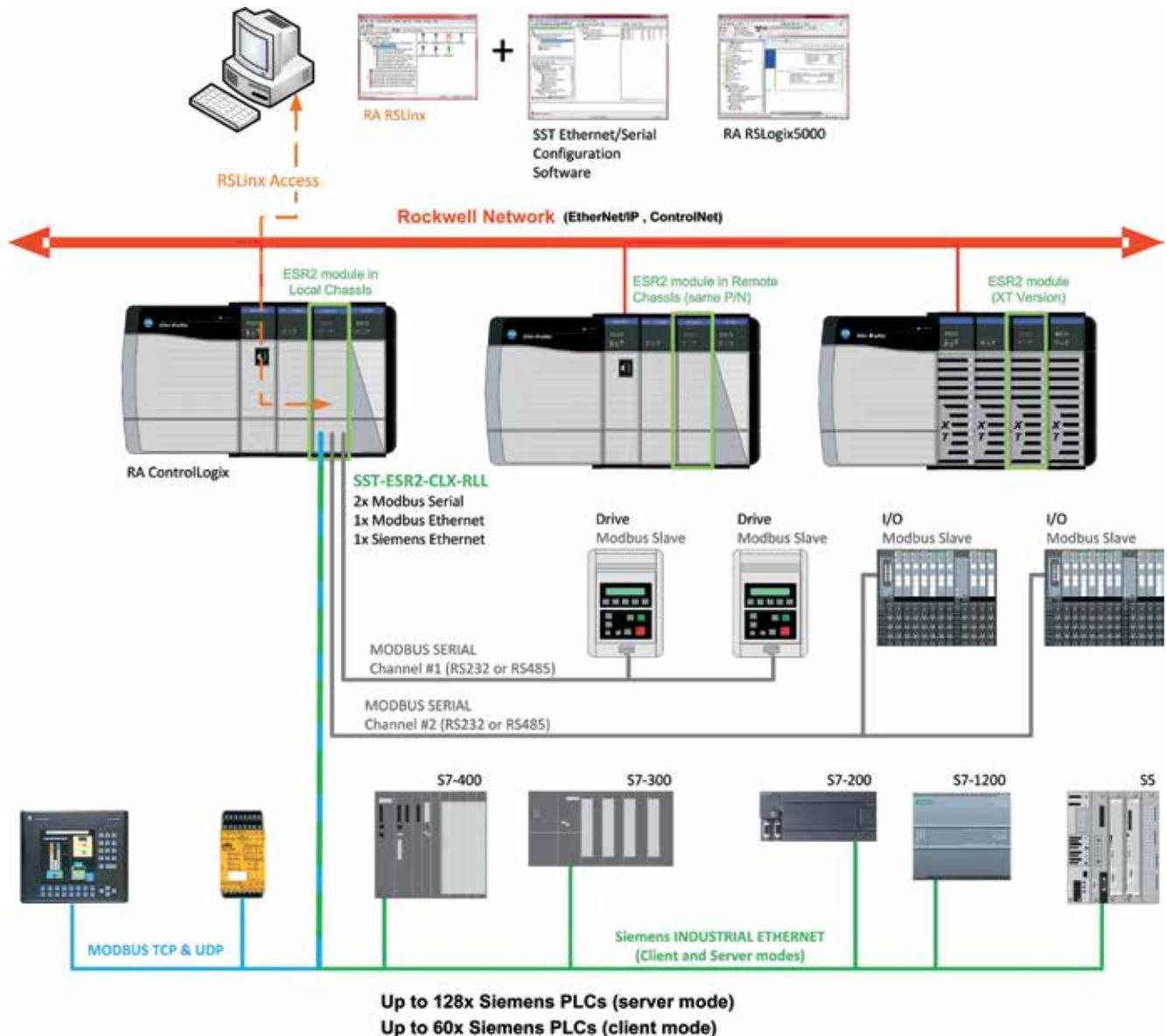


Ordering Information

Engineering No.	Standard Order No.	Description
112073-0001	SST-ESR2-CLX-RLL	SST™ 1x Ethernet + 2x Serial ports communication module for Rockwell ControlLogix, includes Remote Link Library
112073-0003	SST-ESR2-CLX-RLL-CC	SST™ 1x Ethernet + 2x Serial ports communication module for Rockwell ControlLogix, includes Remote Link Library, conformal coated
112073-0002	SST-ESR2-CLXT-RLL	SST™ 1x Ethernet + 2x Serial ports communication module for Rockwell ControlLogix CLXT (eXTreme), includes Remote Link Library, conformal coated, eXTreme module components

Conformal coating material is applied to electronic circuitry to act as protection against moisture, dust, chemicals, and temperature extremes.

Typical Application



SST™ Communication Module for Rockwell ControlLogix

112078 Modbus Serial



Features and Benefits

- Connects your Allen-Bradley ControlLogix to a Modbus Serial network
- Direct I/O mapping, no ladder logic to write for configuration and data transfer between module and CLX processor
- Industry leading performance, I/O data refresh every PLC cycle
- Fully integrated into the Rockwell Automation environment
- User-friendly configuration tool with intuitive graphical interface
- 4x RS232/RS485 Serial Modbus channels in a single slot
- Paging access (AOI provided), with up to 32K words shared for Input, Output and Status data



SST-SR4-CLX-RLL



SST-SR4-CLXT-RLL eXTreme module

Specifications

Description

RLL support: Remote configuration and monitoring via RSLinx
 Add-On-Profile for Rockwell RSLogix5000
 USB port for user configuration and firmware upgrade
 Engineering console simplifies user configuration and diagnostic
 Supports multiple modules in a chassis
 Supports local and remote chassis
 Easy diagnostics: Built-in LEDs and 4 characters display

SST-SR4-CLXT-RLL eXTreme:

Same specifications as SST-SR4-CLX-RLL plus:
 Conformal coating
 eXTreme components
 Ambient operating temperature: -25 to 70° C

Included Hardware/Software

128 MB of onboard memory
 8 MB of flash memory (user configuration data and firmware)
 CPU data exchange:
 496 Input bytes + 496 Output bytes
 32,000 Word Registers via AOI
 USB port:
 Type A
 USB 2 and 1.1 compatible

Communication ports:

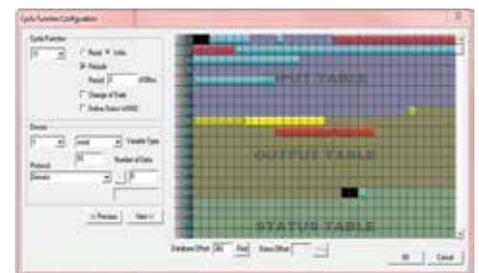
4x Serial, 110 bps to 115.2 kbps, RS232/RS485/RS422, RJ45 (DB9 male supplied cable)
 OS supported: Windows XP, 7 (32, 64-bit), Vista, 8 (32, 64-bit)

Compatible Protocols

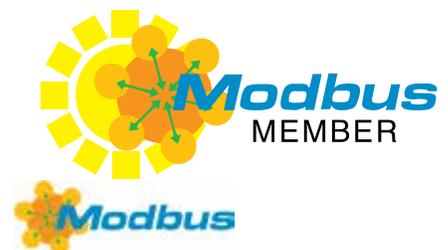
Modbus Master (RTU or ASCII)
 Modbus Slave (RTU or ASCII)

Conformance

RoHS compliant
 CE
 Marine (RINA)
 Korea CC
 cULus listed
 Class I Div 2, Groups A,B,C,D
 Ex (ATEX)



Cyclic Function Screen Showing Data Overlapping Errors, Data mapping, Table Areas, Message Details



SST™ Communication Module for Rockwell ControlLogix

112078 Modbus Serial

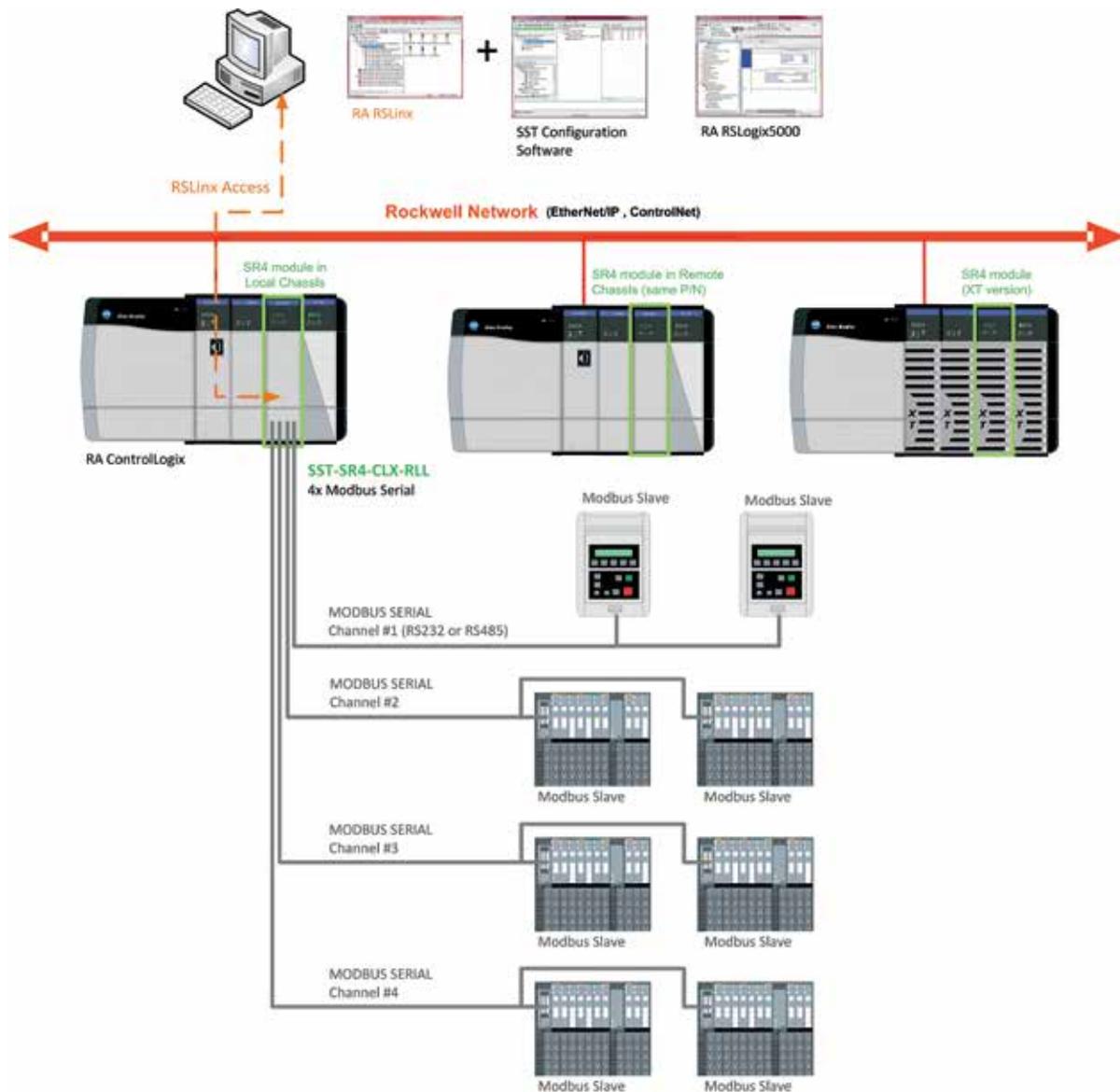


Ordering Information

Engineering No.	Standard Order No.	Description
112078-0001	SST-SR4-CLX-RLL	SST™ 4x Serial ports communication module for Rockwell ControlLogix, includes Remote Link Library
112078-0002	SST-SR4-CLX-RLL-CC	SST™ 4x Serial ports communication module for Rockwell ControlLogix, includes Remote Link Library, conformal coated
112078-0003	SST-SR4-CLXT-RLL	SST™ 4x Serial ports communication module for Rockwell ControlLogix CLXT (eXTreme), includes Remote Link Library, conformal coated, eXTreme module components

Conformal coating material is applied to electronic circuitry to act as protection against moisture, dust, chemicals, and temperature extremes.

Typical Application



SST™ Communication Module for Rockwell ControlLogix 112016 PROFIBUS DP Master and Slave

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Features and Benefits

Connects your Allen-Bradley ControlLogix to a PROFIBUS network

Fully integrated into the Rockwell Automation environment

- Remote configuration and monitoring via Rockwell RSLinx™
- Add-On-Profile for Rockwell RSLogix5000

Direct I/O mapping, no ladder logic to write for configuration and data transfer between module and CLX

Conformal coating version:

- Provides environmental and mechanical protection to significantly extend the life of the components and circuitry
- Protects electronic boards from moisture and contaminants

Typical applications:

- Marine
- Agro-Food
- Mining
- Harsh automotive, etc.

Specifications

Description

High-speed deterministic communication
Easy diagnostics: Built-in LEDs and 4 characters display
Manage DP Master and Slave modes simultaneously
Allows changes to PROFIBUS configuration with PLC in RUN mode
Dynamically add/remove PROFIBUS slaves from the scan list
CommDTM driver for FDT Frame engineering software (PACTware™, FieldCare™, FieldMate™, etc)
Auto-Boot (configuration stored in flash)
Engineering Tools:
Configuration console
Test and diagnostic tools

Included Hardware/Software

Add-On-Profile for increased functionality and reduced commissioning time
Support multiple modules in a chassis; support Local and Remote chassis
One PROFIBUS port, DB9 female, galvanic insulation 1000V
Speed: 9.6 Kbps up to 12 Mbps
LEDs for system, communication, and network status
Up to 1984 input bytes and 1968 output bytes
One Serial port for configuration and diagnostic
Firmware upgradeable
OS supported: Windows XP, 7 (32, 64-bit), Vista, 8 (32, 64-bit)

Compatible Protocols

Master DP-V0 Class-1 and Class-2
Master DP-V1 Class-1 and Class-2
Slave DP-V0

Conformance

RoHS compliant
CE
cULus listed
Class 1 Div 2, Groups A, B, C, and D
FDT certified
Marine (RINA)
Ex (ATEX)
Korea CC

SST-PB3-CLXT-RLL eXTreme:

Same specifications as SST-PB3-CLX-RLL plus:
Conformal coating
eXTreme components
Ambient operating temperature: -25 to 70°C



SST-PB3-CLX-RLL



SST-PB3-CLXT-RLL eXTreme module



SST™ Communication Module for Rockwell ControlLogix

112016 PROFIBUS DP Master and Slave

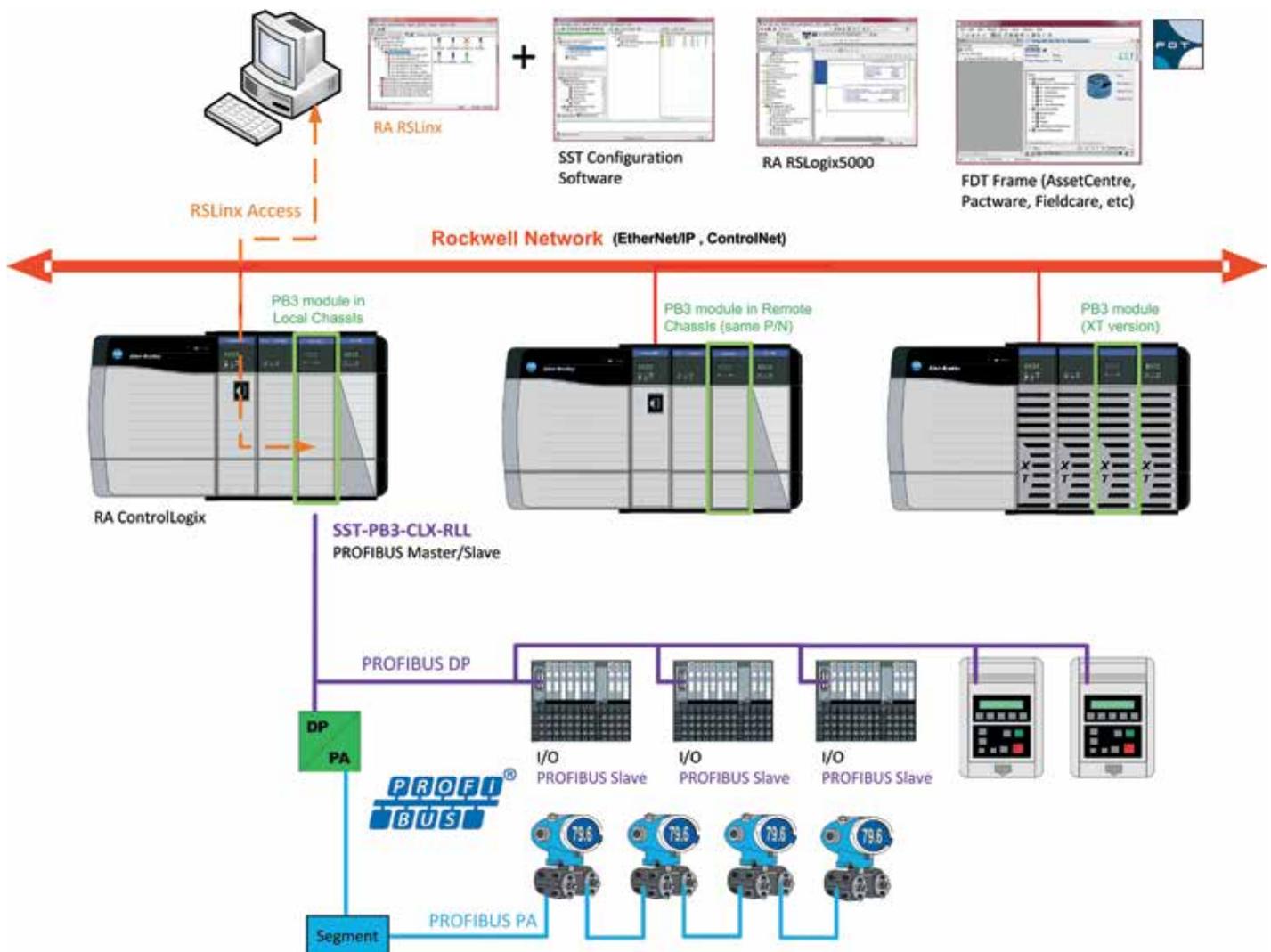


Ordering Information

Engineering No.	Standard Order No.	Description
112016-0018	SST-PB3-CLX-RLL	SST™ PROFIBUS Master and Slave communication module for Rockwell ControlLogix, includes Remote Link Library
112016-0023	SST-PB3-CLX-RLL-CC	SST™ PROFIBUS Master and Slave communication module for Rockwell ControlLogix, includes Remote Link Library, conformal coated
112016-0024	SST-PB3-CLXT-RLL	SST™ PROFIBUS Master and Slave communication module for Rockwell ControlLogix CLXT (eXTreme), includes Remote Link Library, conformal coated, eXTreme module components

Conformal coating material is applied to electronic circuitry to act as protection against moisture dust, chemicals, and temperature extremes.

Typical Application



SST™ Communication Module for Rockwell ControlLogix

112016 PROFIBUS DP Slave

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Features and Benefits

Connects your Allen-Bradley ControlLogix as a slave to a PROFIBUS network

Fully integrated into the Rockwell Automation environment

- No additional installation software
- Add-On-Profile for Rockwell RSLogix5000

Direct I/O mapping, no ladder logic to write for data transfer between module and CLX processor

Conformal coating version:

- Provides environmental and mechanical protection to significantly extend the life of the components and circuitry
- Protects electronic boards from moisture and contaminants

Typical applications:

- Marine
- Agro-Food
- Mining
- Harsh automotive, etc.

Specifications

Description

High-speed deterministic communication
Easy diagnostics: Built-in LEDs and 4 characters display
Full backplane compatible and easy installation with no ladder logic
Dedicated PROFIBUS Slave module
All configuration done using the AOP in RSLogix5000
Auto-Boot

Included Hardware/Software

Add-On-Profile for increased functionality and reduced commissioning time
Support multiple modules in a chassis; support local and remote chassis
One PROFIBUS port, DB9 female, galvanic insulation 1000V
Speed: 9.6 Kbps up to 12 Mbps
LEDs for system, communication, and network status
Simple data transfer up to 244 total words
One serial port for upgrading firmware
Firmware upgradeable
No additional software required for configuration

Compatible Protocols

Slave DP-V0

Conformance

RoHS compliant
CE
Marine (RINA)
PNO Certified
cULus listed
Class 1 Div 2, Groups A, B, C, and D
Ex (ATEX)
Korea CC

SST-PB3S-CLXT-RLL eXTreme:

Same specifications as SST-PB3S-CLX-RLL plus:
Conformal coating
eXTreme components
Ambient operating temperature: -25 to 70°C



SST-PB3S-CLX-RLL



SST-PB3S-CLXT-RLL eXTreme module



SST™ Communication Module for Rockwell ControlLogix

112016 PROFIBUS DP Slave

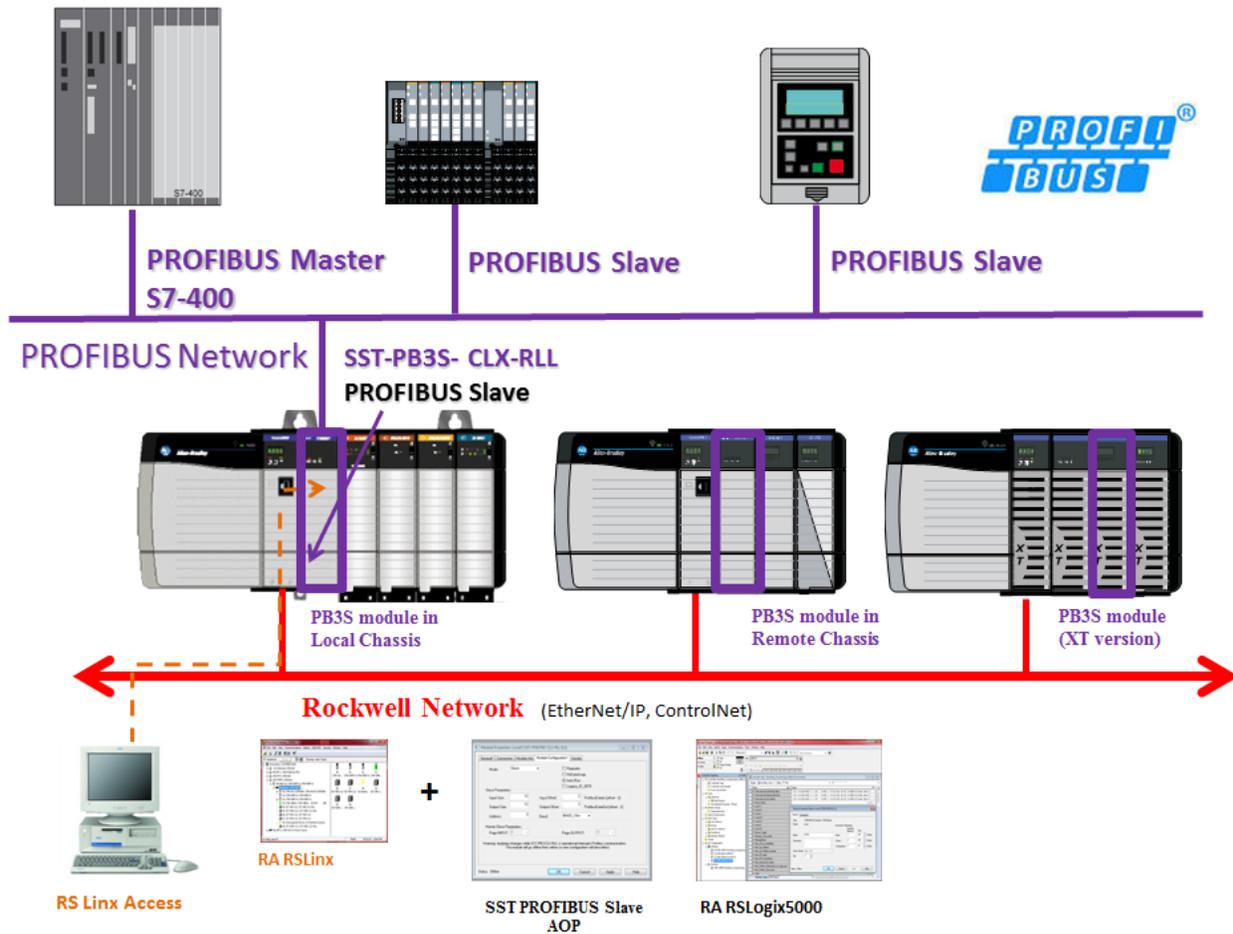


Ordering Information

Engineering No.	Standard Order No.	Description
112016-0025	SST-PB3S-CLX-RLL	SST™ PROFIBUS Slave communication module for Rockwell ControlLogix, includes Remote Link Library
112016-0026	SST-PB3S-CLX-RLL-CC	SST™ PROFIBUS Slave communication module for Rockwell ControlLogix, includes Remote Link Library, conformal coated
112016-0027	SST-PB3S-CLXT-RLL	SST™ PROFIBUS Slave communication module for Rockwell ControlLogix CLXT (eXTreme), includes Remote Link Library, conformal coated, eXTreme module components

Conformal coating material is applied to electronic circuitry to act as protection against moisture dust, chemicals, and temperature extremes.

Typical Application



SST™ Communication Module for Rockwell ControlLogix

112019 AS-interface Scanner



Features and Benefits

Connects your Allen-Bradley ControlLogix to an AS-interface network

Target markets: valve control, tank farms, material handling, conveyors, discrete manufacturing cells, packaging machines, labeling machines, filling/bottling machines

Direct I/O mapping, no ladder logic to write for configuration and data transfer between module and CLX processor

Supports 2 independent AS-i networks with up to 124 AS-i slave devices per module



SST-ASI-CLX

Specifications

Description

AS-i version 3.0
 High-speed deterministic communications to open vendor sensors and actuator devices
 Fast, easy setup to CLX backplane
 AS-i I/O data and status information mapped into the CLX processor's I/O data
 Flash memory for storage of AS-i master I/O configuration
 Easy diagnostics: Built-in LEDs
 Easy setup using 2 push buttons or configuration software
 Operating temperature: 0 to 55°C

Included Hardware/Software

Acts as 1756 input/output module
 Support multiple modules in a chassis
 2x AS-interface Master channels
 Maximum slave supported: Up to 62 slaves on each channel
 AS-i cycle time: 150 µsec (number of slaves +2)
 1 serial port for configuration and diagnostics
 Firmware upgradeable
 Configuration and network diagnostic tools included.
 OS supported: Win 98, Win NT4, 2000, XP, Vista 32-bit, Win 7 (32, 64-bit)

Compatible Protocols

AS-interface Scanner compliant with specification 3.0

Conformance

RoHS compliant
 cULus listed
 CE
 AS-interface certified

Ordering Information

Engineering No.	Standard Order No.	Description
SST-ASI-CLX	112019-0001	AS-interface Communication module for Rockwell ControlLogix, includes configuration cable and software

USB to Serial DB9 cable, commercially available if required

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SST™ Communication Module for Rockwell CompactLogix

112073 Modbus/TCP, and Modbus Serial Protocols Standard Version, Plus Version



Features and Benefits

Connects your Allen-Bradley CompactLogix to a Modbus Ethernet or Modbus Serial network

Modbus Ethernet and Modbus Serial at the same time- Extremely flexible, easy upgrades to Ethernet based devices

Two Modbus Serial Ports, (Software Configurable)- More value, handles any Modbus serial application

One Modbus Ethernet Port, (Software Configurable)- suitable for any Modbus TCP/UDP application

Micro SD card slot (8 Gb Micro SD card included) - Easy module swap-out

10/100 Mb Ethernet Port- Fast configuration downloads, provides backplane or front-module config. options, low-cost cable

2,500 Volt isolation- high immunity to harsh, noisy networks

MTBF of 181 years - reliable, trouble-free usage



SST-ESR2-CPX-S Standard Version



SST-ESR2-CPX-P Plus Version

Specifications

Description

Supports multiple modules in rack
 Supports CompactLogix L2, L3 processors
 Ver. 15 and higher, L4 Ver. 20 and higher
 Operating temperature: 0 to 60°C
 Storage temperature: -40 to 85°C
 Relative humidity: 5% to 95%, non-condensing
 Independent, 3 electrically isolated communication ports, 2,500 Volts
 Modbus Master and/or Slave functionality, ASCII and RTU formats
 Modbus TCP/UDP, client and server supported
 One Micro SD Card Slot, SD card included, configuration files, manuals
 1x Ethernet, 10/100 Mbps, RJ45 (also for configuration and diagnostics)
 2x Serial, 110 bps to 115.2 kbps, RS232/RS485/RS422, RJ45 (DB9 male supplied cable)
 OS supported: Windows XP, 7 (32, 64-bit), Vista, 8 (32, 64-bit)

Paging access (AOI provided), up to 32,000 words for input, output and status data (Plus Version)
 MTBF: 181 years at 25°C
 Max. Distance Rating: 4 slots

Included Hardware/Software

One, SST-ESR2-CPX-(S/P) Universal Modbus Module
 One, 8 Gb Micro SD card
 One, product CD (engineering tools, configuration console)
 Two, 45 cm, RJ-45 to DB-9 male patch cables

Compatible Protocols

Modbus Master (RTU or ASCII)
 Modbus Slave (RTU or ASCII)
 Modbus TCP and UDP Client and Server

Conformance

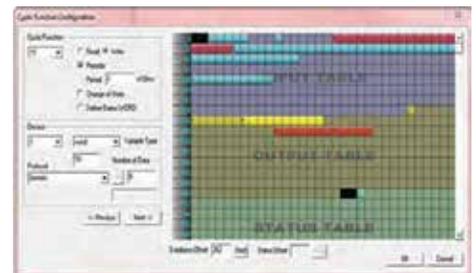
RoHS compliant
 CE certified
 FCC
 Korea CC
 Ex (ATEX)
 UL Class I Div 2, Groups A,B,C,D

Standard Version

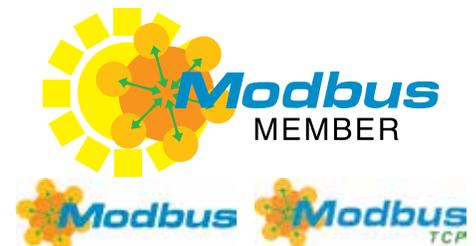
496 Word Database
 32 Modbus Commands/port
 Up to 32 devices per port
 OEM, machine builders, small applications

Plus Version

32,000 Word Database
 256 Modbus Commands/port
 Up to 127 serial devices per port and 128 Ethernet devices
 OEM, machine builders, large networks SCADA applications



Cyclic Function Screen Showing Data Overlapping Errors, Data mapping, Table Areas, Message Details



SST™ Communication Module for Rockwell CompactLogix

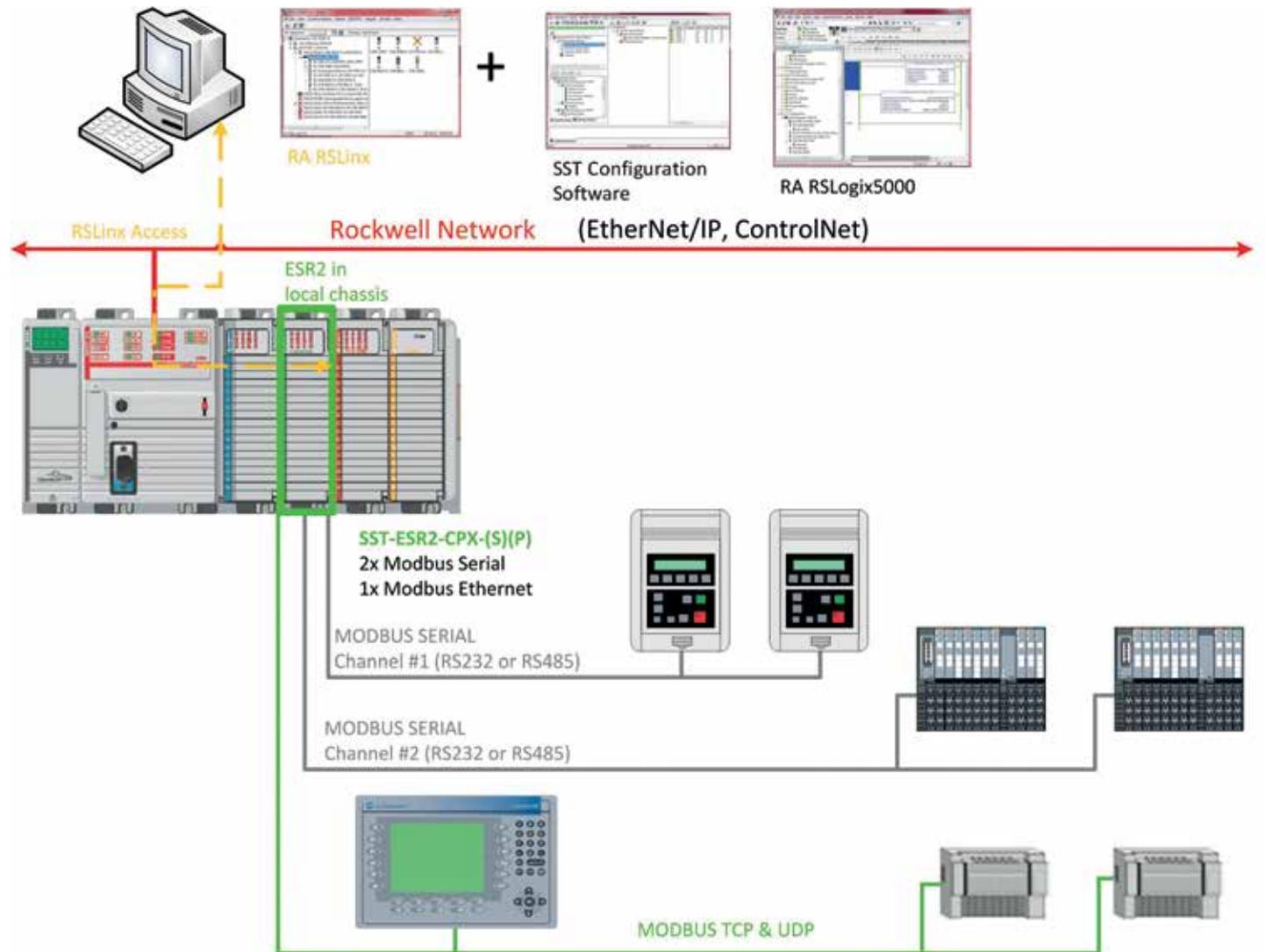
112073 Modbus/TCP, and Modbus Serial Protocols
Standard Version, Plus Version



Ordering Information

Engineering No.	Standard Order No.	Description
112073-0006	SST-ESR2-CPX-S	SST™ Universal Modbus Module for CompactLogix, Standard version
112073-0005	SST-ESR2-CPX-P	SST™ Universal Modbus Module for CompactLogix, Plus version

Typical Application



SST™ Communication Module for Rockwell CompactLogix 112016 PROFIBUS DP Master and Slave

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Features and Benefits

Connects your Allen-Bradley CompactLogix to a PROFIBUS DP-V0, DP-V1 network

Can be configured as PROFIBUS Master, Slave, or Master/Slave- Extremely flexible, reduced inventory, reduced spares, easy to spec-in

10/100 Mb Ethernet port- Fast downloads, remote connections/monitoring, provides backplane or front-module config. options, low-cost cable

Up to 1984 Input Bytes and 1968 Output Bytes per Master- Suitable for large PROFIBUS networks

PROFIBUS port has 1,000 volt electrical isolation- Robust and reliable network, high immunity to electrical noise

Micro SD card slot (8 Gb Micro SD card included)- Easy module swap-out

MTBF of 256 years- reliable, trouble-free usage

Typical applications:

- Marine
- Packaging
- Agro-Food
- Mining
- Harsh automotive, etc.



SST-PB3-CPX



Specifications

Description

LINK, SPEED, SD, OK, STATE, FAULT LEDs provide 29 visual fault/state information
Changes to PROFIBUS configuration with PLC in RUN mode
Autoscan network supported
Support multiple modules in rack
Supports CompactLogix L2 and L3 processor, rev. 15 and higher, L4 rev. 20 and higher
Master, 1984 Input Bytes, 1968 Output Bytes
Slave, 488 Input Bytes, 488 Output Bytes
One 10/100 Mb/s Ethernet port, RJ-45, configuration and diagnostics
Firmware upgradeable
OS supported: Windows XP, 7 (32, 64-bit), Vista, 8 (32, 64-bit)
Operating Temperatures: 0 to 60°C
Storage Temperatures: -40 to 85°C
Relative Humidity: 5% to 95%, non-condensing
Acyclic communications (DPV1), Read and Write
One PROFIBUS port, DB9 female, Galvanic isolation 1000V
PROFIBUS speed: 9.6 Kbps up to 12 Mbps
MTBF: 181 years at 25°C
Max. Distance Rating: 4 slots
Maximum 125 Slaves supported

Included Hardware/Software

One, SST-PB3-CPX Universal PROFIBUS Module
One, 8 Gb Micro SD card
One, Product CD (engineering tools, configuration console)

Compatible Protocols

Master DP-V0 Class-1 and Class-2
Master DP-V1 Class-1 and Class-2
Slave DP-V0

Conformance

RoHS compliant
CE Certified
ATEX
FCC
Korea CC
UL Class I Div 2 Groups A, B, C, D
PI Certified

SST™ Communication Module for Rockwell CompactLogix

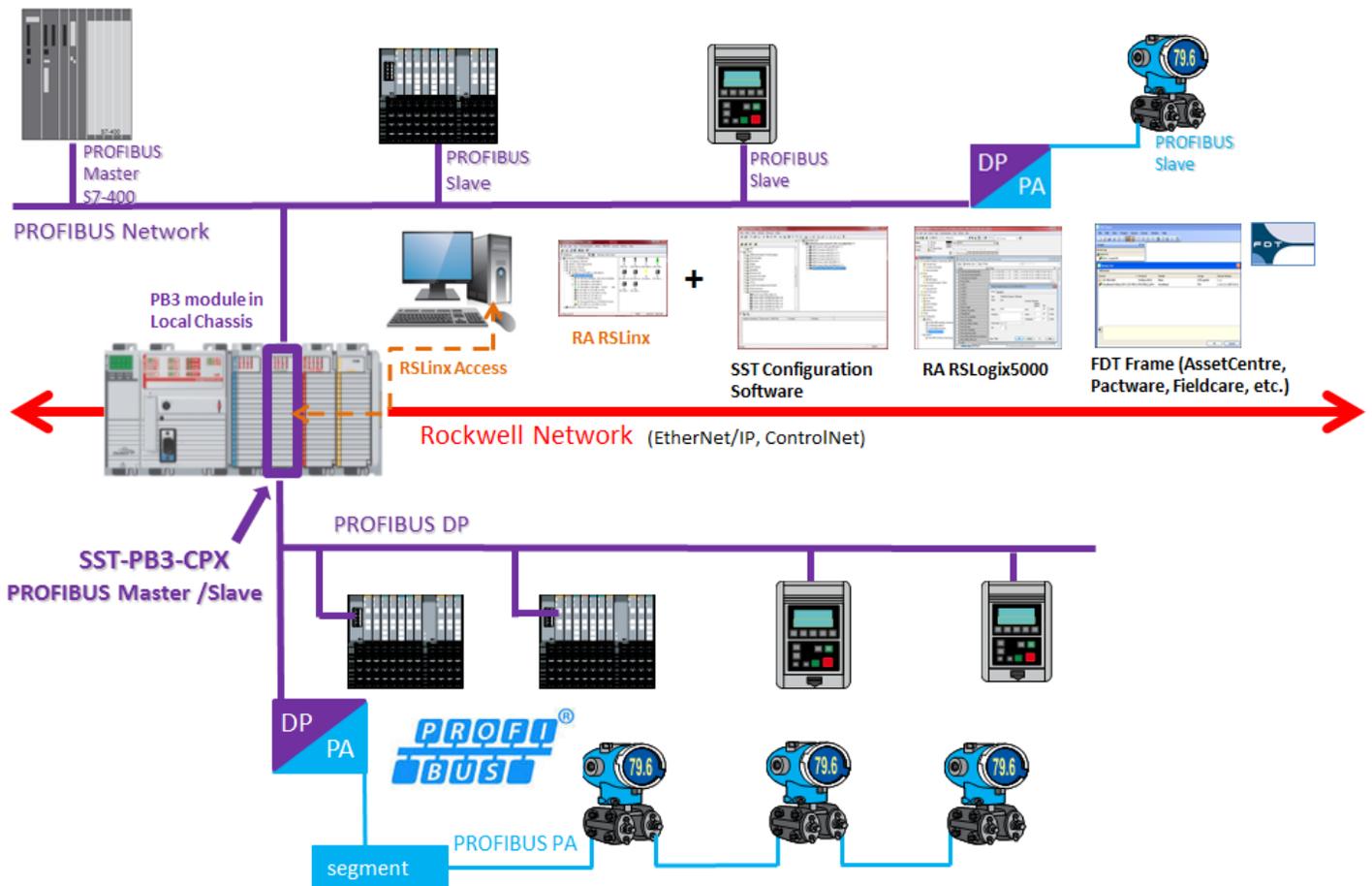
112016 PROFIBUS DP Master and Slave



Ordering Information

Engineering No.	Standard Order No.	Description
112016-0028	SST-PB3-CPX	SST™ PROFIBUS Master and Slave communication module for Rockwell CompactLogix, includes Remote Link Library

Typical Application



SST™ Communication Module for Rockwell CompactLogix 112016 PROFIBUS DP Master

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Features and Benefits

Connects your Allen-Bradley CompactLogix to a PROFIBUS DP-V0, DP-V1 network

Software configured as PROFIBUS Master - Extremely flexible, easy to configure, no ladder logic required

10/100 Mb Ethernet port- Fast downloads, remote connections/monitoring, provides backplane or front-module config. options, low-cost cable, convenient

Up to 1984 Input Bytes and 1968 Output Bytes per Master- Suitable for large PROFIBUS networks

PROFIBUS Master capability- low cost module

Micro SD card slot (8 Gb Micro SD card included)- Easy module swap-out, configuration files

MTBF of 181 years- reliable, trouble-free usage



SST-PB3M-CPX

Typical applications:

- Marine
- Packaging
- Agro-Food
- Mining
- Harsh automotive, etc.



Specifications

Description

LINK, SPEED, SD, OK, STATE, FAULT LEDs provide 29 visual fault/state information
Changes to PROFIBUS configuration with PLC in RUN mode
Autoscan network supported
Support multiple modules in rack
Supports CompactLogix L2 and L3 processor, rev. 15 and higher, L4 rev. 20 and higher
Master, 1984 Input Bytes, 1968 Output Bytes
One 10/100 Mb/s Ethernet port, RJ-45, configuration and diagnostics
Firmware upgradeable
OS supported: Windows XP, 7 (32, 64-bit), Vista, 8 (32, 64-bit)
Operating Temperatures: 0 to 60°C
Storage Temperatures: -40 to 85°C
Relative Humidity: 5% to 95%, non-condensing
Acyclic communications (DPV1), Read and Write
One PROFIBUS port, DB9 female, Galvanic isolation 1000V
PROFIBUS speed: 9.6 Kbps up to 12 Mbps
MTBF: 181 years at 25°C
Maximum 125 Slaves supported
Max. Distance Rating: 4 slots

Included Hardware/Software

One, SST-PB3-CPX PROFIBUS Master Module
One, 8 Gb Micro SD card
One, Product CD (engineering tools, configuration console)

Compatible Protocols

Master DP-V0 Class-1 and Class-2
Master DP-V1 Class-1 and Class-2

Conformance

RoHS compliant
CE Certified
Ex (ATEX)
FCC
Korea CC
UL Class I Div 2 Groups A, B, C, D
PI Certified

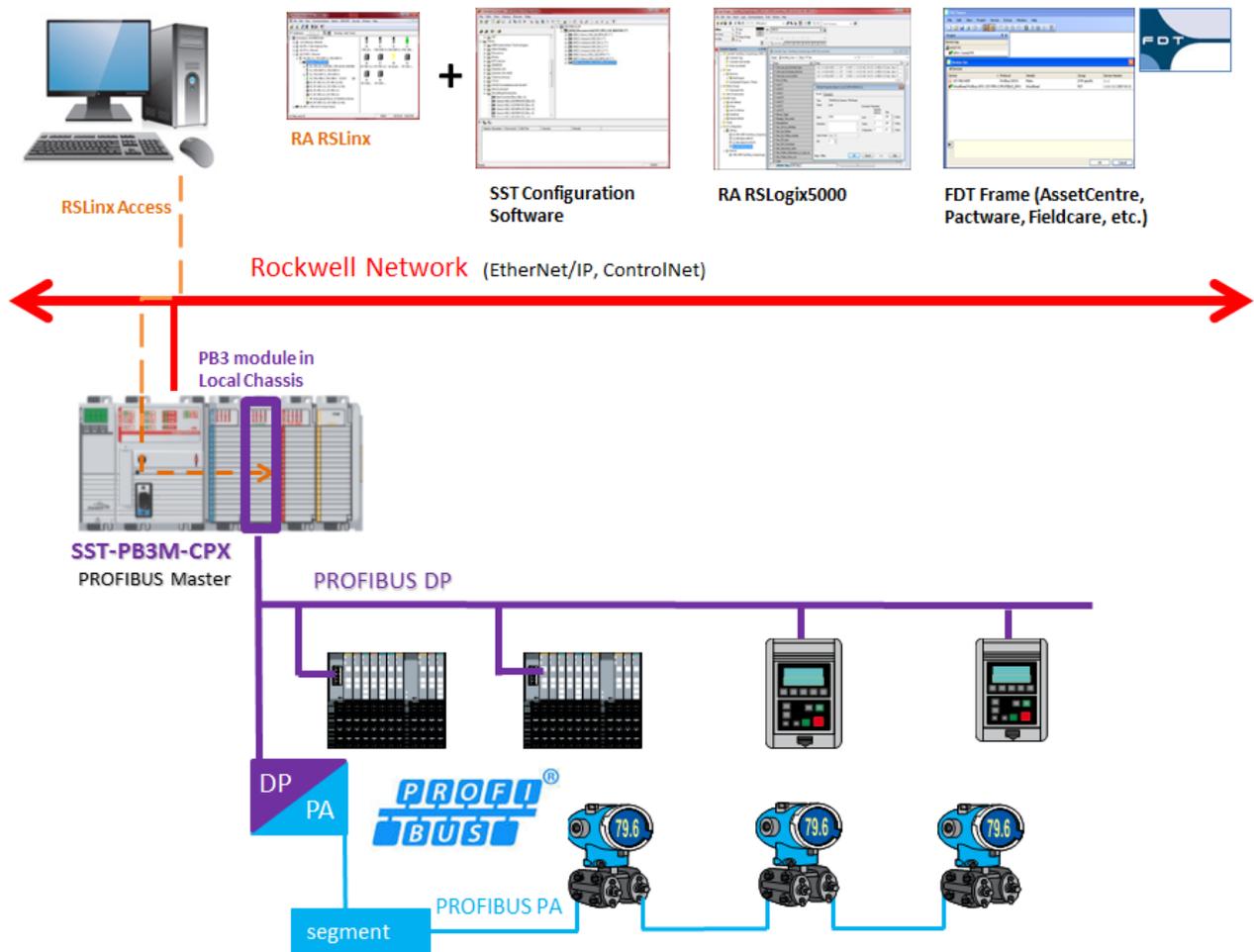
SST™ Communication Module for Rockwell CompactLogix 112016 PROFIBUS DP Master



Ordering Information

Engineering No.	Standard Order No.	Description
112016-0030	SST-PB3M-CPX	SST™ PROFIBUS Master communication module for Rockwell CompactLogix, includes Remote Link Library

Typical Application



SST™ Communication Module for Rockwell CompactLogix 112016 PROFIBUS DP Slave

molex®

Features and Benefits

Connects your Allen-Bradley CompactLogix as a Slave to a PROFIBUS DP-V0 network

10/100 Mb Ethernet port- Fast downloads, remote connections/monitoring, provides backplane or front-module config. options, low-cost cable

Up to 244 Input Bytes, 244 Output Bytes per Slave- High data throughput as Slave device

Software configured as slave, no ladder logic required

Simple, PROFIBUS Slave capability - low cost module

Micro SD card slot (8 Gb Micro SD card included) - Easy module swap-out

MTBF of 181 years- reliable, trouble-free, usage

Typical applications:

- Marine
- Packaging
- Agro-Food
- Mining
- Harsh automotive, etc.



SST-PB3S-CPX



Specifications

Description

High-speed deterministic communication
LINK, SPEED, SD, OK, STATE, FAULT LEDs provide 13 visual fault/state information
Support multiple modules in rack
Supports CompactLogix L2 and L3 processor, rev. 15 and higher, L4 rev. 20 and higher
Slave, 488 Input Bytes, 488 Output Bytes, 244 word total
One 10/100 Mb/s Ethernet port, RJ-45, configuration and diagnostics
Firmware upgradeable
OS supported: Windows XP, 7 (32, 64-bit), Vista, 8 (32, 64-bit)
Operating Temperatures: 0 to 60°C
Storage Temperatures: -40 to 85°C
Relative Humidity: 5% to 95%, non-condensing
Slave DP-V0
One PROFIBUS port, DB9 female, Galvanic isolation 1000V
PROFIBUS speed: 9.6 Kbps up to 12 Mbps
Auto-Run

Max. Distance Rating: 4 slots
MTBF: 181 years at 25°C

Included Hardware/Software

One, SST-PB3-CPX PROFIBUS Slave Module
One, 8 Gb Micro SD card
One, Product CD (engineering tools, configuration console)

Compatible Protocols

Slave DP-V0

Conformance

RoHS compliant
CE Certified
Ex (ATEX)
FCC
Korea CC
UL Class I Div 2 Groups A, B, C, D
PI Certified

SST™ Communication Module for Rockwell CompactLogix

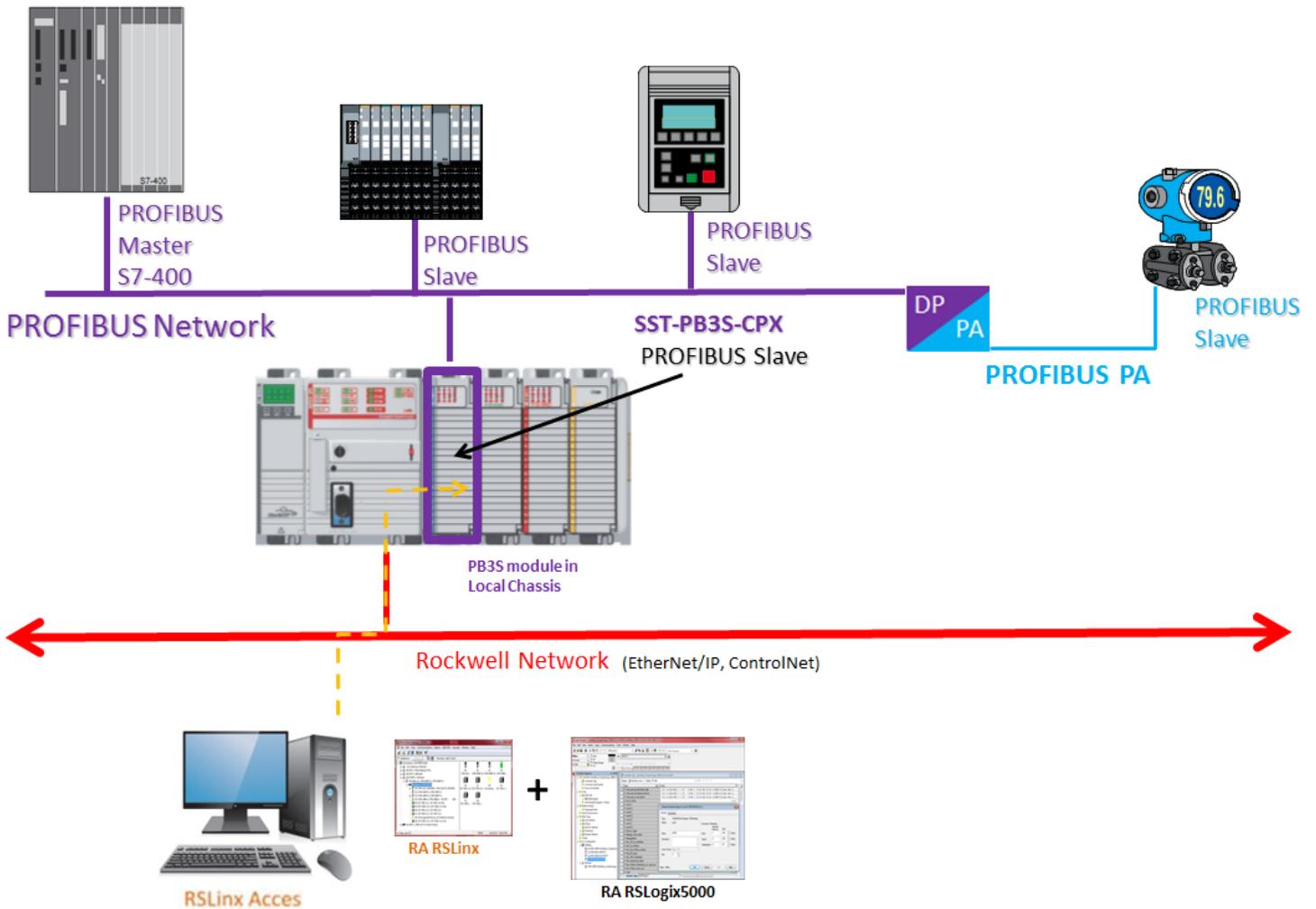
112016 PROFIBUS DP Slave



Ordering Information

Engineering No.	Standard Order No.	Description
112016-0029	SST-PB3S-CPX	SST™ PROFIBUS Slave communication module for Rockwell CompactLogix, includes Remote Link Library

Typical Application



SST™ Communication Module for Rockwell CompactLogix and MicroLogix 1500

112019 AS-interface Scanner



Features and Benefits

Connects Allen-Bradley CompactLogix and MicroLogix 1500 PLCs to an AS-interface network

Target markets: valve control, tank farms, material handling, conveyors, discrete manufacturing cells, packaging machines, labeling machines, filling/bottling machines

Direct I/O mapping, no ladder logic to write for configuration and data transfer between module and CPX processor

Supports 1 independent AS-i networks with up to 62 AS-i slave devices per module



SST-ASI-CPX

Specifications

Description

AS-i version 3.0
 High-speed deterministic communications to open vendor sensors and actuator devices
 Fast, easy setup to CPX backplane
 AS-i I/O data and status information mapped into the CPX processor's I/O data
 Flash memory for storage of AS-i master I/O configuration
 Easy diagnostics: Built-in LEDs
 Easy setup using 2 push buttons or configuration software
 Operating temperature: 0 to 55°C

Included Hardware/Software

1x AS-interface Master channels
 Maximum slave supported:
 Up to 62 slaves on each channel
 AS-i Cycle Time: 150 µsec (number of slaves +2)
 1 serial port for configuration and diagnostics
 Firmware upgradeable
 Configuration and network diagnostic tools included.
 OS supported: Win 98, Win NT4, 2000, XP, Vista 32-bit, Win 7 (32, 64-bit)

Compatible Protocols

AS-interface Scanner compliant with specification 3.0

Conformance

RoHS compliant
 cULus listed
 CE
 AS-interface certified

Ordering Information

Engineering No.	Standard Order No.	Description
SST-ASI-CPX	112019-0002	AS-interface Communication module for Rockwell CompactLogix, MicroLogix 1500 PLCs, includes configuration cable and software

USB to Serial DB9 cable, commercially available if required

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molex[®]



SST™ Communication Module for Rockwell SLC 500

112016 PROFIBUS DP Master and Slave



Features and Benefits

Connects your Allen-Bradley SLC 500 to a PROFIBUS network

Direct I/O mapping, no ladder logic to write for configuration and data transfer between module and SLC processor

Simultaneous operation of PROFIBUS DP Master and Slave



Specifications

Description

High speed deterministic communication
 Fast, easy set up in SLC backplane; PROFIBUS IO data is automatically mapped into the SLC processor's I, O, MO and MI files
 Easy diagnostics: Built-in LEDs
 Manage DP Master and Slave modes simultaneously
 Auto-Boot (configuration stored in flash)
 Engineering Tools:
 Configuration console
 Test and diagnostic tools

Included Hardware/Software

Acts as 1746 input/output module
 Support multiple modules in a chassis
 1 PROFIBUS port, DB9 female, galvanic insulation 1000V
 Speed: 9.6 Kbps up to 12 Mbps
 I/O mapping:
 I and O Files— 32 words in, 32 words out
 M1 and MO Files— 1000 words in/out
 1 serial port for configuration and diagnostic
 Firmware upgradeable

Compatible Protocols

Master DP-V0 Class-1 and Class-2
 Master DP-V1 Class-1 and Class-2
 Slave DP-V0
 FDL Send/Receive

Conformance

RoHS compliant
 CE

Ordering Information

Engineering No.	Standard Order No.	Description
SST-PB3-SLC	112016-0022	PROFIBUS Communication module for Rockwell SLC 500

SST™ Communication Module for Rockwell SLC 500

112019 AS-interface Scanner



Features and Benefits

Connects your Allen-Bradley SLC 500 to a AS-interface network

Target markets: Factory automation, Process control, Complex machines, etc

Direct I/O mapping, no ladder logic to write for configuration and data transfer between module and SLC processor

Supports 2 independent AS-i networks with up to 124 AS-i slave devices



Specifications

Description

High speed deterministic communication
 Fast, easy setup to SLC backplane
 AS-i I/O data mapped into the SLC processor's I/O files
 Status information is mapped into the M0 and M1 files
 Multiple SST-ASI-SLC modules can be used in one SLC rack
 Configure scanner with Rockwell RSLogix 500
 Flash memory for storage of AS-i master I/O configuration
 Easy diagnostics: Built-in LEDs

Included Hardware/Software

Acts as 1746 input/output module
 Support multiple modules in a chassis
 2x AS-interface Master channels
 Maximum slave supported: Up to 62 slaves on each channel
 AS-i cycle time: 150 µsec (number of slaves +2)
 AS-I connector: 4-pin combicon connector
 I/O mapping:
 I and O files: 32 words in, 32 words out
 M1 and M0 files: 461 words in/out
 1 serial port for configuration and diagnostic
 Firmware upgradeable

Compatible Protocols

AS-interface Scanner compliant with specification 3.0

Conformance

RoHS compliant
 CE
 AS-interface certified

Ordering Information

Engineering No.	Standard Order No.	Description
SST-ASI-SLC	112019-0004	AS-interface Communication module for Rockwell SLC 500

SST™ PROFIBUS Remote Module

112016 PROFIBUS DP Master and Slave

molex®

Features and Benefits

Connects any Rockwell Automation Logix controller (CompactLogix, ControlLogix, GuardLogix,) with EtherNet/IP connectivity to a PROFIBUS network

The PB3 module can be installed close to PROFIBUS field devices, reducing expensive PROFIBUS cabling

No ladder logic to write for configuration and data transfer between PB3 Remote module and Logix processor

Unique remote concept

- No rack limitation of Rockwell Logix controllers backplane
- Flexible installation design; the PB3 Remote module can be installed at the most convenient place (cabinet, on-machine, etc)
- Up to 2kbyte Input + 2kbyte Output PROFIBUS process data
- Fits in with wireless architecture by connecting a wireless access point to the Ethernet port

Target markets: Factory automation, process control, complex machines, and more

Fully integrated into the Rockwell Automation environment

- Add-On-Instructions (.L5X); Import PROFIBUS I/O process variables into RSLogix 5000 tags; allow the user to use process variable names instead of arrays of bit, byte, word or float
- EDS file for RSLinx

Implement redundancy scenario

- 2x Logix controllers connected to a single PB3 Remote Module, or implementing PLC redundancy
- 1x Logix controller connected to 2x PB3 Remote Modules, for implementing PROFIBUS master redundancy

Conformal coating version; improves and extends the working life and ensures security and reliability of performance in extreme or humid conditions. Typical applications: Marine, Agro-Food, Mining, Harsh automotive, etc.



PROFI[®]
BUS



Specifications

Description

High speed deterministic communication
 Manage DP Master and Slave modes simultaneously
 Allows changes to PROFIBUS configuration with PLC in RUN mode
 Dynamically add/remove PROFIBUS slaves from the scan list
 CommDTM driver for FDT Frame engineering software (AssetCentre™, PACTware™, Field Care™)
 PROFIBUS Master DP-V1 configuration
 Device detection
 Device diagnostics
 Auto-Boot (configuration stored in flash)
 PROFIBUS configuration console
 Remote DP slave configuration and diagnostics
 Automatic DP slave detection
 Automatic naming of I/O process variable based on GSD file
 Export of I/O process variables in RSLogix L5X format

Technical Data

Acts as "Linking Device" remote module
 1x PROFIBUS port, DB9 female, galvanic insulation 500V
 Speed: 9.6 Kbps up to 12 Mbps
 Up to 1984 input bytes and 1968 output bytes
 2x RJ45 Ethernet port switch
 10/100 Mbps, auto negotiation
 IP addressing (via 2 rotary switches): DHCP (default), DHCP with name ("SST_PB3_xxx"), Factory fixed, factory selectable, flash saved (via 0xF5/0xF6 EIP objects)
 Manages duplicate IP addressing
 Support of DLR (Device Level Ring as a ring node) higher resiliency from loss of one network connection
 Built-in diagnostics LEDs:
 4x module status (system fault, PROFIBUS state, bus fault, and PLC RUN/PROG)
 3x Ethernet: IP status, link (port 1, port 2)

Operating temperature:
 0 to +65°C
 -25 to +70°C (Coated version)
 Storage temperature: -40 to +85°C
 DIN Rail mounted
 Compact dimensions: 18 x 7 x 16 cm
 Power supply: 24V
 Firmware upgradeable

Protocols

Master DP-V0 Class-1 and Class-2
 Master DP-V1 Class-1 and Class-2
 Slave DP-V0

Conformance

ODVA and PROFIBUS certified product
 CE, RoHS, REACH, UL listed
 Class 1/Div 2- Groups A, B, C and D for hazardous (Classified) locations (coated version)
 RINA Marine Certificate

SST™ PROFIBUS Remote Module

112016 PROFIBUS DP Master and Slave

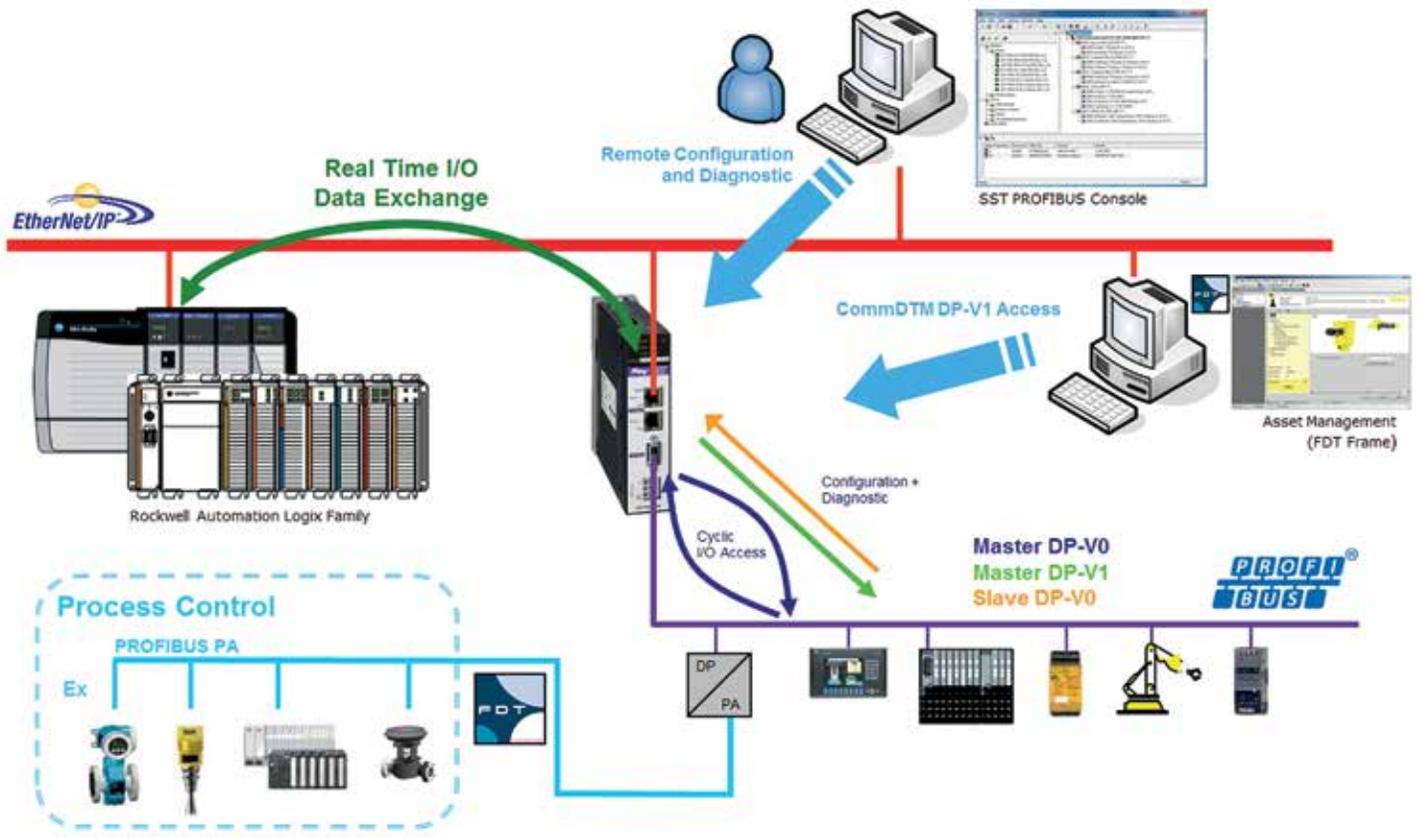


Ordering Information

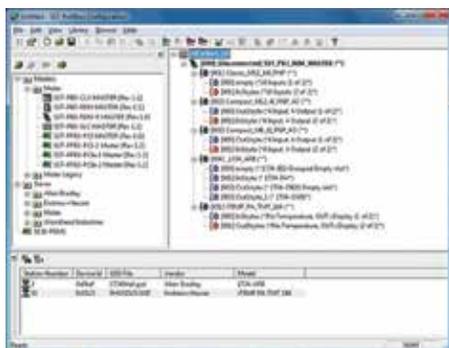
Engineering No.	Standard Order No.	Description
SST-PB3-REM	112016-5000	SST™ PROFIBUS Remote Module for Rockwell Automation Logix controllers
SST-PB3-REM-CC*	112016-5001	SST™ PROFIBUS Remote Module for Rockwell Automation Logix controllers, coated version

*Conformal coating material is applied to electronic circuitry to act as protection against moisture, dust, chemicals, and temperature extremes.

Typical Application



Remote Module Software



PROFIBUS Engineering Console



Dynamic Add-On-Instructions based on PROFIBUS Configuration

IN_PB3	(...)	SST_PB3_REM_C
IN_PB3 ModuleStatus	0	SINT
IN_PB3 CurrentPage	0	SINT
IN_PB3 CMD_Reply	0	SINT
IN_PB3 Reserved	0	SINT
IN_PB3.TEMP_PA_TMT	(...)	Device_16_Input
IN_PB3.TEMP_PA_TMT Temperature	28.34	REAL
IN_PB3.TEMP_PA_TMT Status	80	INT
IN_PB3AB_1734_AFB	(...)	Device_3_Input
IN_PB3AB_1734_AFB_0	2#0000_0001	BOOL
IN_PB3AB_1734_AFB_1	2#0000_0000	BOOL
IN_PB3AB_1734_AFB_IT2_ThermoCouple_1	48	INT
IN_PB3AB_1734_AFB_IT2_ThermoCouple_2	0	INT
IN_PB3AB_1734_AFB_IT2_Status	23	INT
OUT_PB3	(...)	SST_PB3_REM_C
STS_PB3	(...)	SST_PB3_REM_E

Direct Access in RSLogix to PROFIBUS tags

SST™ IP67 PROFIBUS Remote Module

112016 PROFIBUS DP Master and Slave

molex®

Features and Benefits

Connects any Rockwell Automation Logix controller with EtherNet/IP connectivity to a PROFIBUS network

Harsh-duty IP67-rated design for on-machine or in-field mounting. Perfectly fit new Armor GuardLogix PLCs.

The PB3 module can be installed close to PROFIBUS field devices, reducing expensive PROFIBUS cabling

No ladder logic to write for configuration and data transfer between PB3 Remote module and Logix processor

Unique remote concept

- No rack limitation of Rockwell Logix controller backplane
- Flexible installation design; the PB3 Remote module can be installed at the most convenient place
- Up to 2kbyte Input + 2kbyte Output PROFIBUS process data
- Fits in with wireless architecture by connecting a wireless access point to the Ethernet port

Target markets: Factory automation, Process control, Complex machines, etc.

Fully integrated into the Rockwell Automation environment

- Add-On-Instructions (.L5X); Import PROFIBUS I/O process variables into RSLogix 5000 tags; allow the user to use process variable names instead of arrays of bit, byte, word or float
- EDS file for RSLinx

Implement redundancy scenario

- 2x Logix controllers connected to a single PB3 Remote Module; or implementing PLC redundancy
- 1x Logix controller connected to 2x PB3 Remote Modules; for implementing PROFIBUS master redundancy



Specifications

Description

High speed deterministic communication
Manage DP Master and Slave modes simultaneously
IP67-rated dust and water resistant. Tested to withstand shock, high-vibration and high temperatures
Allows changes to PROFIBUS configuration with PLC in RUN mode
Dynamically add/remove PROFIBUS slaves from the scan list
CommDTM driver for FDT Frame engineering software (AssetCentre™, PACTware™, FieldCare™)
PROFIBUS Master DP-V1 configuration
Device detection
Device diagnostics
Auto-Boot (configuration stored in flash)
PROFIBUS Configuration console
Remote DP slave configuration and diagnostics
Automatic DP slave detection
Automatic naming of I/O process variable based on GSD file
Export of I/O process variables in RSLogix L5X format

Technical Data

Acts as "Linking Device" remote module
2x Power connectors, M12, male plus female, A-Coded (protected against power crossing)
2x PROFIBUS ports, B-coded female, galvanic insulation 500V
Speed: 9.6 Kbps up to 12 Mbps
Up to 1984 input bytes and 1968 output bytes
2x Ethernet port switch, M12 D-Coded
10/100 Mbps, auto negotiation
IP addressing (via 2 rotary switches): DCHP (default), DHCP with name ("SST_PB3_xxx"), factory fixed, factory selectable, flash saved (via 0xF5/0xF6 EIP objects)
Manages duplicate IP addressing
Support of DLR (Device Level Ring as a ring node) – higher resiliency from loss of one network connection
Built-in diagnostics LEDs:
4x module status (system fault, PROFIBUS state, bus fault, and PLC RUN/PROG)
3x Ethernet: IP status, Link (port 1, port 2)

Operating temperature: -25 to +70°C
Storage temperature: -40 to +85°C
Compact dimensions: 22 x 6 x 3.6 cm
Power supply: 24 VDC
Firmware upgradeable

Protocols

Master DP-V0 Class-1 and Class-2
Master DP-V1 Class-1 and Class-2
Slave DP-V0

Conformance

ODVA and PROFIBUS certified product
CE, RoHS, REACH, UL listed
KoreanCC, China (CCC)

SST™ IP67 PROFIBUS Remote Module

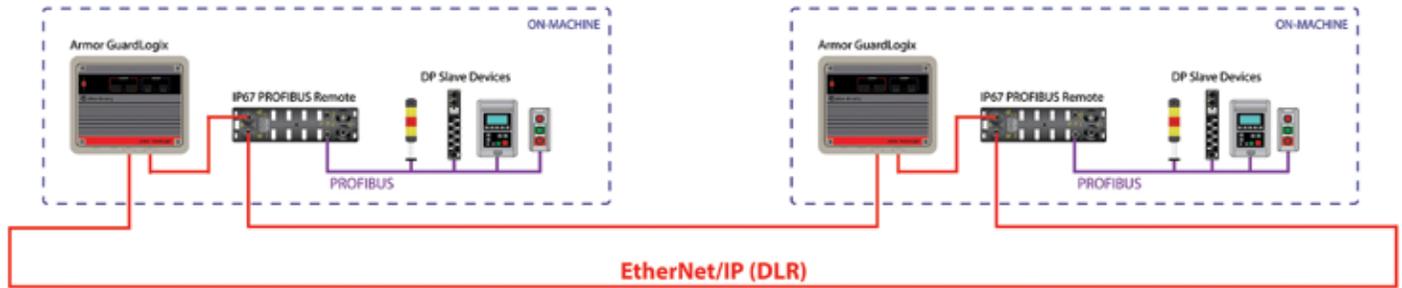
112016 PROFIBUS DP Master and Slave



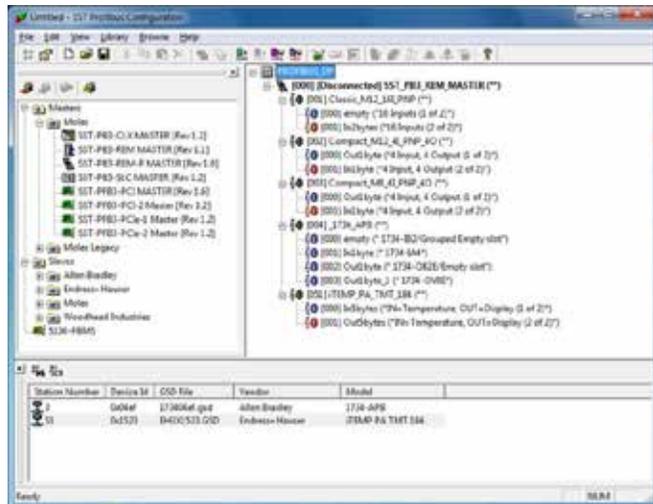
Ordering Information

Engineering No.	Standard Order No.	Description
SST-PB3-REM-R	112016-5002	SST™ IP67 PROFIBUS Remote Module for Rockwell Automation Logix controllers

Typical Application



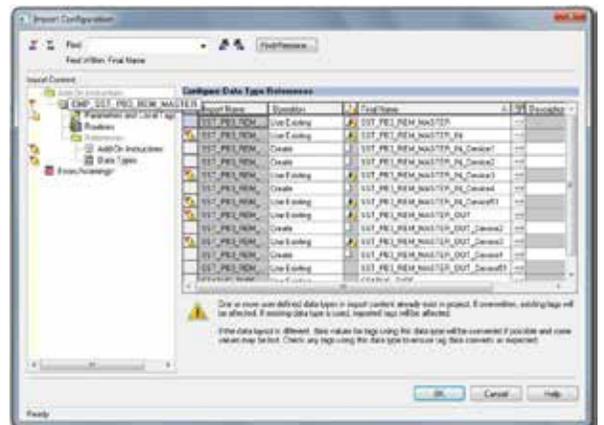
Remote Module Software



PROFIBUS Engineering Console

IN_PB3	{...}	SST_PB3_REM_C
IN_PB3.ModuleStatus	0	SINT
IN_PB3.CurrentPage	0	SINT
IN_PB3.CMD_Reply	0	SINT
IN_PB3.Reserved	0	SINT
IN_PB3.ITEMP_PA_TMT	{...}	Device_16_Input
IN_PB3.ITEMP_PA_TMT.Temperature	28.34	REAL
IN_PB3.ITEMP_PA_TMT.Status	80	SINT
IN_PB3.AB_1734_AFB	{...}	Device_3_Input
IN_PB3.AB_1734_AFB.IB8_0	2#0000_0001	BOOL
IN_PB3.AB_1734_AFB.IB8_1	2#0000_0000	BOOL
IN_PB3.AB_1734_AFB.IT2_ThermoCouple_1	48	INT
IN_PB3.AB_1734_AFB.IT2_ThermoCouple_2	0	INT
IN_PB3.AB_1734_AFB.IT2_Status	23	INT
OUT_PB3	{...}	SST_PB3_REM_C
STS_PB3	{...}	SST_PB3_REM_S

Direct Access in RSLogix to PROFIBUS tags



Dynamic Add-On-Instructions based on PROFIBUS configuration

SST™ DeviceNet* Remote Scanner

112034 DeviceNet Control over Ethernet

molex®

Features and Benefits

High performance DeviceNet protocol executed via Remote DeviceNet™ Scanners

User interface DLL/API is completely backward compatible with existing applications and local DeviceNet interface cards

Diagnostic LEDs

UCMM (Unconnected Message Manager) capable; Group 1, 2, and 3 dynamic explicit connections supported

Provides simultaneous execution of Group 2 Client (Master) and Server (Slave) operation

Supports all DeviceNet standard baud rates: 125, 250, and 500 Kbaud

Supports Poll, Strobe, Change of State (COS) and Cyclic I/O messaging

Provides Client (Master) explicit messaging to slave devices

Backward compatible DLL preserves existing investment

DIN rail mount allows distribution to machine level

Frees up PC slots by placing scanner cards remotely

Manage your DeviceNet application across an Ethernet LAN

Capable of updating DeviceNet I/O faster than a PCI version

Reduce infrastructure costs by using cheaper Ethernet cable and fewer and/or less expensive PCs



Specifications

OS and Drivers Supported

Microsoft® Windows 7 (64-bit), Vista, XP for both drivers and diagnostic tools
Example C source code and Windows DLLs for custom driver development

Software Tools

Diagnostic and test tools are available that enable fast integration of industrial communication into your application.

Conformance

RoHS Compliant: Yes
Approvals: CE
ODVA DeviceNet Conformance Test

Hardware Specifications

Diagnostic LEDs:
Remote Scanner—Power, system status
DeviceNet—Power, communication, health
Ethernet—Link, 10/100 Mbaud, activity
Remote scanner power:
10–30VDC, 330mA typical (male Nano-Change® M8 connector)

Environmental

Humidity: 5% to 95% non-condensing

Network Specifications

Protocol:
DeviceNet Master—Group 2 Client, Group 2 only Client
DeviceNet Slave—Group 2 Server
Isolated CAN physical layer on each channel
Cable:
DeviceNet—shielded twisted pair, compatible with target network
Ethernet—Cat 5e shielded
Connector:
DeviceNet—Compliant male Micro-Change® M12 connector
Ethernet—RJ45
DeviceNet power: 11-24 VDC, 50 mA typical
Isolation: 500 V
Data rate:
DeviceNet—125 Kbps, 250 Kbps and 500 Kbps
Ethernet—10/100 Mbps

Physical

Operating temperature: 0 up to +50°C
Storage temperature: -40 up to +85°C

*DeviceNet is a trademark of Open DeviceNet Vendor Association (ODVA)

SST™ DeviceNet* Remote Scanner

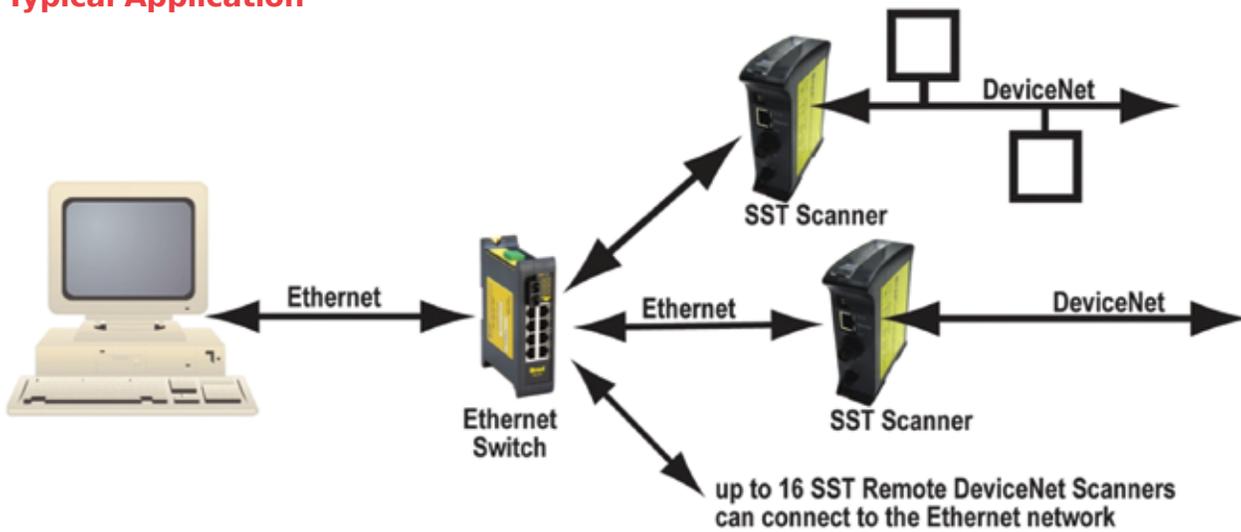
112034 DeviceNet Control over Ethernet



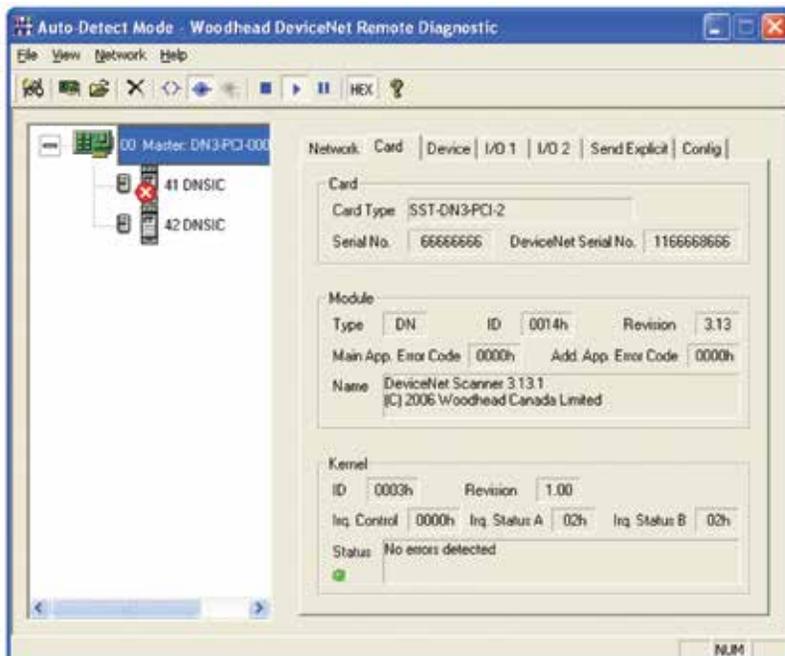
Ordering Information

Engineering No.	Standard Order No.	Description
SST-EDN-1	112034-0021	Remote DeviceNet Scanner (without cables)
SST-EDN-1-C2	112034-0026	Remote DeviceNet Scanner with cable kit (DeviceNet and Power) Single-ended power cable: 3-pole, M8 connector on one end, 2 meters (6.6ft), UL/CSA cable, Cat. No. 403000A110M020 Single-ended DeviceNet cable: 5-pole, M12 connector on one end, 2 meters (6.6ft), UL/CSA cable, Cat. No. DND20A-M020

Typical Application



Remote Diagnostic Software



*DeviceNet is a trademark of Open DeviceNet Vendor Association (ODVA)

applicom[®] Network Interface Card 112000 Industrial Ethernet

molex[®]

Features and Benefits

Fast data acquisition between PC-based applications and industrial devices connected to Ethernet TCP/IP

On board co-processor eliminates data bottlenecks, ensuring delivery of time critical information

"All-in-One" - All protocols included in the package · Best choice for HMI/SCADA applications

High value engineering software tools; enabling fast integration of industrial communication into your applications (configuration, diagnostic, data servers, development libraries)

One configuration and one diagnostic tool whatever the protocols used

Quick "Return-On-Investment"; Single development library and OPC server reduce the time required to learn and integrate applicom[®] products in your architectures

Simultaneously run all TCP/UDP protocols in Client/Server modes

Combine several cards (up to 8) and run simultaneously from 1 to 32 protocols in a single PC

Combo versions:

- Ethernet + PROFIBUS (1.5 Mbps)
- Ethernet + Serial (38.4 Kbps)



Specifications

Description

Engineering tools:

- Engineering console
- Test and diagnostic tools

Compatible data servers:

- OPC DA v3.0
- Wonderware[®] DAServer
- Wonderware I/O (SuiteLink/FastDDE)

Includes development libraries:

- Visual Studio 6 (C++/C)
- Visual Studio 2005 (VB .NET/C+)

Supported OS:

- Windows (32-bit and 64-bit): 10, 8, 7
- Windows (64-bit): 2012/2008 server
- Windows (32-bits): 2003 server

Included Hardware/Software

Bus Format:

- PCI Universal bus 3.3V/5V (PCI-X compatible)
- PCI Express 1x

Hardware plug and play

AMD SC520

16 Mb SDRAM

4 Mb flash memory

One Ethernet port:

- Fast Ethernet 10/100 Mbps, auto negotiating
- Base-T (RJ45), 4 LEDs (Rx, Tx, Link, 10/100)

Compatible Protocols

Ethernet TCP/IP (Client/Server modes)

Altus Alnet II (AL 200x, Webgate)

Alstom SRTP (C80-35, C80-75)

Allen-Bradley EtherNet/IP(PCCC) (Logix, PLC-5 and SLC 500)

Fanuc SRTP (90-30, 90-70)

Mitsubishi Electric Melsec (A, Q)

Omron FINS (C, CV, CS)

Schneider Electric Open Modbus TCP

Schneider Electric UNI-TE (Premium and Micro)

Siemens Industrial Ethernet (S5, S7, TI)

UDP Send/Receive (Free messaging)

Ethernet ISO

Schneider Electric Ethway

Siemens Industrial Ethernet ISO (S5, S7, TF and TI)

Conformance

RoHS compliant

CE

OPC certified

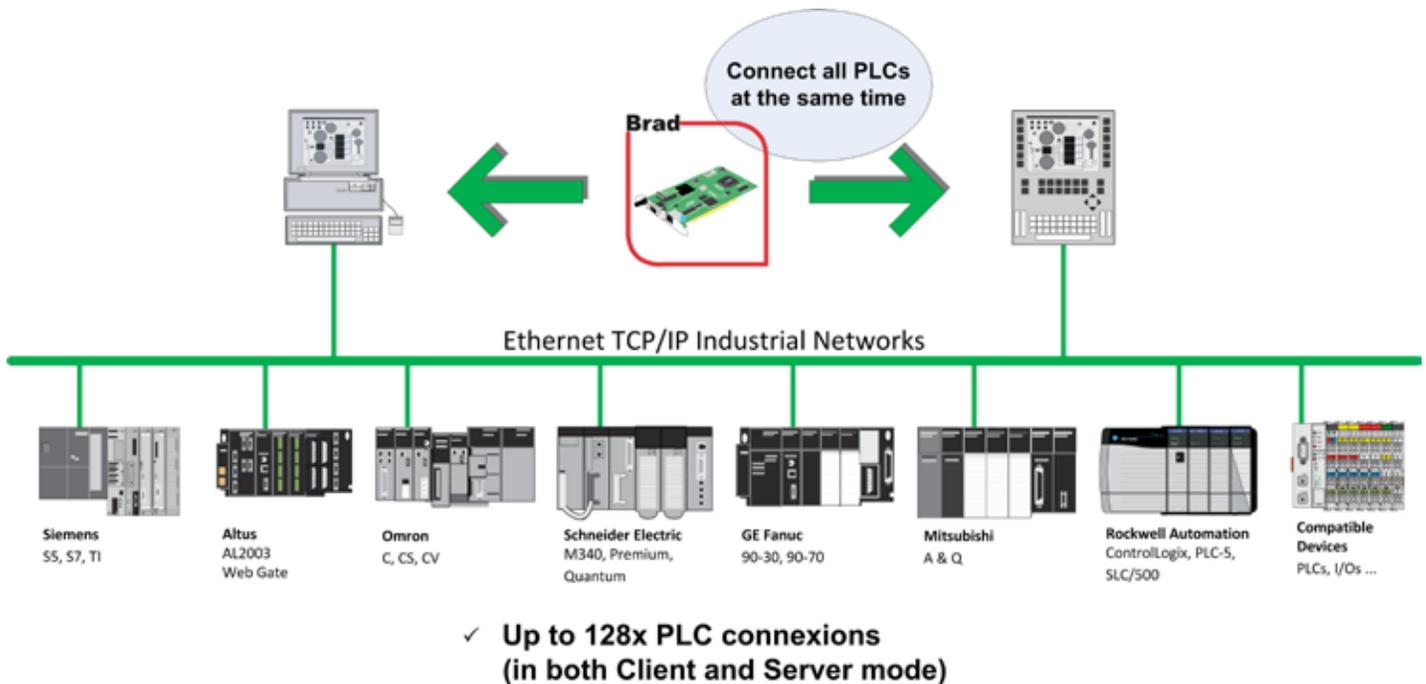
applicom[®] Network Interface Card 112000 Industrial Ethernet



Ordering Information

Engineering No.	Standard Order No.	Description
APP-ETH-PCU-C	112000-0005	PCU2000ETH PCI Network Interface Card for Ethernet
APP-ETH-PCIE	112000-5026	PCIE2000ETH PCI Express Network Interface Card for Ethernet
APP-EPB-PCIE	112000-5028	PCIE2000ETH PCI Express Network Interface Card for Ethernet / PROFIBUS
APP-ESR-PCIE	112000-5027	PCIE2000ETH PCI Express Network Interface Card for Ethernet / serial
APP-EPB-PCU-U	112000-0001	PCIE2000ETH PCI Network Interface Card for Ethernet / PROFIBUS
APP-ESR-PCU-C	112000-0003	PCIE2000ETH PCI Network Interface Card for Ethernet / serial

Typical Application



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applicom® Network Interface Card 112011 PROFIBUS for Scada/HMI

molex®

Features and Benefits

Fast data acquisition between PC-based applications and industrial devices connected to PROFIBUS

On board co-processor eliminates data bottlenecks, ensuring delivery of time critical information

"All-in-One" - All protocols included in the package · Best choice for HMI/SCADA applications

High value engineering software tools; enabling fast integration of industrial communication into your applications (configuration, diagnostic, data servers, development libraries)

One configuration and one diagnostic tool whatever the protocols used

Quick "Return-Of-Investment"; Single development library and OPC server reduce the time required to learn and integrate applicom® products in your architectures

Simultaneously run all PROFIBUS protocols

Combine several cards (up to 8) and run simultaneously from 1 to 32 protocols in a single PC

Combo protocol: Run all PROFIBUS protocols simultaneously (DP, PPI/PPI+, S7/ MPI, FDL)

Compatible with:

- Simatic® S7 Series (S7-1200, S7-200, S7-300, S7-400)
- Simatic® SS Series (95U, 115U, 135U, 155U)



Specifications

Description

Engineering tools:

- Engineering console
- Test and diagnostic tools

Compatible data servers:

- OPC DA v3.0
- Wonderware® DAServer
- Wonderware I/O (SuiteLink/FastDDE)

Includes development libraries:

- Visual Studio 6 (C++/C)
- Visual Studio 2005 (VB .NET/C#)

Supported OS:

- Windows (32-bit and 64-bit): 10, 8, 7
- Windows (64-bit): 2012/2008 server
- Windows (32-bit): 2003 server

Included Hardware/Software

Bus format:

- PCI Universal bus 3.3V/5V (PCI-X compatible)
- PCI Express 1x

Hardware plug and play

- AMD SC520
- 16 Mb SDRAM
- 4 Mb flash memory
- 1 PROFIBUS port, DB9 female, galvanic insulation 500V
- Speed: 9.6 Kbps up to 1.5 Mbps

Compatible Protocols

- Master DP-V0, Class-1 and Class-2
- S7/MPI Client
- FDL S5 Master
- PPI/PPI+ Master
- Free FDL Send/Receive

Conformance

- RoHS compliant
- CE
- OPC certified
- PCI Express certified

Ordering Information

Engineering No.	Standard Order No.	Description
APP-PFB-PCU-C	112011-0004	PCU1500PFB PCI Network Interface Card for PROFIBUS
APP-PFB-PCIE	112011-5026	PCIE1500PFB PCI Express Network Interface Card for PROFIBUS
APP-PS7-PCU-C	112011-0006	PCU1500S7 PCI Network Interface Card for PROFIBUS S7/MPI
APP-PS7-PCIE	112011-5027	PCIE1500S7 PCI Express Network Interface Card for PROFIBUS S7/MPI

applicom[®] Network Interface Card 112020 Serial Protocol for Scada/HMI



Features and Benefits

Fast data acquisition between PC-based applications and industrial devices connected to serial networks

On board co-processor eliminates data bottlenecks, ensuring delivery of time critical information

"All-in-One" - All protocols included in the package · Best choice for HMI/SCADA applications

High value engineering software tools; enabling fast integration of industrial communication into your applications (configuration, diagnostic, data servers, development libraries)

One configuration and one diagnostic tool whatever the protocols used

Quick "Return-Of-Investment"; single development library and OPC server reduce the time required to learn and integrate applicom[®] products in your architectures

Combine several cards (up to 8) and run simultaneously from 1 to 32 protocols in a single PC

Electrical interfaces available: RS232C, RS485/RS422, Current Loop; all with or without galvanic insulation (opto couplers)



Specifications

Description

Engineering tools:

- Engineering console
- Test and diagnostic tools

Compatible data servers:

- OPC DA v3.0
- Wonderware[®] DAServer
- Wonderware IO (SuiteLink/FastDDE)

Includes development libraries:

- Visual Studio 6 (C++/C), Visual Studio 2005 (VB, NET/C#)

Supported OS:

- Windows (32-bit and 64-bit): 10, 8, 7
- Windows (64-bit): 2012/2008 server
- Windows (32-bits): 2003 server

Included Hardware/Software

Bus format:

- PCI Universal bus 3.3V/5V (PCI-X compatible)
- PCI Express 1x

Hardware: plug and play

- AMD SC520
- 16 Mb SDRAM
- 4 Mb flash memory

1x Serial Port:

- D-Sub, 9pin, male
- 2 leds (TX/RX)
- 50 bps to 38.4 Kbps

Electrical interface:

- RS485/RS422 with galvanic insulation (500 V)

Compatible Protocols

- Allen-Bradley DF1 Master (PLC-5 and SLC Series)
- Elsag Bailey[®] Data Link Master (5000 and 2000 Series)
- GE Fanuc SNPX Master (90-xx and 80-xx Series)
- Moeller Group[®] SucomA Master (PS32, PS316 Series)
- Modbus Master (ASCII and RTU)
- Modbus Slave (ASCII and RTU)
- Omron Sysmac Way Master
- Saia Burgess Controls S-Bus Master (PCD Series)
- Schneider Electric Uni-Telway Master/Slave (TSX 7 Series)
- Siemens 3964/3964R Free or RK512 Master
- Siemens AS511 Master (Simatic S5 Series)
- Siemens PPI/PPI+ Master (Simatic S7-200 Series)
- Siemens Ti-Dir Master (Simatic TI-505 Series)

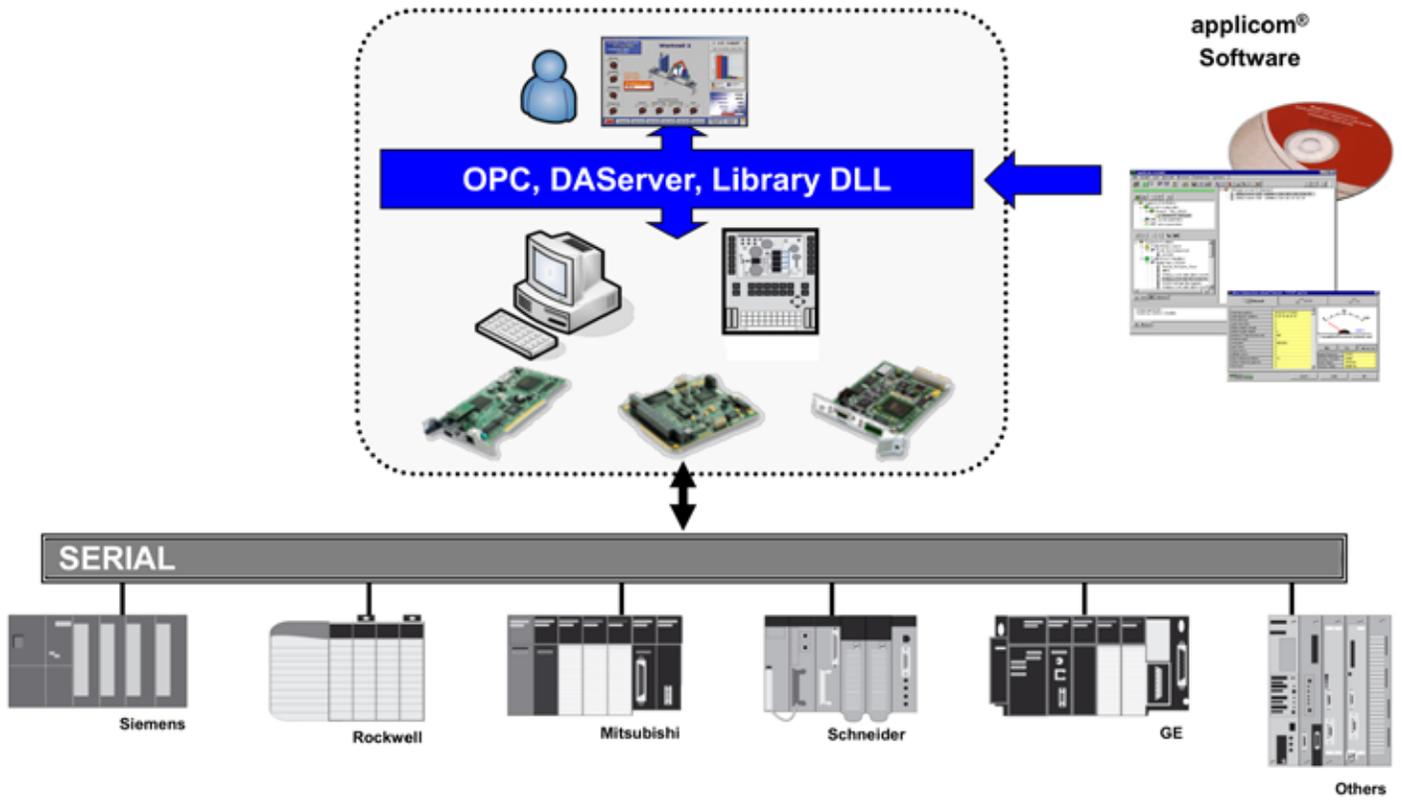
Conformance

- RoHS compliant
- CE
- OPC certified
- PCI Express certified

Ordering Information

Engineering No.	Standard Order No.	Description
APP-SR1-PCU-C	112020-5017	PCU1000 PCI Network Interface Card for Serial networks
APP-SR1-PCIE	112020-5018	PCIE1000 PCI Network Interface Card for Serial networks

Typical Application



applicomIO® Network Interface Card 112000 Ethernet Fieldbus



Features and Benefits

Deterministic data acquisition for real time PC-based control applications

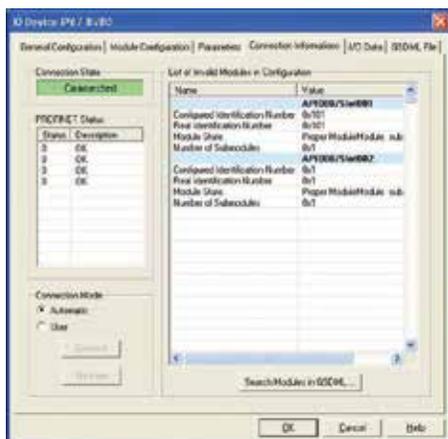
On board co-processor eliminates data bottlenecks, ensuring delivery of time critical information

Very easy-to-use; no knowledge of protocol required

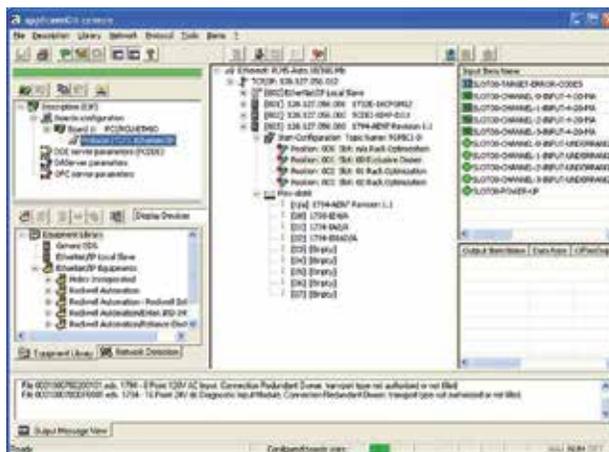
Remote access via TCP/IP connection; to able configuration and diagnostic when using real time OS (VxWorks, Linux)



EtherNet/IP™



Device Diagnostics



Configuration Console

Specifications

Description

Auto mapping of I/O in card DPRAM
I/O exchange up to 14 Kbytes
Hardware and software Watchdog
Auto-Boot (Configuration stored in flash)
Engineering tools:

Engineering console with automatic test and diagnostic tools

Compatible data servers:

OPC DA v3.0, 2.05 and 1.0a

Includes development libraries:

Supported OS:

Windows (32-bit and 64-bit): 10, 8, 7
Windows (64-bit): 2012/2008 server
Windows (32-bit): 2003 server
Others: Linux, VxWorks, RTX VenturCom

Included Hardware/Software

PCI Universal bus 3.3V/5V (PCI-X compatible)

Hardware plug-and-play

AMD SC520

16 Mb SDRAM; 4 Mb flash memory

1 digital input plus 1 digital output

1 Ethernet port:

Fast Ethernet 10/100 Mbps, auto negotiating

Base-T (RJ45), 4 LEDs (Rx, Tx, Link, 10/100)

Compatible Protocols

EtherNet/IP

Scanner and adapter

Explicit messaging (Client/Server)

Up to 128 simultaneous CIP connections

EtherNet/IP Devices supported:

Generic and Rockwell IO through EDS files

(Flex™ I/O, CompactLogix, etc)

IP address settings configurable via the console or

DHCP/BOOTP server

Client DNS supported

Conformance

RoHS compliant

CE

OPC certified

ODVA conformance tested

Ordering Information

Engineering No.	Standard Order No.	Description
DRL-EIP-PCU	112000-5030	PCU-ETHIO PCI Network Interface Card for EtherNet/IP
DRL-EIP-PCIE	112000-5033	PCU-ETHIO PCI Express Network Interface Card for EtherNet/IP

Software Development Kits

EtherNet/IP Scanner and Adapter

112106 Ethernet Software Development Kits

molex[®]

Features and Benefits

Scanner and adapter protocol stacks can address both PCL (Scanner) or device (Adapter) manufacturers who want to implement EtherNet/IP networks

Molex stacks have no hardware and OS dependencies and can be easily implemented on a large range of hardware system platforms or software operating systems

Sample applications with source codes are provided and can be quickly and easily implemented

OEM engineering console software (EIP-CT) to quickly create configuration files to initialize the stack and perform commissioning and diagnostic of connected devices (this tool is protected by a USB dongle and can be customer branded)

Molex stacks are certified tested with ODVA conformance tool

Molex can provide stack training, technical support and engineering development for both hardware and software design



EtherNet/IP Stack, SST™-EIP-SCA

EtherNet/IP[™]

Specifications

Basic Characteristics

Conform to ODVA specifications EtherNet/IP
(vol 1-3.14, vol 2-1.15)

CIP features:

- Implicit messaging (I/O process data)
- Explicit messaging (configuration and diagnostic)
- Extensive Client/Server messaging support
- Fully compatible with EtherNet/IP conformance test suite CT11
- Stack resolution: Timing resolution in microseconds
- Supported objects according to CIP Standard
 - Identity object
 - Message router object
 - Assembly object:
 - Connection Manager Object
 - TCP/IP Interface Object
 - Ethernet link object
 - QoS object
 - And any user objects

SDK Package

- ANSI C source code
- Electronic documentation
- Implementation example on several operating systems (Win32, Win64, VxWorks 6.4/6.6/6.8, Linux)
- EDS sample
- STC sample for ODVA conformance tool
- Sandbox application for testing SDK API
- EIP_Trace to log messages from target platform on a Windows host
- EIP_Tool to access CIP objects

Common Characteristics

- Hardware compatibility: 32-bit and 64-bit processor (Intel, PowerPC, ARM, SH4 already validated)
- Supported operating system: Any OS real-time or not (Windows, VxWorks, Linux, etc.)
- Hardware compatibility:
 - Supports Motorola and Intel memory systems
- Stack implementation:
 - Single or multi task
 - Socket based or UDP optimization
- Code foot print (estimate but highly customizable):
 - 200 kB for Adapter
 - 400 kB for Scanner

EtherNet/IP Configuration Tool (EIP-CT)

- Windows (32-bit and 64-bit): XP, Vista, Seven, 2008 Server
- Generate scanner stack configuration files
- EDS device library management
- Adapter commissioning (Automatic device detection, online actions, etc.)
- Support of modular device like Rockwell Flex/I/O and Point/I/O devices with chassis and module management
- Integrated diagnostic
- OEM customization
- USB dongle protection
- Used by ODVA during plug fest interoperability tests

Software Development Kits

EtherNet/IP Scanner and Adapter

112106 Ethernet Software Development Kits



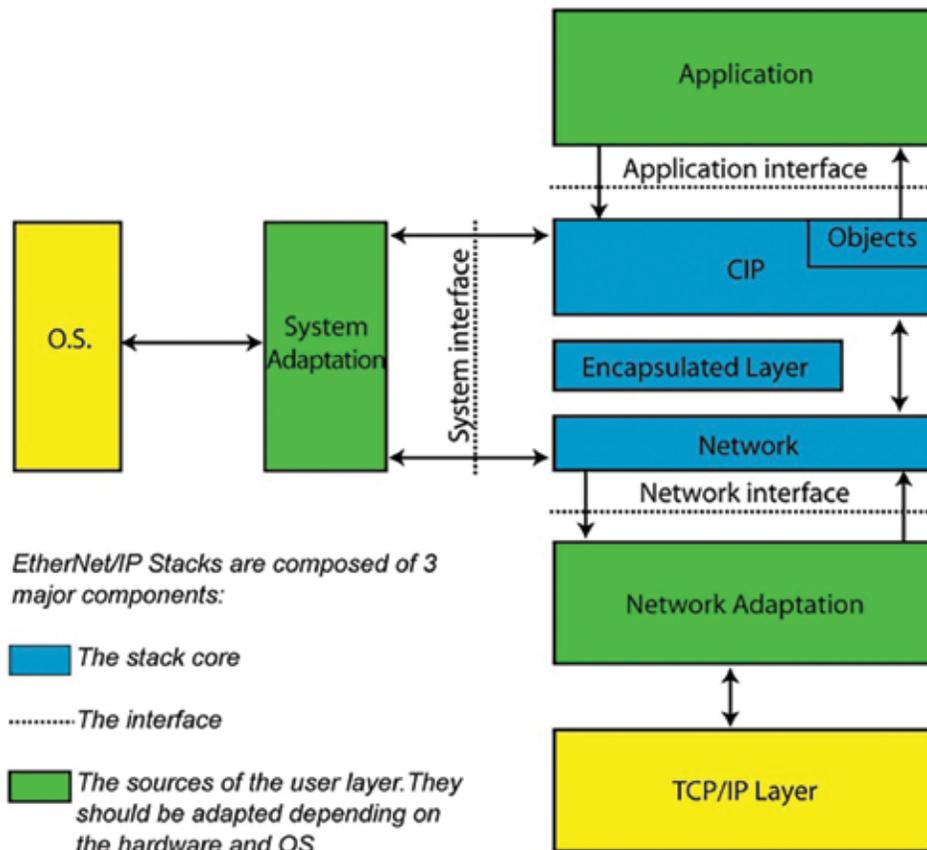
Ordering Information

Engineering No.	Standard Order No.	Description
SDK-EIP-SCA	112106-5003	EtherNet/IP Scanner and Adapter SDK
SDK-EIP-SCA-L	112106-5009	EtherNet/IP Scanner and Adapter License Fee
SDK-EIP-SCA-UDP-1	112106-5004	EtherNet/IP Scanner and Adapter SDK – Update Contract – 1 year
SDK-EIP-SCA-CNF-U	112106-5011	EtherNet/IP Configuration Tool (EIP-CT) for Scanner SDK
SDK-EIP-ADP	112106-0000	EtherNet/IP Adapter SDK
SDK-EIP-ADP-UPD-1	112106-5000	EtherNet/IP Adapter SDK – Update Contract – 1 year
SDK-EIP-ADP-FAM	112106-5050	EtherNet/IP Adapter SDK – Family product line

Support/Training Information

Engineering No.	Standard Order No.	Description
SDK-EIP-EDS	860000-0141	Engineering Support for EtherNet/IP SDK
SDK-EIP-TRN	860000-0143	EtherNet/IP SDK Training

Typical Application



Software Development Kits CIP Safety DeviceNet* Slave and EtherNet/IP Adapter

112115 DeviceNet Software Development Kits

112116 Software Development Kits - License

112117 EtherNet/IP Software Development Kits

Features and Benefits

Faster time-to-market with TÜV approved stack

Meets IEC 61508, SIL3 ensuring international market acceptance

Approved by TUV and tested by ODVA means a high-quality solution for minimal project risk and faster time-to-market

Pre-tested modular ANSI C code is easy to compile using standard compilers; faster time-to-market

Molex engineers can support protocol-integration requests minimizing investment required for in-house resources

Designed for use with other Molex/Brad offerings: Hardware (DN4 network interface cards), Software (DeviceNet or EtherNet/IP software stacks) which results in a complete CIP communication solution

molex[®]



CIP Safety Stack, Molex SST-EIP-ADP-SAF



Specifications

Description

Design for dual channel architecture (1oo2)
ANSI C code for the safety portion of the stack
(Compliant with CIP Safety Specification 2.1)
ANSI C code for black-channel components
(NET_CTRL_IO)
Interface specification for high-integrity and
black-channel environments
Safety integration manual (including safety
measure requirements)
Optionally, modified standard CIP stacks
(software/firmware) for DeviceNet (Slave) or
EtherNet/IP (Adapter)
Optionally, ANSI C code for the platform adaptation
layers (both safety and non-safety)
All documentation required by certification bodies
(TÜV, ODVA)
Support during certification process of vendor's
final product

Conformance

TÜV approved for SIL3 design
ODVA conformance



Typical Products Requiring Safety

Software Development Kits CIP Safety DeviceNet* Slave and EtherNet/IP Adapter



112115 DeviceNet Software Development Kits

112116 Software Development Kits - License

112117 EtherNet/IP Software Development Kits

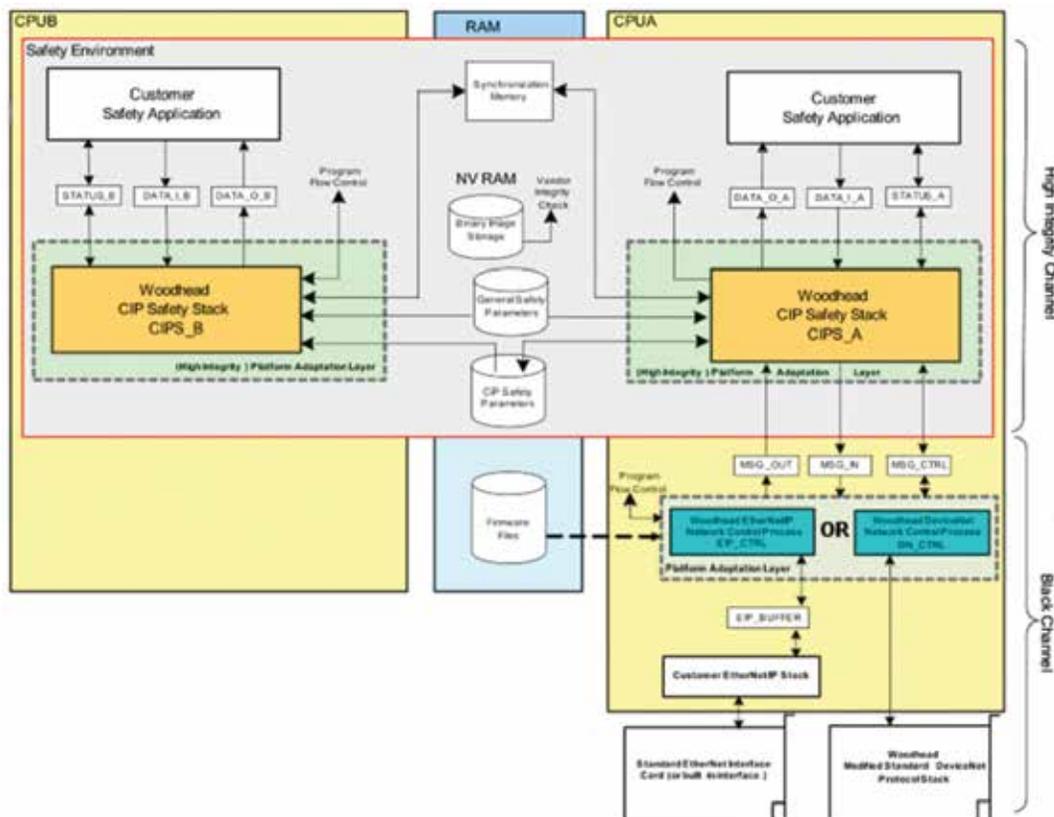
Ordering Information

Engineering No.	Standard Order No.	Network	Description
SDK-DNS-SAF	112115-0001	DeviceNet Slave	CIP Safety Software Development Kit
SDK-DNS-SAF-L	112116-0001		CIP Safety Software Development Kit, Royalty (per device)
SDK-DNS-SAF-UPD-1	860000-0271		CIP Safety Software Development Kit – Update Contract – 1 year
SDK-EIP-ADP-SAF	112117-0001	EtherNet/IP Adapter	CIP Safety Software Development Kit
SDK-EIP-ADP-SAF-L	112116-0002		CIP Safety Software Development Kit, Royalty (per device)
SDK-EIP-ADP-UPD-1	860000-0271		CIP Safety Software Development Kit – Update Contract – 1 year

Support/Training Information

Engineering No.	Standard Order No.	Description
SDK-CIP-SAF-TRN	860000-0291	Engineering Support for CIP Safety SDK

Typical Application



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Direct-Link® Windows Compatible Protocol Drivers 112027 Ethernet TCP/IP



Features and Benefits

Direct-Link® SW1000 provides data acquisition between Windows PC-based applications and industrial devices connected to Ethernet TCP/IP

Economic solution; well suited for embedded and light architecture (laptop, panel PC, MMI)

100% software solution; use PC COM port or integrated Ethernet interface

Wide variety of open and vendor specific industrial protocols



Specifications

Description

Based on Windows TCP/IP socket
All Ethernet protocols can run simultaneously
All Ethernet protocols can run Client and Server modes
Database (32 Kbits, 32 Kwords) for Server mode to exchange data with applications

Included Hardware/Software

Engineering tools:
Engineering console
Test and diagnostic tools
Compatible data servers:
OPC DA v3.0, 2.05 and 1.0a
Wonderware® DAServer
Wonderware IO (SuiteLink/FastDDE)
Includes development libraries:
Visual Studio 6 (C++C), Visual Studio 2005 (VB .NETC#)
OS support:
Windows (32-bit and 64-bit): 10, 8, 7
Windows (64-bit): 2012/2008 server
Software or USB dongle protection

Compatible Protocols

Ethernet TCP/IP:
Altus Alnet II (AL200x, webgate); Client/Server
Alstom SRTP (C80-35, C80-75); Client/Server
Allen-Bradley Logix5000 (ControlLogix and FlexLogix); Client/Server
Fanuc SRTP (C90-30, C90-70); Client/Server
Mitsubishi Electric Melsec (A and Q); Client/Server
Omron FINS (C, CV, CS); Client/Server
Schneider Electric Modbus TCP and UDP; Client/Server
Schneider Electric UNI-TE (Premium and Micro); Client/Server
Siemens Industrial Ethernet (S5, S7, TI); Client/Server

Ordering Information

Engineering No.	Standard Order No.	Description
DRL-ALL-SWF-S	112027-0002	SW1000 software drivers, Full tags, Software key protection
DRL-ALL-SWF-U	112027-0003	SW1000 software drivers, Full tags, USB dongle protection
DRL-ALL-SWL-S	112027-0005	SW1000 software drivers, Full tags, Software key protection
DRL-ALL-SWL-U	112027-0006	SW1000 software drivers, Full tags, USB dongle protection

DeviceNet* Diagnostic Tools

112008 eNetMeter™ DN NetAlytix™

molex®

Quickly identify problems relating to network power, data errors and excessive bandwidth consumption for your DeviceNet network.

eNetMeter DN and NetAlytix

eNetMeter DN is a passive device that continuously monitors a DeviceNet network and sends the information over Ethernet to a PLC or PC monitoring system. The information can be used to proactively respond to out-of-tolerance parameters before network failure occurs. Optionally, data can be accessed through NetAlytix software, an OPC server or a DLL.

Features and Benefits

Continuously monitors a DeviceNet network in a passive state

Provides feedback to an EtherNet/IP™ master or one of three methods to a personal computer (PC) residing on Ethernet:

- NetAlytix™ software
- OPC server
- DLL interface

High-speed sampling of network parameters

- Signals are sampled millions of times per second providing accurate values

Email based notification feature is now supported within the NetAlytix software tool

AOI supports simple integration with Logix based controller allowing easy data transfer for an eNetMeter

Information captured includes:

- Overall network status and measurements
- Individual node status and measurements
- Detailed measurements of power (V+, V-), signal (CANH, CANL) and shield parameters

Warning and fault flags indicate when a value has exceeded a set tolerance (levels are customizable)

NetAlytix software enables quick graphical access to network issues including CAN and power waveform details

- Easily allows comparison of a known good waveform to current readings in order to diagnose problems



eNetMeter, 112008-0008



eNetMeter PTU, 112008-0016

Specifications

Electrical

Input power (Aux. or DeviceNet) 11 to 25V DC, 300 mA (typical at 24 VDC)

Data rate: DeviceNet: 125K, 250K and 500K baud

Ethernet: 10/100 M baud

Mechanical

Diagnostic LEDs and control: Ready, System/Boot, Power & Comm; Reset (recessed)

Physical

Dimensions:

142.00mm (5.60") high;

102.00mm (4.08") deep;

38.00mm (1.53") wide

Connectors:

DeviceNet—5-pole M12 Micro-Change®

Ethernet—RJ-45

Enclosure: IP20

Mounting: DIN rail or panel (screw) mounted

USB: USB 2.0 master, for transfer/storage of configuration parameters

Operating temperature: 0 to 60°C

Storage temperature: -5 to 75°C

Humidity: 5% to 95% non-condensing

Software

NetAlytix full version includes OPC Server and API/DLL

Supported within Windows 8, Server 2012,

Windows 7 (64-bit), Vista, XP

Environmental

Approvals: CE, cULus

RoHS Compliant: Yes

*DeviceNet is a registered trademark of Open DeviceNet Vendor Association

DeviceNet[®] Diagnostic Tools

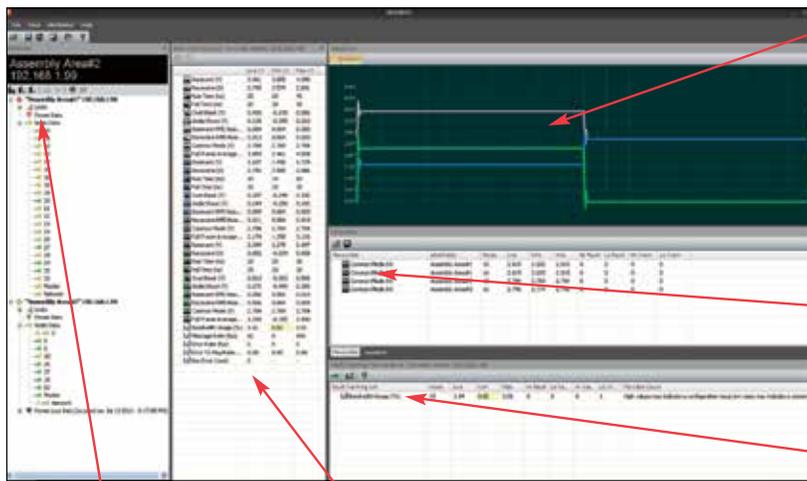
112008 eNetMeter[™] DN NetAlytix[™]



Ordering Information

Engineering No.	Standard Order No.	Description
SST-ENM-DN1	112008-0008	eNetMeter [™] DN diagnostic tool for DeviceNet
SST-NAS-DN1	112008-0011	NetAlytix [™] software for eNetMeter DN (includes full application, DLL/API, OPC Server)
SST-ENM-SKT	112008-0012	Bundle of eNetMeter DN (1120080008) and NetAlytix (1120080011), with a limit of one per partner or end-customer site
SST-ENM-PTU	112008-0016	Bundle of eNetMeter DN (112008-0008) and NetAlytix (112008-0011) in portable test case (IP54) with DC power and external ports for network as well as AC power connections

NetAlytix[™] Software V2



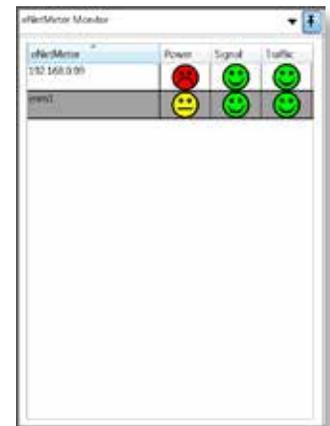
Data Waveform Area (colours match DeviceNet wiring)

Favourites Area (User defines own)

All Warnings & Faults are displayed together

Drop-down hierarchy shows all active eNetMeters and network nodes being monitored

All data shown for network area selected in drop-down hierarchy (left panel)



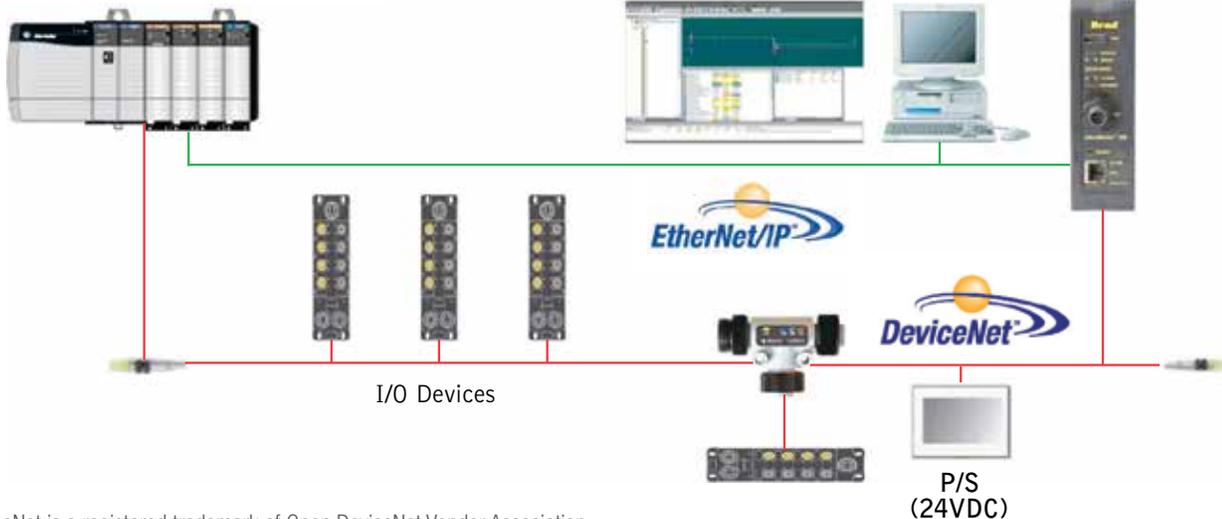
eNetMeter Monitor software - included in NetAlytix software

Typical Application

Typical PLC/PAC (can access eNetMeter[™] DN data with Add-On Instruction

PC running NetAlytix[™] software

eNetMeter[™] DN



*DeviceNet is a registered trademark of Open DeviceNet Vendor Association

DeviceNet* Diagnostic Tools

112008 NetMeter®



Quickly identify problems relating to network power, data errors and excessive bandwidth consumption for your DeviceNet network.

NetMeter

NetMeter cuts troubleshooting time by providing technical details, yet it simplifies and summarizes, allowing both a DeviceNet expert and novice to effectively identify and diagnose network problems. It summarizes DeviceNet bus health by displaying a happy face icon, indicating a healthy network; a sad face, indicating a serious problem; or a neutral face, indicating nominal performance (a good indication to repair things before they actually fail). NetMeter then walks the user through each fault condition and its potential source.

Features and Benefits

Certifies proper network operation:

- Measures 677 key network parameters
- Compares with DeviceNet specification

Battery-powered:

- Save readings for off-line analysis

Accelerates fault troubleshooting:

- AutoSearch finds all bad network parameters
- Full traffic and error analysis by node address
- Power quality, shield voltage, signal quality



NetMeter, 11200-80013



NetMeter Kit, 112008-0014

Specifications

Electrical

Power supply:

- 7V—30V (30 mA at 24V) battery 2x AA alkaline (for offline review of stored measurements)

Mechanical

Baud rates supported:

- 125K, 250K, 500K (auto-detect)
- Analog range (with over/under range indication):
- Bus Power: 0 to 25V
- Bus Signal: -5 to 10V

Physical

Connectors:

- DeviceNet Standard "Sealed Micro"
- Adapter cable included for DeviceNet Standard "Sealed Mini"

Ordering Information

Engineering No.	Standard Order No.	Description
DN-MTR (E)	112008-0013	NetMeter for DeviceNet
DN-MTR-KIT (E)	112008-0014	NetMeter Kit for DeviceNet (includes carrying case, PowerMonitor T and LED Termination Resistor)
DN-MTR-BAG	112008-0003	NetMeter carrying case
DN-MTR-CAL	112008-0004	NetMeter ISO calibration
715-0016	112062-0048	NetMeter User Guide, pocket book, 28 pages

*DeviceNet is a registered trademark of Open DeviceNet Vendor Association

DeviceNet* Mini-Change® Diagnostic Power Monitor® Tees

130035 Male/Female Thick Media



Features and Benefits

- Minimizes maintenance repair and downtime by analyzing bus power quality
- Predicts power faults by logging outside of specification power conditions thereby increasing uptime
- Helps quickly certify new installations



DeviceNet* Brad® Mini-Change® Diagnostic Power Monitor® Tees

Specifications

Reference Information

UL File No.: E152210
CSA File No.: LR6837

Electrical

Power supply: 7–30V DC, < 50mA
Basic analog accuracy: ± 100mV
Minimum “Low” voltage threshold: <12.96V
Nominal “OK” voltage range: 12.96V–24.78V
Maximum “high” voltage threshold: >24.78V
Glitch/Ripple threshold (AV/AT):
Var 75 V/S at 16mS to 640 V/S at 1.0mS
Reset: Magnet at drop “reset” changes mag reed switch state

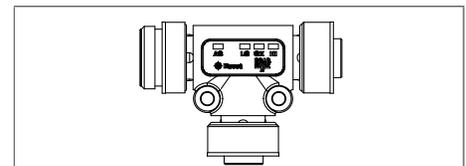
Physical

Connector face: Thermo plastic elastomer
Molded body: Thermo plastic elastomer
Coupling nut: Zinc diecast black e-coat
Operating temperature: -20 to +80°C

Environmental

Protection: IP67
NEMA Rating: NEMA 6

Ordering Information



Diagnostic Type	Left Trunk Gender	Right Trunk Gender	Drop Gender	Engineering No.	Order No.
Standard Bus Drop Tee with Diagnostics	Male 	Female 	Female 	DN3020PM-1	130035-0060
	Female 	Male 	Female 	DN3020PM-3	130035-0061

Diagnostic Tee

Indication	Led Display	Condition
OK	Green	Normal
HI	Red	Overvoltage
LO	Blue	Undervoltage
HI	Flashing Red	Surge within last 24 hours
LO	Flashing Blue	Brown out within last 24 hours
AC	Flashing Yellow	Power glitch within last 24 hours

*DeviceNet is a registered trademark of Open DeviceNet Vendor Association (ODVA)

Get customized insights at: www.molex.com/bradautomation.html