

# SST™-ESR2-CPX Universal Modbus\* Modules



SST™-ESR2-CPX Modules connect Rockwell Automation CompactLogix L2, L3 and L4 controllers to Modbus\* Ethernet and Modbus Serial networks, enabling high-performance, low-cost solutions for industrial automation applications

## Features and Benefits

Modbus* Ethernet and Modbus Serial at the same time	Delivers an extremely flexible design and easy upgrades
Two Modbus Serial ports (software configurable)	Offers more value. Handles any Modbus Serial application
One Modbus Ethernet port (software configurable)	Suitable for any Modbus TCP/UDP application
MicroSD card slot (8 GB MicroSD card included)	Facilitates easy module swap-out
10/100 Mb Ethernet port	Enables fast configuration downloads. Provides backplane or front-module configuration options.
2,500-volt isolation	Ensures high immunity to harsh, noisy networks
MTBF of 181 years	Provides reliable, trouble-free usage



SST-ESR2-CPX-S Standard Version

SST-ESR2-CPX-P Plus Version



## Applications

### Machine Builders

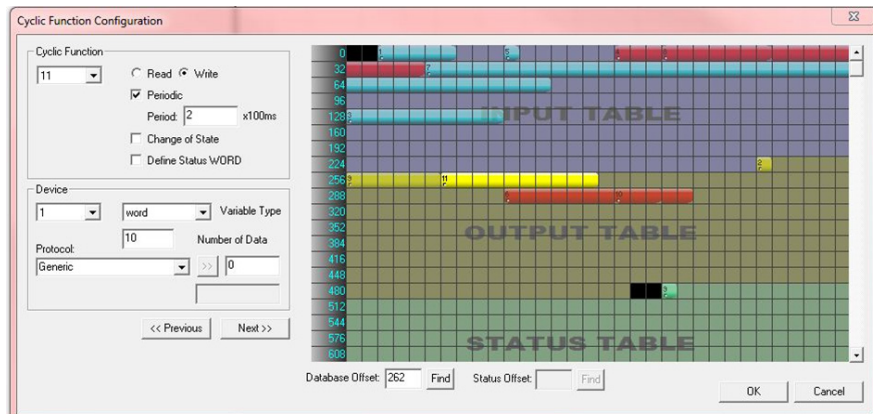
- Complex machines
- Packaging

### Factory Automation

- Material handling

### Process Control

- Water, wastewater treatment
- Food and beverage industry
- Oil and gas
- Pharmaceutical



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

\*Modbus is a registered trademark Schneider Automation Inc.

# SST™-ESR2-CPX Universal Modbus\* Modules



## Specifications

### Description

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  
 1x Ethernet, 10/100 Mbps, RJ45 (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  
 Maximum Distance Rating: 4 slots

### Included Hardware/Software

One, SST-ESR2-CPX-(S/P) Universal Modbus Module  
 One, 8 GB MicroSD card  
 One, product CD (engineering tools, configuration console)  
 Two, 45cm, 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

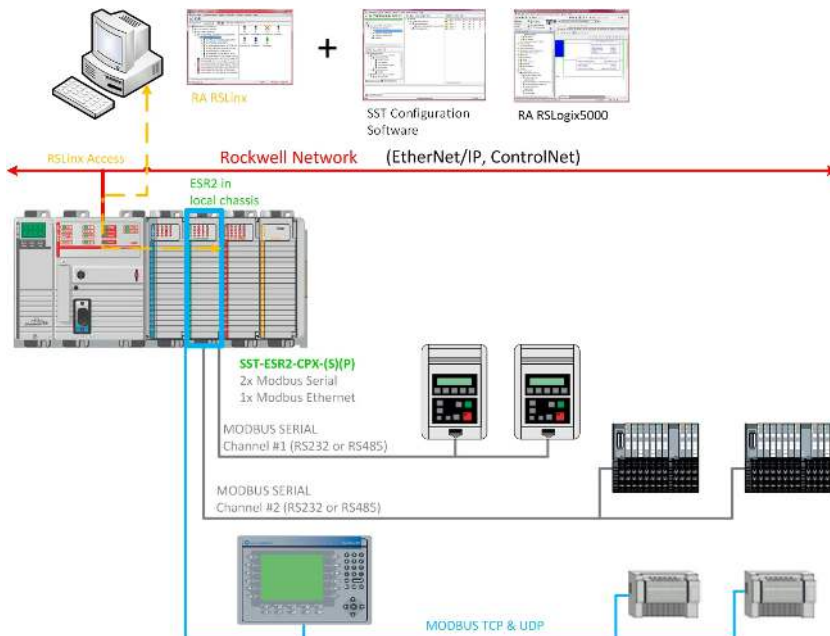
32,000-word database  
 256 Modbus commands/port  
 Up to 127 serial devices per port and 128 Ethernet devices  
 OEM, machine builders, large networks  
 SCADA applications

## Ordering Information

Order No.	Product Name	Module
<a href="#">112073-0005</a>	SST-ESR2-CPX-P	SST™ Universal Modbus Module for CompactLogix, Plus Version

Order No.	Product Name	Module
<a href="#">112073-0006</a>	SST-ESR2-CPX-S	SST™ Universal Modbus Module for CompactLogix, Standard Version

## Universal MODBUS\* Module, SST™-ESR2-CPX Networking Capabilities Diagram



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†CompactLogix is a registered trademark of Rockwell Automation, Inc.

[www.molex.com/link/sstcommunicationmodules.html](http://www.molex.com/link/sstcommunicationmodules.html)