



## Maximise network flexibility with SST™ Communication Modules for rapid connection of Rockwell SLC 500 systems to PROFIBUS networks

The SST™ Communication Module connects Rockwell SLC 500 PLCs as a Master or Slave to scan or emulate PROFIBUS DP I/O. With the user-defined data space of 2064 bytes Input and 2064 bytes Output, the SST™ Profibus module provides a cost-efficient solution to connect SLC CPUs with large PROFIBUS networks.

A 9-pin serial port included on the scanner allows for firmware upgrades in the field and the upload of I/O configurations.

The SLC's processor logic scan and the PROFIBUS I/O scan are independent of each other. The SLC processor reads the scanner input data during its input scan and writes the output data during its output scan. The scanner reads input data from the Slaves and writes output data to the Slaves independent of what the SLC is doing. Slave status, diagnostic status information on all Slaves, network diagnostic counters and DP Master diagnostic counters are maintained by the scanner. The scanner does not require the set-up of a G-file in the SLC. For more information visit: [www.molex.com/link/sstcommunicationmodules.html](http://www.molex.com/link/sstcommunicationmodules.html)

### Features and Benefits

100% backward compatible with previous generation (SST-PFB-SLC)

Manages DP-V1 Services including SLC ladder logic samples

Doubling of M0 and M1 data area up to 1000 words

PROFIBUS DP Master Configuration Software

Supports all PROFIBUS baud rates

Simultaneous operation of PROFIBUS DP Master and Slave

Flash memory for storage of DP Master I/O configuration

Fast, easy set up into SLC backplane, PROFIBUS I/O data is automatically mapped into the SLC's processor's I, O files and into MO and MI files residing on PB3-SLC

Supports exported configuration files from the SST DP configuration software and Siemens COM PROFIBUS

Multiple SST-PB3-SLC modules can be used in one SLC rack

### Protocols

PROFIBUS DP-V0 Master Class 1&2

PROFIBUS DP-V1 Master Class 1&2

PROFIBUS DP-V0 Slave

### Applications

#### Factory automation and process control:

- Consumer and packaged goods
- Conveyor and handling systems
- Food and Beverage
- Automotive
- Wastewater treatment
- Oil and Gas
- Pharmaceutical



Food and Beverage



Conveyor and handling systems

## Brad® SST™ Communication Module for Rockwell SLC 500

112016 PROFIBUS-DP  
Master and Slave



## Specifications

### NETWORK SPECIFICATIONS

#### Compatible Protocols:

PROFIBUS DP-V0 Master, class 1&2  
 PROFIBUS DP-V1 Master, class 1&2  
 PROFIBUS DP-V0 Slave (up to 122 words input data & 122 words output data)

**LAN Controller:** Siemens ASPC2

**Slaves Supported:** Maximum of 125

**I/O per Slave:** Maximum of 244 bytes in/out

#### I/O Mapping (for SLC™):

I and O files: 32 words in/out  
 M1 and M0 files: 1000 words in/out  
 Slave data is mapped into I, O, M0, M1 files in the SLC. Mapping depends on addresses assigned in the configuration created

**Baud Rate:** 9.6 Kbps up to 12 Mbps

**Connector:** DB9 female, Galvanic insulation 1000V

### HARDWARE SPECIFICATIONS

**Bus Interface:** Rockwell SLC™ 5/03 or higher

**Processors:** Protocol processor: Freescale Coldfire MCF5272  
 Backplane processor: Altera Cyclone II

**Memory:** 2 MB of local Coldfire SDRAM  
 32 MB of local NIOS DDR  
 512 KB of onboard shared memory  
 512 KB of sectored flash memory for storage of program and configuration data

**Diagnostics:** Two LEDs indicate: Health of the PROFIBUS network (COMM)  
 Communication status with PROFIBUS slaves (SYS)

**Backplane Current Consumption:** 750mA @ 5V from a supply delivering Separated Extra Low Voltage (SELV)

**Operating Temp:** 0 up to +50°C

**Storage Temp:** -40 up to +85°C

**Relative Humidity:** 5 to 95% non-condensing

**Pollution degree:** Degree 1 - no pollution, or only non-conductive or non-corrosive pollution

#### Conformance:

RoHS compliant  
 CE

## Brad® SST™ Communication Module for Rockwell SLC 500

### DIAGNOSTIC & SOFTWARE TOOLS

#### Configuration Software

Browse a DP network for Slave devices to include in DP Master configuration using the DPView component

#### Scanner Software

Maintains Slave status, diagnostic status information on all slaves, network diagnostic counters, and DP Master diagnostic counters

Maintains network and I/O module status information including:

- DP Master Slave status table
- Network diagnostic counters
- DP Master diagnostic counters

#### Diagnostic LEDs

COMM and SYS LEDs provide immediate notification of network and system errors

## Ordering Information

Part Number	Engineering Number	Protocol	PLC Supported
112016-0022	SST-PB3-SLC	PROFIBUS-DP	Rockwell SLC 500