

SST™ PB3 Remote communication is a unique and powerful solution to connect PROFIBUS-DP connectivity for Rockwell Automation Logix® controllers.

Leader for 15 years in connectivity for Rockwell Automation controllers, SST™ communication modules are the perfect choice for a wide range of industrial applications including factory automation, process control and complex machines.

The SST™ PB3 Remote Module for PROFIBUS is a “Linking device” with on-board Profibus and Ethernet communication ports that provide a fast and easy solution for adding Profibus Master and Slave connectivity to any Rockwell Logix controllers (CompactLogix, ControlLogix, SoftLogix, and GuardLogix). This unique remote concept offers the same features as an in-chassis module but with extra functionalities and services due to its flexible remote design. For example, the PB3 Remote Module reduces the cost of expensive Profibus cabling when used in environments where controller and field devices are a long distant apart.

The PB3 Remote Module is fully integrated into Rockwell Automation’s Integrated Architecture through features such as the Add-on-Instructions to save integration time; direct access from RSLogix 5000 to I/O data without writing any ladder logic; and complete access to Profibus DP-V1 services and device diagnostics.

The PB3 Remote Module software includes a Windows engineering console with Rockwell Automation look-and-feel for Profibus master and slave configuration that exports Profibus process variables in RSLogix 5000 (.L5X) format, performs automatic DP slave detection and displays on-line diagnostics. A CommDTM driver is included as standard to enable Frame DTM applications like PACTware™ and Fieldcare™ for asset management.

## FEATURES AND BENEFITS

- **Save Money!**  
Reduce expensive Profibus cabling; The PB3 module can be installed close to Profibus field devices
- **Save Time!**  
No ladder logic to write for configuration and data transfer between PB3 Remote module and Logix processor
- **Unique Remote Concept!**
  - No Rack limitation of the Rockwell Automation controller backplane
  - Flexible installation design; the PB3 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
- Fully integrated into Rockwell Architecture
  - Add-On-Instructions (.L5X); Import Profibus I/O process data into RSLogix 5000 tags; allow the user to use process variable names instead of arrays of Bit, Byte, Word
  - EDS file for RSLinx
- Implement redundancy scenario
  - Two Logix controllers connected to a single PB3 Remote Module; for implementing PLC redundancy
  - 1 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

## APPLICATIONS

- Control and command of Profibus slave devices to perform tasks with strong critical time constraints
- Collect Profibus data for Supervision/Scada to monitor plant
- Bridge Rockwell networks to Siemens environment using PROFIBUS Master&Slave modes simultaneously



## SST-PB3-REM

Remote Backplane Communication Module for Rockwell Automation Controllers



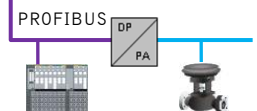
IEC Class 61131-2 Class 1 Div 2



For CompactLogix...



EtherNet/IP



# SPECIFICATIONS

## Product Information

### Product Package

#### Engineering Tools

- 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
- CommDTM driver for FDT Frame tools
  - PROFIBUS Master DP-V1 configuration
  - Device diagnostics
  - Device detection

#### Supported OS:

- Windows (32-bit & 64-bit): Seven, Vista, 2008 Server, 2003 Server, XP
- VMware 7.0, VMware player 3.1

### Technical Data

#### Memory

- 4 Mb of onboard memory
- 1 Mb of flash memory (user configuration and firmware upgrade)

#### Diagnostic LEDs

- 4x Module status
  - System Fault
  - Profibus State
  - Bus Fault
  - PLC RUN/PROG
- 3x Ethernet: IP Status, Link (port 1, port 2)

#### I/O Mapping

- Maximum of 1984 input bytes
- Maximum of 1968 output bytes
- 250 words status

#### Shielded housing

#### DIN Rail mounted

#### Compact Dimensions:

18 x 7 x 16 cm / (7 x 2.75 x 6.30 inches)

#### Conformal coated version

#### Operating Temperature:

0°C to +65°C  
 -25°C to +70°C (Coated version)  
 Storage Temperature: -40°C to +85°C

#### Power Supply: 24V

#### Current Consumption:

850 mA @ 5V or 1.75 mA @ 24V

#### MTBF: 81.2 years

### Communication Ports

- 1x PROFIBUS port
  - Sub-D, 9-pin, female
  - PROFIBUS RS485 with galvanic insulation (500 V)
  - 9.6 Kbps to 12 Mbps
- 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

### Protocols

#### PROFIBUS

- Master
  - PROFIBUS DP-V0 Class-1 & Class-2
  - PROFIBUS DP-V1 Class-1 & Class-2
- Slave
  - PROFIBUS DP-V0
- Supports Master, simultaneous Master&Slave, and Slave only modes

#### EtherNet/IP

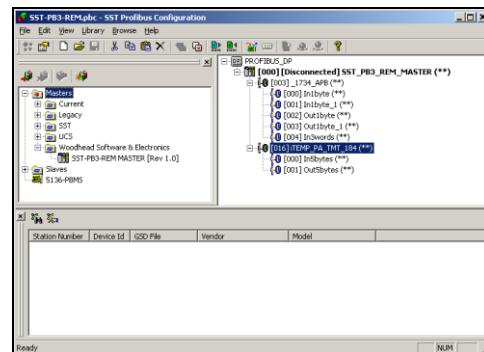
- Explicit Messaging: I/O, DP diagnostic, DP Slave parameters, DP slave enable/disable, DP SetSlaveAddress, DP-V1 Read/Write, etc

### Conformances

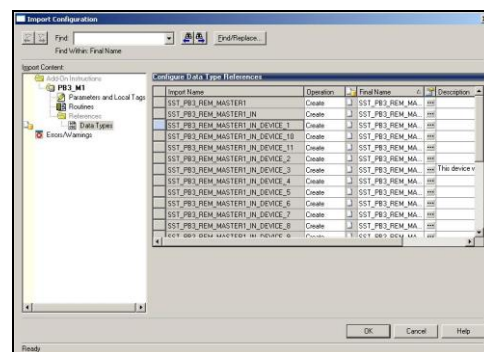
- CE, RoHS, UL Listed, IEC 61131-2
- Class 1 / Div 2 - Groups A,B,C & D for hazardous (Classified) locations
- RINA Marine Certificate
- Rockwell Encompass Global programme

# SST-PB3-REM

## Remote Backplane Communication Module for Rockwell Automation Logix Controllers



- Profibus Engineering Console -



- Add-On-Instructions -

IN_PB3	(...)	SST_PB3_REM_CI
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_APB	(...)	Device_3_Input
IN_PB3.AB_1734_APB.IB8_0	2#0000_0001	BOOL
IN_PB3.AB_1734_APB.IB8_1	2#0000_0000	BOOL
IN_PB3.AB_1734_APB.IT2_ThermoCouple_1	48	INT
IN_PB3.AB_1734_APB.IT2_ThermoCouple_2	0	INT
IN_PB3.AB_1734_APB.IT2_Status	23	INT
OUT_PB3	(...)	SST_PB3_REM_CI
STS_PB3	(...)	SST_PB3_REM_S...

- Direct Access in RSLogix to Profibus Tags -

## ORDERING INFORMATION

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

Also available, In-Chassis PROFIBUS modules for Rockwell ControlLogix

112016-0018	SST-PB3-CLX-RLL	SST™ PROFIBUS Scanner for AB ControlLogix, includes RLL
112016-0023	SST-PB3-CLX-RLL-CC(*)	SST™ PROFIBUS Scanner for AB ControlLogix, coated version, includes RLL
112016-0019	SST-PB3-CLX-DTM	SST™ PROFIBUS Scanner for AB ControlLogix, includes RLL and CommDTM driver license

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