

The SST™ PB3 Remote Module is a unique and powerful solution to provide PROFIBUS connectivity for Rockwell Automation Logix controllers; Rockwell users in factory-automation and process-control applications can benefit from flexible installation designs, reduced commissioning time and lower cabling costs

The SST™ PB3 Remote Module for PROFIBUS is a linking device with on-board PROFIBUS and Ethernet communication ports that provides a fast and easy solution for adding PROFIBUS Master and Slave connectivity to any Rockwell Logix controllers. This unique remote module concept offers the same features of an in-chassis module but can reduce expensive PROFIBUS cabling costs when used in environments where controller and field devices are away from each other, sometimes needing to be long distances apart.

The PB3 module fits both factory-automation and process-control applications. Fully integrated into Rockwell architecture through user-friendly features such as Add-on-Instructions, integrated Ethernet switch and direct access from RSLogix 5000 to I/O data without the need to write any ladder logic, the module also has complete access to PROFIBUS DP-V1 services and device diagnostics.

The PB3 Remote Module software for PC includes an engineering console with Rockwell look-and-feel. The console can configure PROFIBUS Master and Slaves, export PROFIBUS process variables in RSLogix 5000 (L5X) format, perform automatic DP Slaves detection and display on-line diagnostics. A CommDTM driver is included in the software package to enable FrameDTM applications, including AssetCentre, PACtware and Fieldcare for asset management.

PB3 Remote Module hardware and software are 100% designed, developed and produced in Molex facilities. For additional information visit: www.molex.com/link/sstpb3remote.html

SST™ PB3 Remote Module For PROFIBUS

112016 Remote PLC Communication Modules



FEATURES AND BENEFITS

- **Save Money**
 - Reduce expensive Profibus cabling; the PB3 Remote 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 Rockwell CompactLogix 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 coated version improves and extends the working life and ensures security and reliability of performance in extreme or humid conditions**

MARKETS AND APPLICATIONS

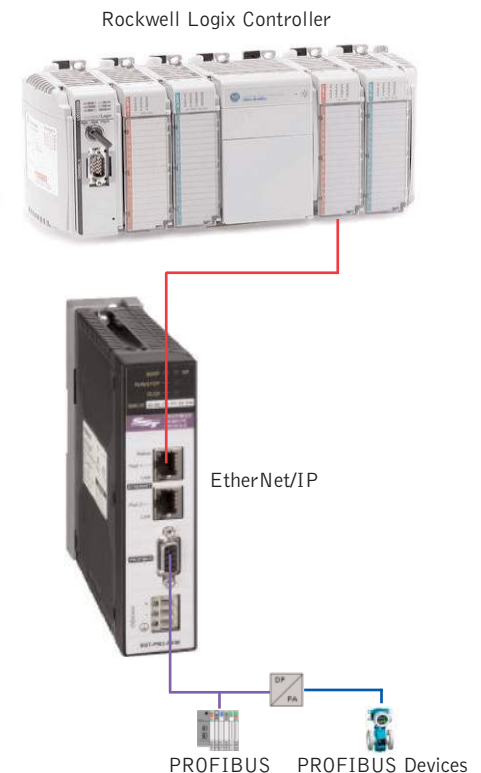
- **Factory automation**
 - Automotive
 - Material handling
- **Process control**
 - Wastewater treatment
 - Agro food industry
 - Oil & Gas
 - Pharmaceutical
- **Complex machine builder**



Oil Rig



Food Factory Production Line



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): 7, 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 Size (using 4x CIP Modules)

- 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

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):
DCHP (default), DHCP with name ("SST_PB3_XXX"), Factory Fixed, Factory Selectable, Flash Saved (via 0xF5/0xF6 EIP objects)
- Manages duplicate IP addressing

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112016 Remote PLC
Communication Modules

Protocols

PROFIBUS

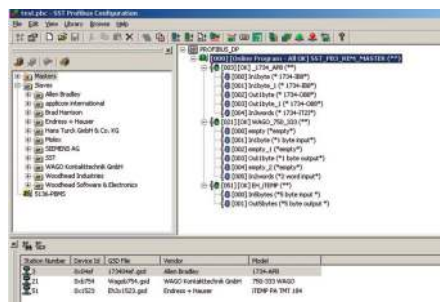
- Master
 - PROFIBUS DP-V0 Class-1 & Class-2
 - PROFIBUS DP-V1 Class-1 & Class-2
- Slave
 - PROFIBUS DP-V0
- Supports Master, simultaneous Master&Slave, and Slave only modes

EtherNet/IP

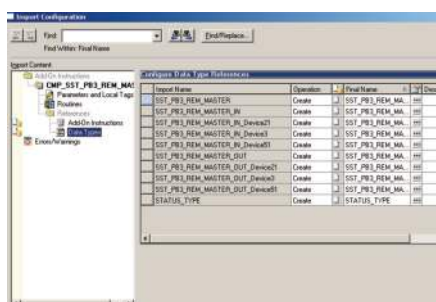
- Explicit Messaging: I/O, DP diagnostic, DP Slave parameters, DP slave enable/disable, DP SetSlaveAddress, DP-V1 Read/Write, etc

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



PROFIBUS Engineering Console



Add-On-Instructions

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_In
IN_PB3.TEMP_PA_TMT.Temperature	28.34	REAL
IN_PB3.TEMP_PA_TMT.Status	80	SINT
IN_PB3.AB_1734_APB	{...}	Device_3_Inp
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.IT21_ThermoCouple_1	48	INT
IN_PB3.AB_1734_APB.IT21_ThermoCouple_2	0	INT
IN_PB3.AB_1734_APB.IT21_Status	23	INT
OUT_PB3	{...}	SST_PB3_RE
STS_PB3	{...}	SST_PB3_RE

Direct Access in RSLogix to PROFIBUS Tags

ORDERING INFORMATION

Order No.	Engineering No.	Conformal Coated? (*)	Operating Temperature Range	Protocol	Description	MOQ
112016-5000	SST-PB3-REM	No	0 to +65°C	PROFIBUS	Remote Module with DTM driver, DIN Rail, 24V	1pc
112016-5001	SST-PB3-REM-CC	Yes	-25 to +70°C			

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