

QuickPanel* View Communication Module Hardware User's Guide

*PROFIBUS Slave Adapter
IC754PBSS01*

April 2010
GFK-2291B

Warnings, Cautions, and Notes as Used in this Publication

Warning

Warning notices are used in this publication to emphasize that hazardous voltages, currents, temperatures, or other conditions that could cause personal injury exist in this equipment or may be associated with its use.

In situations where inattention could cause either personal injury or damage to equipment, a Warning notice is used.

Caution

Caution notices are used where equipment might be damaged if care is not taken.

Note: Notes merely call attention to information that is especially significant to understanding and operating the equipment.

This document is based on information available at the time of its publication. While efforts have been made to be accurate, the information contained herein does not purport to cover all details or variations in hardware or software, nor to provide for every possible contingency in connection with installation, operation, or maintenance. Features may be described herein which are not present in all hardware and software systems. GE Intelligent Platforms assumes no obligation of notice to holders of this document with respect to changes subsequently made.

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Primary language of support	English

Contact Information

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The PROFIBUS Slave has been tested and found to meet or exceed the requirements of U.S. (47 CFR 15), Canadian (ICES-003), Australian (AS/NZS 3548) and European (EN55011) regulations for Class A digital devices when installed in accordance with guidelines noted in this manual.

Note: This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Note: This Class A digital apparatus complies with Canadian ICES-003.

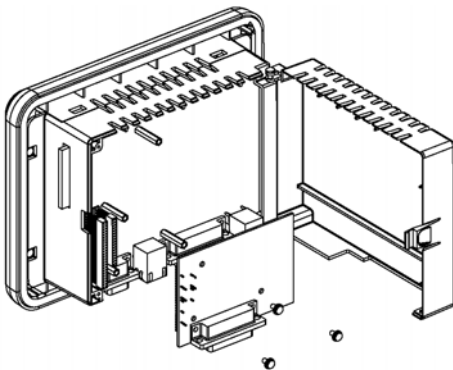
The following statements are required to appear for Class 1, Div 2 Hazardous Locations.

1. EQUIPMENT LABELED WITH REFERENCE TO CLASS 1, GROUPS A, B, C, AND D, DIV 2 HAZARDOUS LOCATIONS IS SUITABLE FOR USE IN CLASS 1, DIVISION 2, GROUPS A, B, C, D, OR NON-HAZARDOUS LOCATIONS ONLY.
2. WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS 1, DIVISION 2.
3. WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NONHAZARDOUS.

The communication card meets ATEX Group II Category 3 when installed properly in a QuickPanel View or Control OI.

Installing a Communication Module

Warning: Always use anti-static precautions when accessing the mating connector or the interior of the unit.



1. Disconnect the DC input power terminal block connector from your QuickPanel View unit before connecting the Communication Module to the unit.

Note: The 6" model QuickPanel is shown. Other models are similar.

2. Open the back cover.
3. Attach the Communication Module to the unit by plugging the module into the mating connectors on the back of the unit.

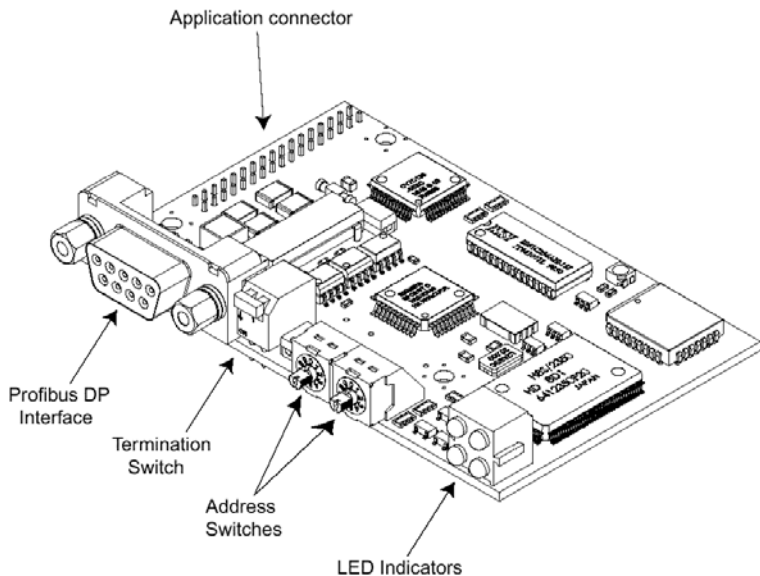
Caution: Be sure to properly align pins in the dual connector upon insertion to avoid damage to the card or the QuickPanel View unit.

4. Install the three screws to secure the card in the unit.
5. Close the cover.

Note: To use this card with QuickPanel View, CIMPLICITY Machine Edition software is required. The Slave card is supported only in QuickPanel View.

Overview

The PROFIBUS module is shown below.



PROFIBUS-DP Connector

9-Pin in D-sub (female)	Signal	Description
1	NC	-
2	-	-
3	B-Line	Positive RxD/TxD
4	RTS	Request to send
5	GND Bus	Isolated ground
6	+5V Bus	Isolated +5V
7	-	-
8	A-Line	Negative RxD/TxD
9	-	-
Case	Shield	-

Node Address Switches

Before configuring the AnyBus-S PROFIBUS-DP module the node address has to be set. This is done with two rotary switches on the module, this enables address settings from 1-99 in decimal format. Looking at the front of the module, the leftmost switch is used for the ten setting and the rightmost switch is used for the setting of the integers.

Example:

Address = (Left Switch Setting x 10) + (Right Switch Setting x 1)

Note: Another way of setting the node address is via the mailbox telegram FB_SET_NODE_ADDRESS.

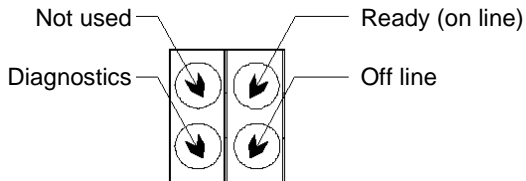
The node address range is then extended to 1-125.

See chapter that describes FB_SET_NODE_ADDRESS telegram.

Note: The node address cannot be changed during operation.

LEDs

Four LEDs are located on the PROFIBUS Slave module. These LEDs indicate the module status and the fieldbus status.



<i>LED.</i>	<i>Indication</i>	<i>Description</i>
Not used	-	Not Used
Ready	Green	Indicates that the module is On-Line on the fieldbus. Green - Module is On-Line and data exchange is possible. Turned Off - Module is not On-Line
Off line	Red	Indicates that the module is Off-Line on the fieldbus. Red - Module is Off-Line and no data exchange is possible. Turned Off - Module is not Off-Line

LED.	Indication	Description
Diagnostics	Red	<p>Fieldbus Diagnostics</p> <p>Indicates certain faults on the Fieldbus side.</p> <p>Flashing Red 1 Hz - Error in configuration: IN and/or OUT length set during initialization of the module is not equal to the length set during configuration of the network.</p> <p>Flashing Red 2 Hz - Error in User Parameter data: The length/contents of the User Parameter data set during initialization of the module is not equal to the length/contents set during configuration of the network.</p> <p>Flashing Red 4 Hz - Error in initialization of the PROFIBUS communication ASIC.</p> <p>Turned Off - No diagnostics present</p>

Specifications**Network:**

Protocol	PROFIBUS Specification version: Vol. 1: 2.0, Vol. 2: 2.0 Configuration test version: A-12
Data Rate	All baud rates from 9600 bps to 12 Mbps with auto baud rate detection
Termination	Termination required at the end of the net- work cable.

Environmental:

Storage Temperature	-25° to 85°C
Operating Temperature	0° to 60°C
Operating Humidity	5 to 90% (non-condensing)