

QuickPanel™ Control Communication Module Quick Installation Guide

***PROFIBUS Master Adapter
IC754PBSM01***

May 2004

GFK-2271A

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 Fanuc Automation assumes no obligation of notice to holders of this document with respect to changes subsequently made.

GE Fanuc Automation makes no representation or warranty, expressed, implied, or statutory with respect to, and assumes no responsibility for the accuracy, completeness, sufficiency, or usefulness of the information contained herein. No warranties of merchantability or fitness for purpose shall apply.

QuickPanel is a trademark of GE Fanuc Automation. Any other trademarks referenced herein are used solely for purposes of identifying compatibility with the products of GE Fanuc Automation.

The PROFIBUS Master 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.

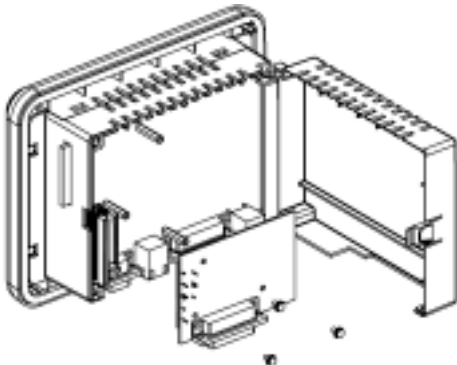
1. EQUIPMENT LABELED WITH REFERENCE TO CLASS 1, GROUPS A, B, C, AND D, DIV 2 HAZARDOUS LOCATIONS IS SUITABLE FOR USE IN CLASS 1, DIVISION 2, GROUPS A, B, C, D, OR NON-HAZARDOUS LOCATIONS ONLY.
2. WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS 1, DIVISION 2.
3. 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.

Installation

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

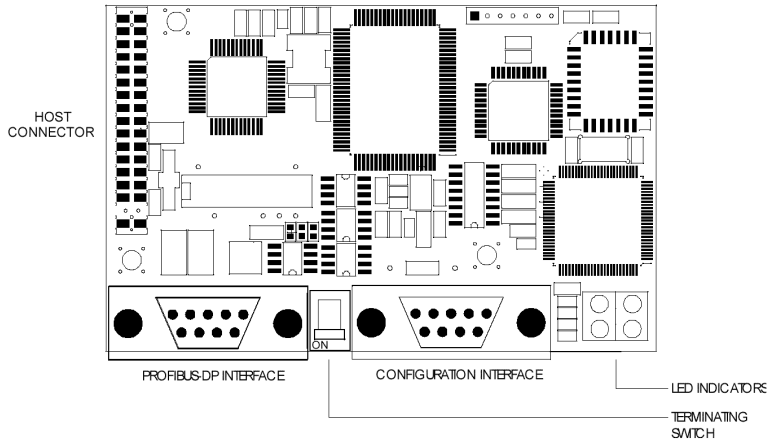
Caution: Be sure to properly align pins in the dual connector upon insertion to avoid damage to the card or the QuickPanel Control.

Note: To use this card with QuickPanel Control, CIMPLICITY Machine Edition software, version 4.0, Service Pack 1 or later is required.

Features

Overview

The PROFIBUS module is shown below.



Configuration Connector

The configuration port is a non-isolated RS-232 communication port.

9-Pin in D-sub (male)	I/O	Signal	Description
1	-	-	-
2	Input	RXD	Receive Data
3	Output	TXD	Transmit Data
4	Output	DTR	Data Terminal Ready
5	Ref.	GND	Ground
6	-	-	-
7	Output	RTS	Request To Send
8	Input	CTS	Clear To Send
9	-	-	-
Case	-	PE	Protective Earth

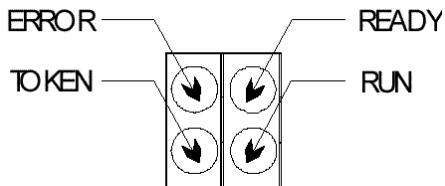
Features

PROFIBUS-DP Connector

9-Pin in D-sub (female)	Signal
1	Shield
2	-
3	B-Line
4	RTS (TTL)
5	GND Bus
6	+5V Bus
7	-
8	A-Line
9	-
Case	Shield

LEDs

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



Features

Ready

Color: green.

LED Status	Description
ON	Module OK 'Device Error' = 0
Cyclic flash (approx. 1 Hz.; 50% ON, 50% OFF)	Flash only contain boot loader, no valid firmware stored in flash 'Device Error' <> 0
Cyclic flash (approx. 4 Hz.; 50% ON, 50% OFF)	Hardware or system error or firmware/configuration database download in progress 'Device Error' <> 0
OFF	Hardware error

Run

Color: green.

<i>LED Status</i>	<i>Description</i>
Cyclic flash (approx. 4 Hz.; 50% ON, 50% OFF)	Ready for communication
Acyclic flash*	Configuration error or fatal error
On	Communication running

Error

Color: red. This LED is lit if a PROFIBUS bus error has occurred (e.g. a remote node was not found).

<i>LED Status</i>	<i>Description</i>
Off	No Errors detected
On	Error on communication line

Features

Token

Color: green

<i>LED Status</i>	<i>Description</i>
Off	
On	PROFIBUS Master owns Token

Specifications**Network:**

Protocol	PROFIBUS Class 1 Master according to EN 50170
Data Rate	All baud rates from 9600 bps to 12 Mbps with auto baud rate detection
Termination	Termination required at the end of the network cable.

Environmental:

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