

GE Fanuc Automation
Operator Interface Products

QuickPanel™ View & QuickPanel Control

PCMCIA Adapter
IC754PCMCIA001-A
Hardware User's Guide, GFK-2368

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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.

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The PCMCIA Adapter 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 (EN55022) regulations for Class A digital devices when installed in accordance with guidelines noted in this manual.

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

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 including interference 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: Any changes or modifications to the product or installation that are not expressly approved by GE Fanuc Automation could void the user's authority to operate the equipment under FCC rules.

UL Hazardous Locations Information

The following information is for products bearing the UL marking for Hazardous Locations:

WARNING - EXPLOSION HAZARD - SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIV. 2.

WARNING - EXPLOSION HAZARD - WHEN IN HAZARDOUS LOCATIONS, TURN OFF POWER BEFORE REPLACING OR WIRING MODULES.

WARNING - EXPLOSION HAZARD - DO NOT CONNECT OR DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NONHAZARDOUS.

Power, input and output (I/O) wiring must be in accordance with Class I, Div. 2 wiring methods, Article 501 4(b) of the National Electrical Code, NFPA 70 and in accordance with the authority having jurisdiction.

For additional agency qualifications, see page 12.

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Introduction

The PCMCIA Adapter Interface Card can be installed in a GE Fanuc QuickPanel View or QuickPanel Control operator interface to provide support for a single Type I, Type II, or Type III PCMCIA card.

The Adapter can be used with GE Fanuc Intermediate and Loaded QuickPanel View & Control products. The Intermediate and Loaded QuickPanel models have a built-in expansion connector.

QuickPanel View and QuickPanel Control operating system version 1.04.0047 (and later) includes support for the PCMCIA adapter card. Operating system versions 1.03.046 (and earlier) must load an updated driver in order to use the PCMCIA adapter. The updated driver and installation instructions are available at the GE Fanuc support website <http://globalcare.gefanuc.com/>.

PCMCIA Card Compatibility

The Adapter supports the following types of PCMCIA cards:

- I/O mapped only cards
- Memory mapped cards that do not require more than 60KB of address space.

PCMCIA memory cards used with the PCMCIA Adapter do not require additional software. However, other types of 3rd party cards may require card specific drivers to be loaded into the QuickPanel Control or QuickPanel View. Such required drivers are supplied by the manufacturers of the PCMCIA card and must be suitable for use with Windows CE.NET v4.1 and the ARM processor type.

The address mapping or device naming for I/O cards inserted into the PCMCIA adapter is determined by the manufacturer of the I/O card and the device driver supplied for the card. For example, a PCMCIA four-port serial expansion card may have the four connectors labeled "1", "2", "3" and "4". However, on a QuickPanel with a single serial port (COM1), "1" may be mapped to COM5 on the QuickPanel by the card driver.

Device naming for memory cards inserted into the PCMCIA adapter is determined by the Windows operating system and is insertion-order dependant. For example, upon inserting a Compact Flash memory card then inserting a PCMCIA memory card, the Compact Flash card would be named "PCFlash Storage" and the PCMCIA memory card would be named "PCFlash Storage2". If the order of insertion is reversed, the names will be reversed.

Note: PCMCIA cards inserted into the adapter may affect overall system performance of the QuickPanel due to the electrical requirements of PCMCIA cards and their slower speed compared to the QuickPanel's system bus. Computational intensive applications, continuous 100Mbit Ethernet traffic, or high COMM data rates *may* be adversely affected. The extent of any effect is application dependant and users of the PCMCIA card are responsible for verifying the suitability of the card in the QuickPanel with their specific applications.

The PCMCIA adapter supports 5V and 3.3V PCMCIA cards. A PCMCIA Memory or I/O card can consume up to 3 watts. PCMCIA cards can be installed and removed with power applied.

Examples of Compatible PCMCIA Card Types

- Four-port serial cards
- Modem
- ATA (Advanced Technology Attachment) flash cards
- LAN cards etc.
- 3.3V/5V VCC to PC-Card

The following types of cards are *not* supported:

- SRAM cards above 64KB.
- Linear addressable flash ROM cards above 64KB
- Old flash ROM cards that require 12V VPP.
- DMA memory cards.

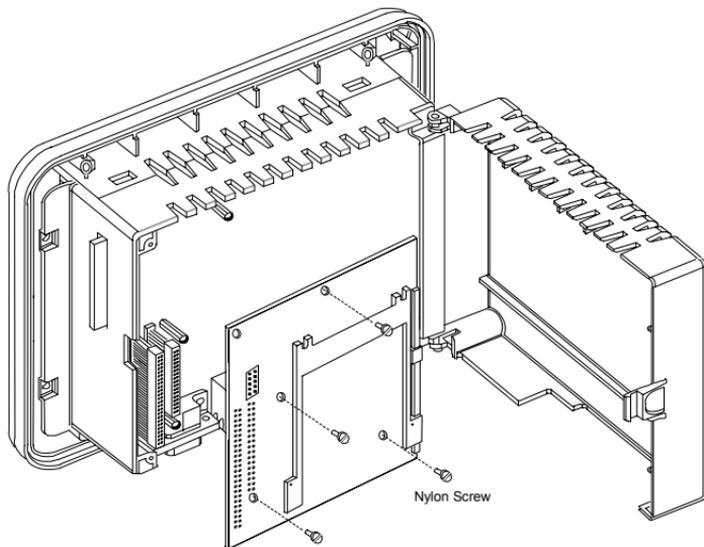
For a current list of 3rd party cards that have been tested in the QuickPanel View/Control and found to be compatible, refer to QuickPanel View, QuickPanel Control, Display-PAC XScale V1.x Third Party Compatibility, which can be found on

<http://globalcare.gefanuc.com>.

Installing the PCMCIA Adapter

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

Remove power from the QuickPanel before opening the back cover.



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

Note: The Adapter consumes 1.041 watts at 24VDC and supports PCMCIA cards with maximum power consumption of 3 watts. You should verify that the 24VDC power supply for the QuickPanel product can provide an additional 5 watts of power to support the power consumption of the Adapter and PCMCIA card.

1. Disconnect the DC input power terminal block connector from your QuickPanel Control unit before installing the Adapter.
2. Open the back cover of the QuickPanel.
3. Attach the PCMCIA Adapter to the unit by plugging the module into the expansion 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 Adapter or the QuickPanel Control unit.**

4. To secure the Adapter in the unit, install the four provided screws as shown in the figure on page 9.
5. Tighten the screws until tight and then 1/4 turn of the screw. Do not over tighten the screws to avoid breaking the screw or board.

Caution: **To avoid damaging a PCMCIA card, install the nylon screw in the hole between the ejector rails as shown in the figure on page 9.**

6. Close the cover.

General Specifications

| Environmental Conditions | |
|--|---|
| Temperature Operation Storage | 0°C to 60°C -40°C to 85°C |
| Humidity | 5 to 95% relative humidity (non-condensing) |
| Vibration (Operating) | (IEC 60068-2-6, JISC0911) 10 - 57Hz, 0.012" peak-peak displacement 57 - 500Hz, 1.0g acceleration |
| Shock (Operating) | (IEC 60068-2-27, JISC0912) 15g, 11ms (sine wave) |
| Power consumption Adapter PCMCIA Memory or I/O card | 1.041 watt 3 watts maximum Note: The 24 VDC power supply for the QuickPanel must be able to provide an additional 5 watts to support the power consumption of the Adapter and PCMCIA card. |

Agency Qualifications

| <i>Description</i> | <i>Agency Standard or Marking</i> | <i>Comments</i> |
|--|--|---|
| N.A. Safety for Industrial Control Equipment | UL508/C-UL | Certification by Underwriter's Laboratories to UL standard and equivalent CSA standard |
| N.A. Safety for Hazardous Locations Class I, Div. 2, Groups A, B, C, D | UL1604/C-UL | Certification by Underwriter's Laboratories to UL standard and equivalent CSA standard |
| Explosive Atmospheres Directive European Safety for Hazardous Locations Equipment Group II, Category 3 | ATEX | Certification in accordance with European Directives; Refer to Declaration of Conformity and Independent 3 rd Party Assessment Certificate |
| Electromagnetic Compatibility Directive European EMC for Industrial Control Equipment | CE | Certification by Competent Body in accordance with European Directives; Refer to Declaration of Conformity |