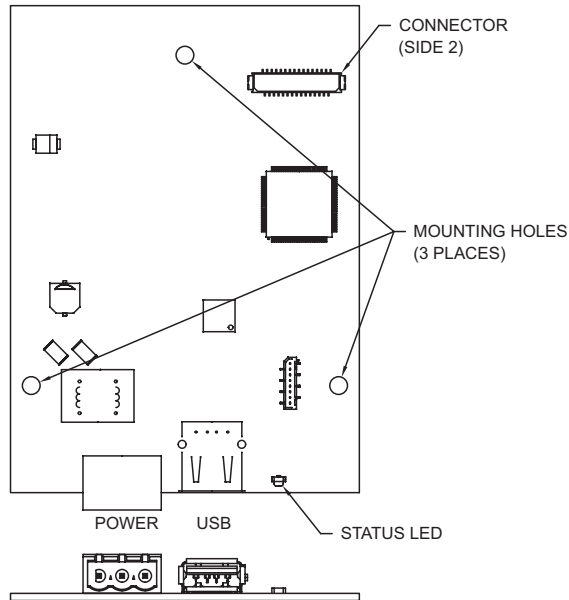


MODEL G3USB - USB HOST OPTION CARD FOR THE G306A OPERATOR INTERFACE TERMINAL



- CONFIGURED USING CRIMSON® 3.0 (OR LATER) SOFTWARE
- INSTALLS INSIDE A G306A OPERATOR INTERFACE TERMINAL
- INSTALLATION AND CONNECTION HARDWARE INCLUDED WITH CARD

GENERAL DESCRIPTION

The G3 proprietary expansion slot provides a high speed parallel architecture that extends the functionality and flexibility of the G3 series HMI. This approach allows the G3 series to evolve concurrently with the latest advances in communications and standards without sacrificing performance. This high bandwidth channel has significantly greater throughput when compared to the traditional (external) serial gateway approach.

The G3USB option card is easily installed by removing the rear cover of your G3 operator interface, attaching the card using the supplied screws and connecting a single cable. Installing this card adds a USB host port to the G306A HMI that is not available on standard units.

Having an on-board USB host port will allow such functionality as file transfer from CompactFlash to USB memory stick or attachment of peripherals such as a keyboard or bar code reader.

SAFETY SUMMARY

All safety related regulations, local codes and instructions that appear in the literature or on equipment must be observed to ensure personal safety and to prevent damage to either the instrument or equipment connected to it. If equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Do not use the controller to directly command motors, valves, or other actuators not equipped with safeguards. To do so can be potentially harmful to persons or equipment in the event of a fault to the controller.



CAUTION: Risk of Danger.
 Read complete instructions prior to installation and operation of the unit.

CONTENTS OF PACKAGE

- G3USB Host Option Card
- Cable already attached to option card
- Hardware pack consisting of three screws.
- This hardware bulletin

ORDERING INFORMATION

MODEL NO.	DESCRIPTION	PART NUMBER
G3USB	USB Host Option Card for G306A operator interface	G3USBHC0



THIS EQUIPMENT IS SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C, D, HAZARDOUS LOCATIONS, OR NON-HAZARDOUS LOCATIONS ONLY



WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOWN TO BE FREE OF IGNITABLE CONCENTRATIONS.



WARNING - EXPLOSION HAZARD - SUBSTITUTION OF ANY COMPONENT MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2

SPECIFICATIONS

1. POWER REQUIREMENTS:

24VDC \pm 20%; 0.25A max; 0.25A typical (independent from the host G3 power connection). Must use NEC Class 2 or Limited Power Source (LPS) rated power supply.

2. ENVIRONMENTAL CONDITIONS:

Operating Temperature Range: 0 to 50 °C

Storage Temperature Range: -20 to 80 °C

Operating and Storage Humidity: 80% maximum relative humidity (non-condensing) from 0 to 50 °C.

Altitude: Up to 2000 meters.

3. USB HOST PORT:

Complies with universal serial bus specification Rev 2.0. Support data transfers at full-speed. Hardware over-current protected (0.5 A max).

4. CERTIFICATIONS AND COMPLIANCES:

SAFETY:

IEC 61010-1, EN 61010-1: Safety requirements for electrical equipment for measurement, control and laboratory use, Part 1.

ELECTROMAGNETIC COMPATIBILITY

Emissions and Immunity to EN 61326: Electrical Equipment for Measurement, Control and Laboratory use.

Immunity to Industrial Locations: Reference G3 unit for immunity specifications

Emissions:

Emissions EN 55011 Class A

Note:

1. The G3USB option card has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules.

5. **CONSTRUCTION:** Installation Category I, Pollution Degree 2.

6. **INSTALLATION REQUIREMENTS:** Card must be installed inside the rear cover of a G3 operator interface with the hardware provided. See “Installing the G3USB Option Card” for more details.

7. **WEIGHT:** 1.6 oz (45.36 g)

INSTALLING THE G3USB OPTION CARD

INSTALLATION INSTRUCTIONS



Caution: The option and main circuit boards contain static sensitive components. Before handling the cards, discharge static charges from your body by touching a grounded bare metal object. Ideally, handle the cards at a static controlled clean workstation. Also, handle the cards by the edges only. Dirt, oil, or other contaminants that may contact the cards can adversely affect circuit operation.



Warning: Depending upon the G3 operator interface, high voltage may be present inside the operator interface. Be sure to remove all power before removing the rear cover of the operator interface.

Each G3USB option card comes with a cable for communications from the main G3 operator interface PC board. It also comes with three screws for attaching the option card to the inside of the G3 operator interface's rear cover.

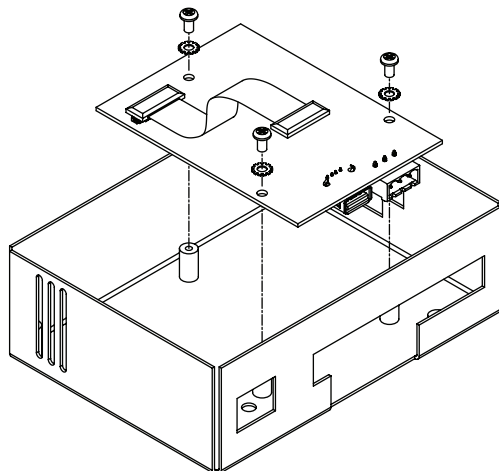


Figure 1

To install the option card remove all power and communication cables from the unit. The chassis ground connection to the rear cover may be left connected. The G3 operator interface literature contains instructions for removing the rear cover, refer to the “Battery & Time Keeping” section.

Using the three screws provided connect the option card to the rear cover as shown in Figure 1.

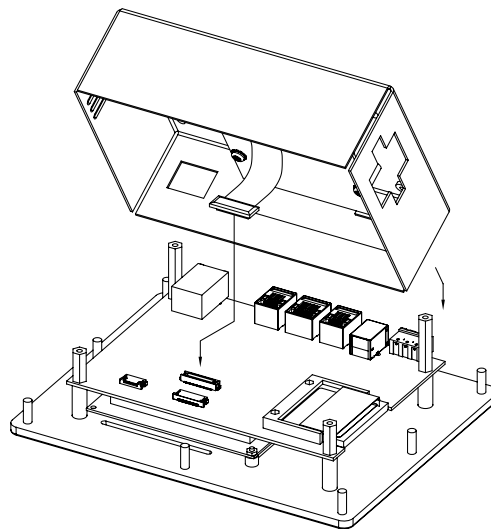


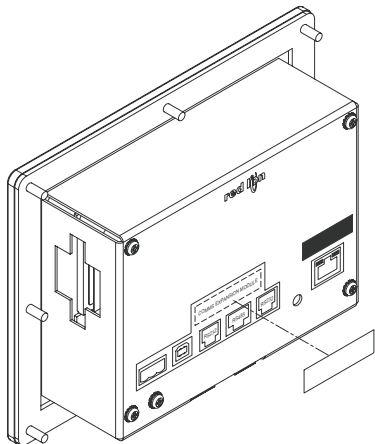
Figure 2

Connect the cable from the option card to CN11 on the main board of the G3 operator interface as shown in Figure 2. Be sure both ends of the cables are firmly seated into their appropriate connector housing.

Carefully replace the rear cover by reversing the previous instructions for removing the rear cover.

THE OPTION CARD LABEL

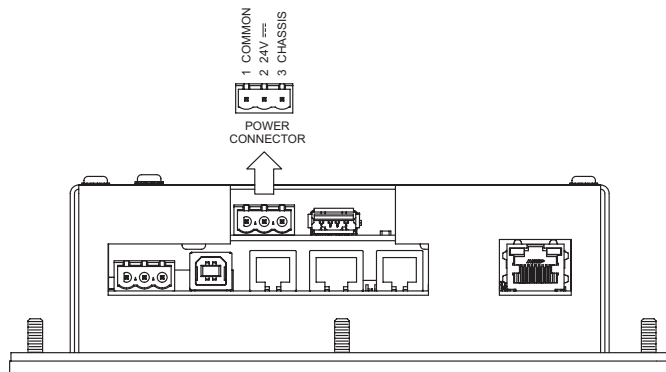
Place the option card label on your rear cover in the space indicated by the dashed lines and labeled "COMMS EXPANSION MODULE."



POWER SUPPLY REQUIREMENTS

NEW AND EXISTING INSTALLATIONS

The G3USB option card needs 24 V power independently of the G3. Wires should be jumpered from the 24 V main supply of the G3 to the option card. The power connections described above are absolutely essential to prevent any ground loops. The 24 V power terminal connector for the G3USB option card is shown below.



SOFTWARE/UNIT OPERATION

CRIMSON SOFTWARE

Crimson 3.0 software is available as a free download from www.redlion.net.

LED

The G3USB option card has an LED through the back cover once the option card is installed. The status of the LED is described in the table below.

LED STATUS	
OFF	No USB device connected
RED	Device connected, NOT configured
GREEN	Device configured

CONFIGURING A G3USB OPTION CARD

The G3USB is configured using Crimson software. Crimson is available as a free download from www.redlion.net/g3, or it can be ordered on CD. Updates to Crimson for new features and drivers are posted on the website as they become available. By configuring the G3USB using the latest version of Crimson, you are assured that your unit has the most up to date feature set. Crimson software can configure the G3USB through the RS232 PGM port, Ethernet port, CompactFlash socket or through the USB host port itself on your G306A operator interface. Additional information can be found in your G306A operator interface hardware literature and the Crimson user manual.

TROUBLESHOOTING YOUR G3USB OPTION CARD

If for any reason you have trouble operating, connecting, or simply have questions concerning your new G3USB option card, contact Red Lion's technical support. For contact information, refer to the back page of this bulletin for phone and fax numbers.

EMAIL: techsupport@redlion.net

Web Site: <http://www.redlion.net>

LIMITED WARRANTY

The Company warrants the products it manufactures against defects in materials and workmanship for a period limited to two years from the date of shipment, provided the products have been stored, handled, installed, and used under proper conditions. The Company's liability under this limited warranty shall extend only to the repair or replacement of a defective product, at The Company's option. The Company disclaims all liability for any affirmation, promise or representation with respect to the products.

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