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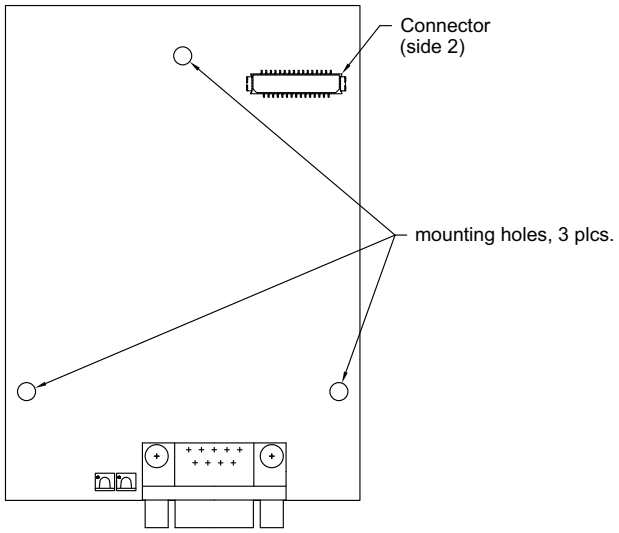
Bulletin No. G3MPI-X
Drawing No. LP0868
Effective 03/11

MODEL G3MPI - MULTI POINT INTERFACE OPTION CARD FOR G3 OPERATOR INTERFACE TERMINALS



- ADDS MPI MULTI POINT INTERFACE CONNECTIVITY TO ANY G3 OPERATOR INTERFACE
- POWERED BY THE G3 OPERATOR INTERFACE
- INSTALLATION AND CONNECTION HARDWARE INCLUDED WITH CARD

NOTICE

This product does not have a UL rating. Installing Non-UL Rated parts or components into any UL Rated device voids the original UL rating on that device.

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 G3MPI option card adds Multi Point Interface connectivity to any G3 series HMI. This allows a high speed exchange of data, at data rates up to 12 MBaud, between the hosting G3 and a PLC on an MPI network.

The card is easily installed by removing the rear cover of your G3 operator interface, attaching the card using three screws and connecting a single cable.

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

- G3MPI Option Card with pluggable DB9F connector
- Cable already attached to G3MPI option card
- Hardware pack consisting of three screws
- This hardware bulletin

ORDERING INFORMATION

MODEL NO.	DESCRIPTION	PART NUMBER
G3MPI	Multi Point Interface Option Card For G3 Operator Interfaces	G3MPI000

SPECIFICATIONS

1. **POWER REQUIREMENTS**:
   Power is supplied to the option card from the main board of your G3 operator interface.
2. **COMMUNICATIONS**:
   DB9 female connector. Baud rate selectable between 9.6k and 12M.
3. **CERTIFICATIONS AND COMPLIANCES**:
   ELECTROMAGNETIC COMPATIBILITY
   Emissions and Immunity to EN 61326: Electrical Equipment for Measurement, Control and Laboratory use.
   Immunity to Industrial Locations: Reference G3 unit for emissions and immunity specifications
4. **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.
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 G3MPI Option Card" for more details.

INSTALLING THE G3MPI 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 G3MPI option card comes with three screws for attaching the option card to the inside of the G3 operator interface's rear cover.

To install the option card remove all power and I/O communications cables from the unit. 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.

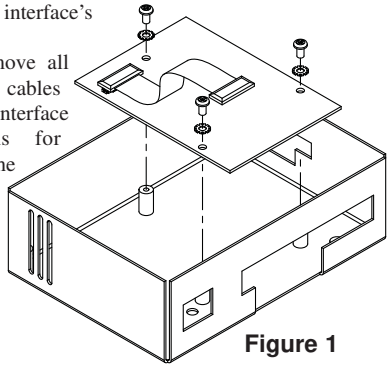


Figure 1

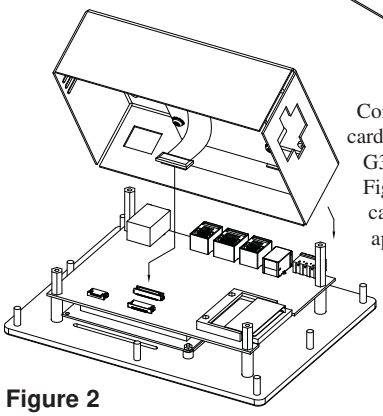


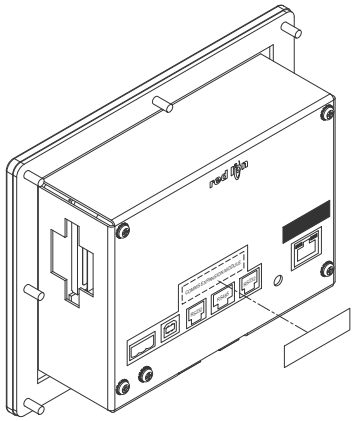
Figure 2

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 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 G3MPI option card draws all of its power from the main board of your G3 operator interface. The specifications of your G3 operator interface account for the power needs of an option card.

COMMUNICATING WITH THE G3MPI OPTION CARD

CONFIGURING A G3MPI OPTION CARD

The G3MPI 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 G3MPI 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 G3MPI card through the RS232 PGM port, USB port, Ethernet port, or CompactFlash socket on your G3 operator interface. Additional information can be found in your G3 hardware bulletin and also in the Crimson user manual.

To enable the option card, click on the left hand pane of the Communications window and highlight the G3 icon. In the right pane, click the Option Card Selection Edit button to show the selection dialog and select the MPI Option Card from the list. The MPI Option Card will then appear in the left hand pane, installed in the tree of available ports.

CONFIGURING THE DRIVER

To select a driver, click on the left hand pane of the Communications window and highlight the MPI Interface icon. In the right hand pane, click the Driver Selection Edit button to show the Driver Selection dialog and select the S7300/400 Master driver from the list. Refer to the Crimson User Manual for information regarding communications configuration.

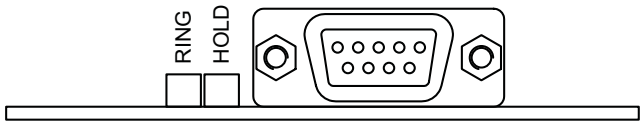
SOFTWARE/ UNIT OPERATION

LEDS

The card has 2 LEDs visible through the Expansion Card slot that give state information.

RING (green): ON - Indicates the station is in a logical ring.

HOLD (red): ON - Indicates hold token state.



CRIMSON® SOFTWARE

Crimson® 2.0 software is available as a free download from www.redlion.net or it can be purchased on a CD. The latest version of the software is always available from the web site, and updating your copy is free.

TROUBLESHOOTING YOUR G3MPI OPTION CARD

If for any reason you have trouble operating, connecting, or simply have questions concerning your new G3MPI 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

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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.

The customer agrees to hold Red Lion Controls harmless from, defend, and indemnify RLC against damages, claims, and expenses arising out of subsequent sales of RLC products or products containing components manufactured by RLC and based upon personal injuries, deaths, property damage, lost profits, and other matters which Buyer, its employees, or sub-contractors are or may be to any extent liable, including without limitation penalties imposed by the Consumer Product Safety Act (P.L. 92-573) and liability imposed upon any person pursuant to the Magnuson-Moss Warranty Act (P.L. 93-637), as now in effect or as amended hereafter.

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