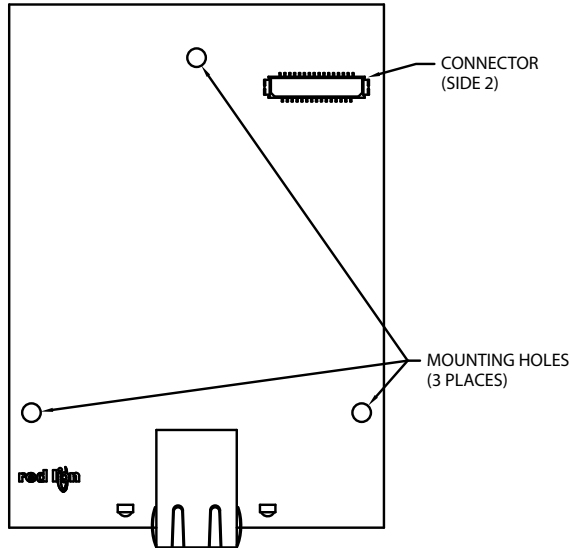


## MODEL G3ENET – 10/100 ETHERNET OPTION CARD FOR G3 OPERATOR INTERFACE TERMINALS



- CONFIGURED USING CRIMSON SOFTWARE
- 10 BASE T/100 BASE-TX ETHERNET PORT
- INSTALLS INSIDE A G3 OPERATOR INTERFACE TERMINAL
- INSTALLATION AND CONNECTION HARDWARE ARE 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 G3ENET 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 an auxiliary 10/100 Ethernet port to any G3 Series HMI that contains only a single resident port.

The auxiliary Ethernet port provides a means to isolate machine-network traffic from the plant-wide network, thereby negating the need for an industrial router. Further, by isolating the machine and plant-wide networks, the system only requires that a single IP address be provided by the company's IT group.

### 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.



### CONTENTS OF PACKAGE

- G3ENET Option Card
- Cable already attached to G3ENET option card
- Hardware pack consisting of three screws
- This hardware bulletin

### SPECIFICATIONS

1. **POWER REQUIREMENTS:**  
 Power is supplied to the option card from the main board of your G3 operator interface.
2. **COMMUNICATIONS:**  
**Ethernet Port:** 10 BASE-T / 100 BASE-TX  
 RJ45 jack is wired as a NIC (Network Interface Card).
3. **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.
4. **CONSTRUCTION:** Installation Category I, Pollution Degree 2.
5. **INSTALLATION REQUIREMENTS:** Card must be installed inside the rear cover of a G3 operator interface with the hardware provided. See "Installing the G3ENET Option Card" for more details.
6. **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
7. **WEIGHT:** 1.6 oz (45.36 g)

### ORDERING INFORMATION

MODEL NO.	DESCRIPTION	PART NUMBER
G3ENET	Ethernet Option card for G3 operator interfaces	G3ENET00

# INSTALLING THE G3ENET 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.

The G3 operator interface literature contains the instructions for removing the rear cover and installing the option card.

*Note: Connector CN2 on the G3ENET option card must be left unconnected as shown in Figure 1.*

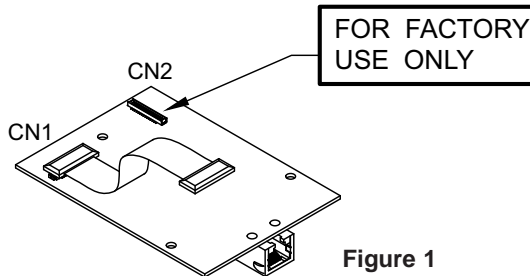
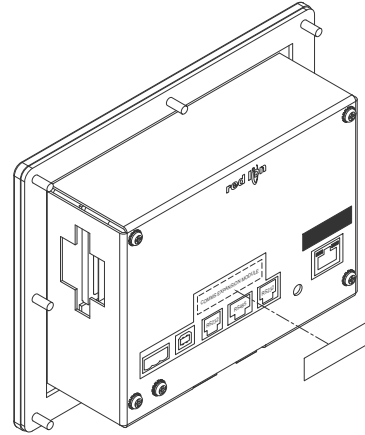


Figure 1

## 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." The label would display the MAC ID of the particular G3ENET option card being used.



## POWER SUPPLY REQUIREMENTS

### NEW AND EXISTING INSTALLATIONS

The G3ENET 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.

# SOFTWARE/UNIT OPERATION

## ETHERNET COMMUNICATIONS

Ethernet communications can be established at either 10 BASE-T or 100 BASE-TX. The G3ENET option card's RJ45 jack is wired as a NIC (Network Interface Card). G3ENET option card auto-detects remote transmit and receive pairs and correctly assigns the transmit and receive pairs for the G3ENET option card. This extremely useful feature enables the user to use whichever type of cable (cross-over or straight) is available.

There are two LEDs next to the Ethernet connector. A yellow LED to the left of the Ethernet connector, and a bi-color green/red LED to the right. The LEDs represent the following statuses.

LED COLOR	DESCRIPTION
YELLOW solid	Link established
YELLOW flashing	Data being transferred
GREEN	10 BASE-T Communications
RED	100 BASE-TX Communications

## CONFIGURING A G3ENET OPTION CARD

The G3ENET option card is configured using Crimson software. Crimson is available as a free download from [www.redlion.net](http://www.redlion.net), 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 G3ENET using the latest version of Crimson, you are assured that your unit has the most up to date feature set.

## TROUBLESHOOTING YOUR OPTION CARD

If for any reason you have trouble operating, connecting, or simply have questions concerning your new G3ENET 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](mailto:techsupport@redlion.net)

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

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