

# WEB-ENABLED GRAPHIC OPERATOR INTERFACE TERMINALS



G3 Series HMI, shown smaller than actual size.

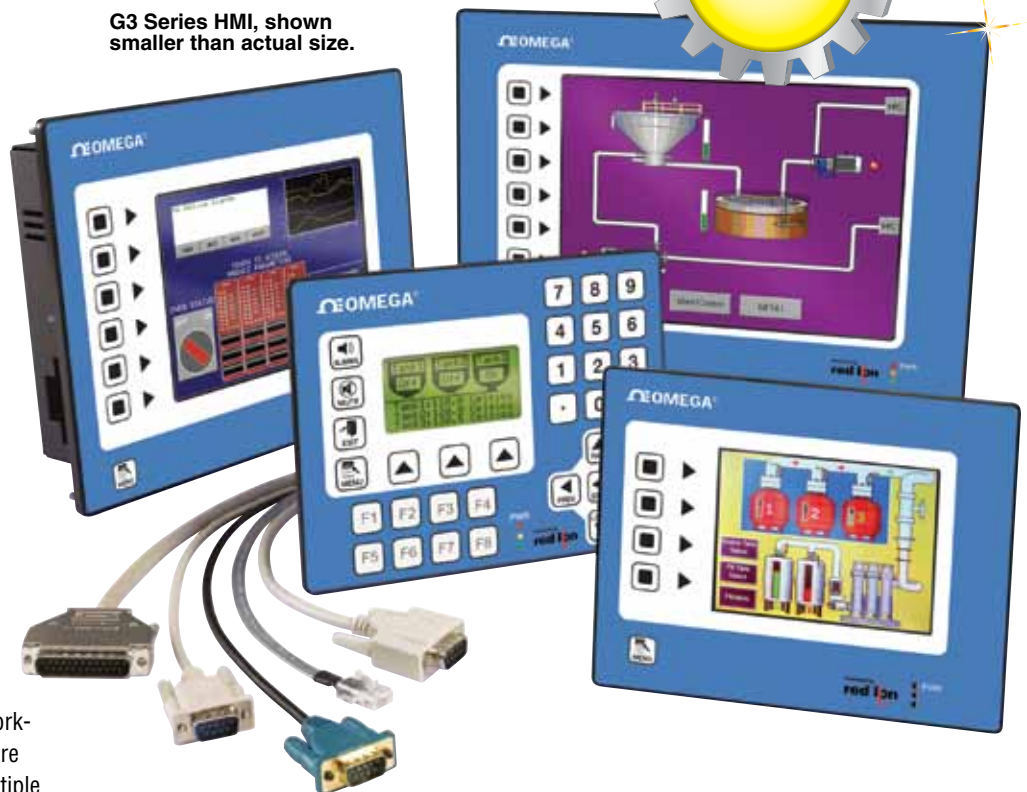
## G3 SERIES HMI

- Remote Monitoring and Operation
- The Most On-Board Comms Ports
- Built-In Ethernet
- Protocol Converter
- Affordable Price

Now you can make complete integration of your machine a reality. The G3 HMI Series features the most on-board communications ports of any HMI available, and lets you web- and network-enable many different types of hardware using integrated Ethernet. Control multiple devices including PLCs, PCs, drives, PID controllers and more—at speeds up to 115 kBaud. Three serial ports are standard, and with an inexpensive expansion card, the G3 HMI integrated protocol converter can communicate with as many as five different device types. No HMI offers that kind of connectivity at any price. And the best news is, the G3 HMIs actually cost LESS than many HMIs with far fewer features.

### A Variety of Affordable Models Deliver the Most Value of Any HMI

G3 HMIs are available in a variety of models and sizes to meet your machine requirements. Each model combines unique capabilities normally expected from high-end units, yet at a very affordable price. One RS422/485 port and two RS232 ports are standard, and each port is format and Baud rate programmable up to 115,200 Baud. One each RS232 and RS422/485 ports are available with an option card, providing up to five comms ports per G3 HMI.



### The Easiest and Most Flexible Software; and It's Free

Red Lion's remarkable Crimson 2 software is a powerful programming platform that gives the G3 Series a number of exclusive functions. Its sophistication also makes all the complex capability of the G3 manageable, with user friendly drag and drop data mapping. Crimson is universal to all Red Lion HMIs. And unlike competitive HMIs that charge you extra for what is often very cumbersome and difficult proprietary software, the initial set up of Crimson is very easy and virtually self-explanatory. Crimson includes an extensive library of device drivers to quickly establish communications between the G3 and virtually any device. Once communication is established, anything the G3 can communicate with is now Ethernet-enabled via the built-in gateway and protocol converter. This capability is unavailable in any other HMI Panel. Best of all, Crimson is free. As are software updates, support, cabling

instructions and communication drivers. In fact, if a specific device driver does not exist, Red Lion will write one for you. Try finding this level of support and value with any other HMI!

### Integrated Protocol Converter Has Them All Talking

Crimson features a built in gateway that converts any attached device's serial protocol to 10 Base T/100 Base-TX Ethernet and automatically web-enables the device. Disparate serial devices now speak the same language, and unlike other HMIs that require you to purchase a protocol converter for up to \$1,000 additional—on the G3 Series, it's standard.

### Built-In Web Server Offers Remote Access and Control

The Crimson web server is capable of providing remote access to the G3 via a number of mechanisms. First, you can use Crimson to automatically generate



## Lower Manpower and Travel Costs

Why check up on equipment performance manually when you can have the process notify you of pending failure?

The G3 series can connect via Ethernet, landline modems, or even cellular modems to reach you anywhere in the world. With built-in email and text messaging functions, the G3 allows you to focus only on the areas of concern.

web pages that contain lists of tags—each formatted according to the tag's properties. You can also create a custom web site, using a third party HTML editor such as Microsoft FrontPage, with code that instructs Crimson to insert live tag values for realtime monitoring. And finally, you can enable Crimson's Virtual Panel, a unique remote access and control feature, which allows a web browser to not only view the G3's display in realtime, but control its keypad and operate any of its Ethernet-enabled devices remotely. This feature is only available in the G3 HMI Series.

### Multi-Device Data Logging Capabilities

Crimson allows users to quickly set up any number of devices in a control application, collect performance data, display it, store it for evaluation, or trigger PLC functions with one panel—either live or remotely. Data may be recorded as quickly as once per second and can be acquired from one or all connected devices. Values are stored in CSV (comma separated variable) files that can easily be imported into applications such as Microsoft Excel. Unique to the G3 HMI, Crimson's web server can be used to expose various data via the G3 panel's Ethernet port, allowing remote access to diagnostic information, or to the values recorded by the data logger.

### Virtually Unlimited Data Storage with CompactFlash

An integrated CompactFlash slot accommodates inexpensive and readily available Type I and II CompactFlash cards that lets you collect, retain and transfer data easily. If you need to update the database within a machine that is already installed at a customer's site, Crimson allows you to save a copy of the database to a CompactFlash card, ship that card to your customer, and have the G3 load the database from that card.

### Faster Data Transfer and Downloading with USB

The G3 HMI Series features a convenient USB port for fast downloads of configuration files from a PC as well as trending and data logging uploads to your PC for analysis.

### Powerful Processing

The G3 HMI Series features an onboard 32-bit processor for unmatched computing capability. The full-featured Crimson software contains a built in "C" compiler to create custom programs for complex applications, recipe handling, realtime scheduling, math expression evaluation and much more.

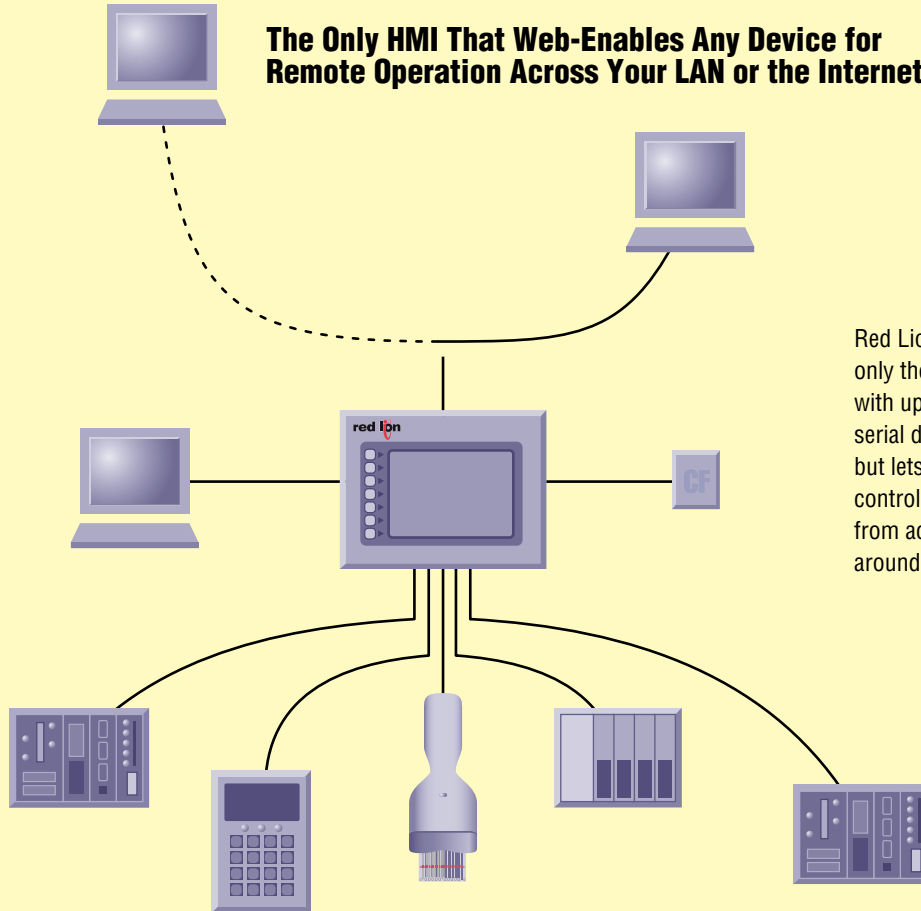
### Faster Configuration and Programming

Crimson 2 is a powerful set of icon-based, configuration, display, control and data logging tools designed specifically to take full advantage of the G3 HMI Series architecture. The majority of simple applications can be quickly set up using a step-by-step process to configure communications protocols, define the data tags to be accessed, and create the user interface. A full set of drag and drop graphical items makes creation of the interface easy while yielding professional results. More advanced features, such as programming, data logging and configuring the G3's web server, are intuitive and easily enabled.

### The Lowest Priced, Full-Featured HMIs

For less than many stripped-down HMIs, you can add the powerful capabilities and ease of use found only in the G3 HMI Series. The G3 Series come standard with three serial comms, Ethernet, protocol converter, USB, and CompactFlash slot. And at no extra charge, you get full-featured Crimson 2 software with drag and drop configuration and data tagging, easy-to-use interface tools, flexible programming environment, powerful data logging, and our exclusive Virtual Panel and web server capabilities for remote access and control.

## The Only HMI That Web-Enables Any Device for Remote Operation Across Your LAN or the Internet



Red Lion's G3 HMI Series is not only the first to communicate with up to five different types of serial devices simultaneously, but lets you access, monitor and control these devices remotely—from across your network, or around the globe.

### Accessory Cables

The following cables may be used to connect the G3 HMI, Data Station Plus or Red Lion Modular Controller Master to the listed device.

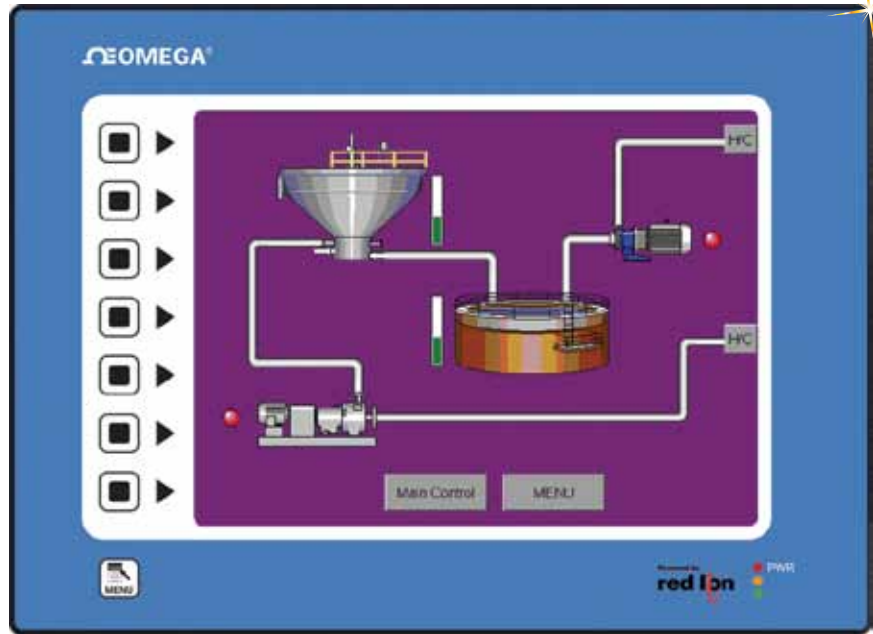
MODEL NO.	DESCRIPTION	MODEL NO.	DESCRIPTION
<b>CBLAB001</b>	Allen Bradley SLC-503 V DF 1	<b>CBLOMR03</b>	Omron C-SERIES RS422
<b>CBLAB002</b>	Allen Bradley PLC-5 V CHNL 0	<b>CBLPROG0</b>	RJ-11 PROG. Lead 10FT
<b>CBLAB003</b>	Allen Bradley DH48	<b>CBLRLC00</b>	485 G3 RJ45 - RL RJ11
<b>CBLAB004</b>	Allen Bradley PNLVW VIA DF1	<b>CBLRLC01</b>	RJ12-RJ12 1' Crossed
<b>CBLGEF01</b>	Ge Fanuc 90S V SNP	<b>CBLRLC02</b>	RJ12-RJ12 10' Crossed
<b>CBLGEN01</b>	RS232 TO MALE 9-PIN	<b>CBLRLC03</b>	RJ45-RJ45 1' Straight
<b>CBLGEN02</b>	RS232 Bare Wires	<b>CBLRLC04</b>	RJ45-RJ45 10' Straight
<b>CBLGEN03</b>	RS422/485 Bare Wires	<b>CBLRLC05</b>	RS485 Jumpered
<b>CBLIDE01</b>	Idec Micro 3	<b>CBLRLC06</b>	MC TO RED LION RJ11 RS485
<b>CBLIDE02</b>	Idec Micro 3C	<b>CBLRLC07</b>	RJ45-RJ45 6" Straight
<b>CBLIDE03</b>	Idec Micro Smart	<b>CBLRLCS2</b>	RJ12-RJ12 10' Straight
<b>CBLKEY01</b>	Keyence KV Series Cable	<b>CBLSIE01</b>	Siemens S7 PPI
<b>CBLKOY00</b>	Koyo Model 2xx	<b>CBLSIE02</b>	Siemens MPI with out Adaptor
<b>CBLMAT01</b>	Matsushita FP	<b>CBLSIE03</b>	Siemens MPI with Adaptor
<b>CBLMAT02</b>	Matsushita FP0	<b>CBLSIE04</b>	TI 545 on Port 1
<b>CBLMDM00</b>	Modem 9Pin Male	<b>CBLSIE05</b>	Siemens 545/555 RS232
<b>CBLMDM01</b>	Modem 25Pin Male	<b>CBLSIE06</b>	Siemens 545/555 - RS422
<b>CBLMIT01</b>	Misubishi FX	<b>CBLSIE07</b>	TI 500 Series
<b>CBLMIT02</b>	MIT FX0 and FX0N	<b>CBLSIE08</b>	Siemens-CP525 Comm Card
<b>CBLMIT03</b>	MIT A/Q	<b>CBLSIE09</b>	Siemens-S5 with Adaptor
<b>CBLMOD01</b>	Modicon (RS232)	<b>CBLTEL00</b>	G3 Telemechanique RS485
<b>CBLOMR01</b>	Omron (RS232)	<b>CBLTEL01</b>	G3 Telemechanique SLV 485
<b>CBLOMR02</b>	Omron SYS C200H-LK210	<b>CBLYAS01</b>	Yaskawa SMC3010

# G310 10" GRAPHIC LCD OPERATOR INTERFACE TERMINAL WITH VGA DISPLAY AND TOUCHSCREEN



- Up To 5 RS232/422/485 Communications Ports (2 RS232 and 1 RS422/485 On Board, 1 RS232 and 1 RS422/485 On Optional Communications Card)
- 10 Base T/100 Base-TX Ethernet Port To Network Units and Host Web Pages
- USB Port To Download The Unit's Configuration from a PC or for Data Transfers To a PC
- Unit's Configuration Is Stored In Non-Volatile Memory (8 MB Flash)
- CompactFlash® Socket To Increase Memory Capacity
- 10.4" TFT 256 Color VGA 640 x 480 Pixel LCD
- 8-Button Keypad for On-Screen Menus
- Three Front Panel LEDs
- Power Unit From 24 Vdc ±20% Supply
- Resistive Analog Touchscreen
- For Use In Hazardous Locations: Class I, Division 2, Groups A, B, C, and D; Class II, Division 2, Groups F and G; Class III, Division 2

The G310 10 Inch Operator Interface Terminal combines unique capabilities normally expected from high-end units with a very affordable price. The G310 is able to communicate with many different types of hardware using high-speed RS232/422/485 communications ports and Ethernet 10 Base T/100 Base-TX communications. In addition, the G310 features USB for fast downloads of configuration files and access to trending



G310C000, shown smaller than actual size.

and data logging. A CompactFlash® socket is provided so that Flash cards can be used to collect your trending and data logging information as well as to store larger configuration files. In addition to accessing

and controlling of external resources, the G310 allows a user to easily view and enter information. Users can enter data through the touchscreen or front panel 8-button keypad.

<b>To Order</b> Visit <a href="http://omega.com/g3_hmi310">omega.com/g3_hmi310</a> for Pricing and Details	
MODEL NO.	DESCRIPTION
G310C000	0.4" operator interface LCD, TFT, indoor, 8 button keypad
G310S000	10.4" operator interface LCD, TFT, outdoor, 8 button keypad
G3CF064M	64 MB compact flash card (industrial grade)
G3CF256M	256 MB compact flash card (industrial grade)
G3CF512M	512 MB compact flash card (industrial grade)
SFCRM200	Crimson programming software, manual and USB cable
PSDR0400	DIN rail power supply, 24 Vdc, 4 A
CBLPROG0	RS232 programming cable
CBLUSB00	USB programming cable (included with SFCRM200)
G3FILM10	Pack of ten protective films for G310C or G310S
G3RS0000	Two port RS232/485 (isolated) option card
G3PBDP00	Profibus option card
G3DN0000	DeviceNet option card
G3CN0000	CANopen option card

Comes complete with panel gasket, template for panel cutout, hardware packet for mounting unit into panel, terminal block for connecting power and operator's manual.  
**Ordering Example:** G310C000, operator interface, SFCRM200, crimson programming software, manual and USB cable, PSDR0400, power supply.