WEB-ENABLED GRAPHIC OPERATOR INTERFACE TERMINALS

G3 SERIES HMI
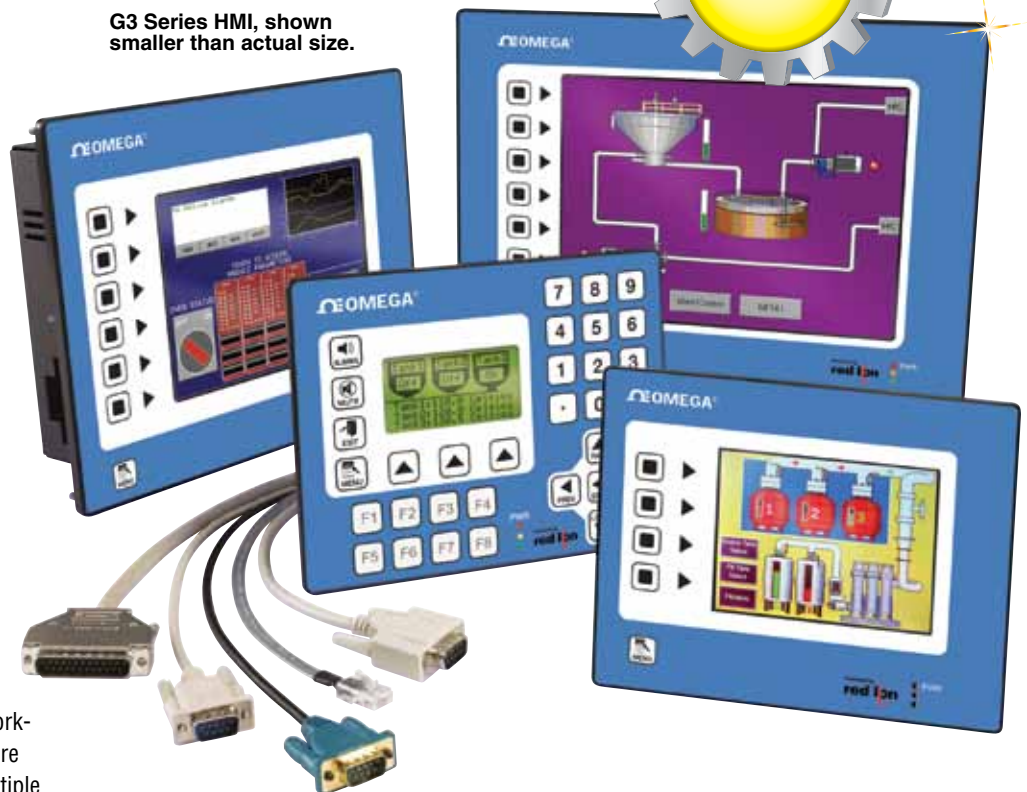
G3 Series HMI, shown smaller than actual size.

- **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.
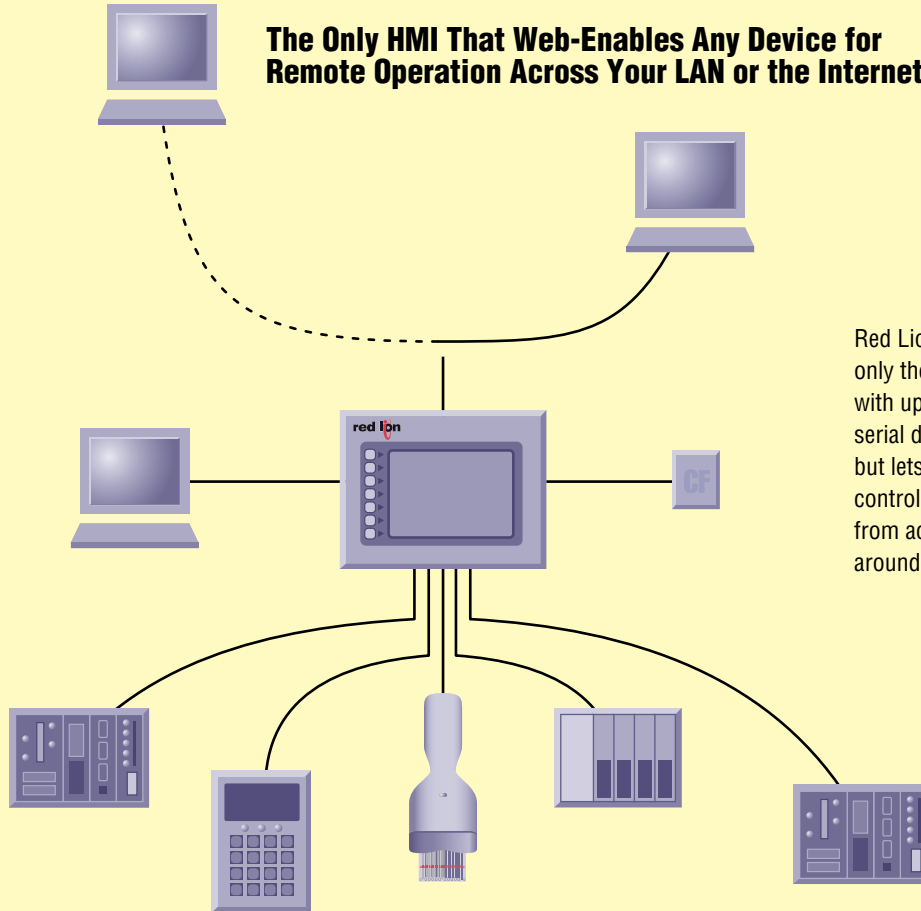
Faster Configuration and Programming

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
CBLAB001	Allen Bradley SLC-503 V DF 1	CBLOMR03	Omron C-SERIES RS422
CBLAB002	Allen Bradley PLC-5 V CHNL 0	CBLPROG0	RJ-11 PROG. Lead 10FT
CBLAB003	Allen Bradley DH48	CBLRLC00	485 G3 RJ45 - RL RJ11
CBLAB004	Allen Bradley PNLVW VIA DF1	CBLRLC01	RJ12-RJ12 1' Crossed
CBLGEF01	Ge Fanuc 90S V SNP	CBLRLC02	RJ12-RJ12 10' Crossed
CBLGEN01	RS232 TO MALE 9-PIN	CBLRLC03	RJ45-RJ45 1' Straight
CBLGEN02	RS232 Bare Wires	CBLRLC04	RJ45-RJ45 10' Straight
CBLGEN03	RS422/485 Bare Wires	CBLRLC05	RS485 Jumpered
CBLIDE01	Idec Micro 3	CBLRLC06	MC TO RED LION RJ11 RS485
CBLIDE02	Idec Micro 3C	CBLRLC07	RJ45-RJ45 6" Straight
CBLIDE03	Idec Micro Smart	CBLRLCS2	RJ12-RJ12 10' Straight
CBLKEY01	Keyence KV Series Cable	CBLSIE01	Siemens S7 PPI
CBLKOY00	Koyo Model 2xx	CBLSIE02	Siemens MPI with out Adaptor
CBLMAT01	Matsushita FP	CBLSIE03	Siemens MPI with Adaptor
CBLMAT02	Matsushita FP0	CBLSIE04	TI 545 on Port 1
CBLMDM00	Modem 9Pin Male	CBLSIE05	Siemens 545/555 RS232
CBLMDM01	Modem 25Pin Male	CBLSIE06	Siemens 545/555 - RS422
CBLMIT01	Misubushi FX	CBLSIE07	TI 500 Series
CBLMIT02	MITS FX0 and FX0N	CBLSIE08	Siemens-CP525 Comm Card
CBLMIT03	MIT A/Q	CBLSIE09	Siemens-S5 with Adaptor
CBLMOD01	Modicon (RS232)	CBLTEL00	G3 Telemechanique RS485
CBLOMR01	Omron (RS232)	CBLTEL01	G3 Telemechanique SLV 485
CBLOMR02	Omron SYS C200H-LK210	CBLYAS01	Yaskawa SMC3010