These products are obsolete.

OPTOTERMINALS

Features

- Full-color touch screen interface
- NEMA-4 front panel; CE certified
- Complete programming and design software included
- Provides an effective interactive operator interface for SNAP Ethernet-based systems

OptoTerminals

DESCRIPTION

***** These products are Obsolete and no longer available. *****

Opto 22's OptoTerminal™ family brings a programmable, Ethernet-enabled, graphics-based operator interface to any location with Opto 22 SNAP Ethernet-based systems, including the SNAP PAC System and SNAP-IT packaged systems. OptoTerminal mountable display terminals are used by operators to send commands to and receive real-time data from plant floor equipment and other devices connected to Opto 22 hardware. Ideal for automation, control, data acquisition, and remote monitoring, an OptoTerminal offers a compact and durable operator interface for the plant floor and remote locations.

Two OptoTerminal models are available:

- OptoTerminal-G70—320 x 240-pixel color LCD display
- OptoTerminal-G75—640 x 480-pixel color LCD display

Both OptoTerminal models include a resistive touch screen and programmable soft keys, and both can be connected to standard Ethernet networks using a built-in 10 Mbps Ethernet interface; an EIA-232 interface is also provided for diagnostics and serial communication.

Opto 22 OptoTerminals were developed in partnership with QSI Corporation, a long-time maker of handheld and panel-mount operator interface terminals. OptoTerminals offer a NEMA 4-rated front panel; are well suited for factory automation, discrete manufacturing, and equipment monitoring applications; and can be easily mounted on a variety of machines or panels using standard mounting screws. The industrially hardened terminals are CE certified.

Programming

Easy-to-use software for designing and programming screens is included with the OptoTerminal. On-screen graphic objects are used to display information, accept user input, and communicate with SNAP Ethernet-based systems. These on-screen objects include text, geometric shapes, buttons, trend charts, keypads, keyboards, meters, and other graphics that can be sized, scaled, and placed as needed. Screen design and terminal programming uses QSI Corporation's Qlarity Foundry™, a Microsoft® Windows®-based object-oriented programming environment that includes libraries of custom objects for connecting to Opto 22 systems.

Power

Power is supplied to an OptoTerminal through the unit's serial connector. To provide this power, a serial connector must be wired to a power supply at the installation site. The optional **OptoTermCable,** a combination serial cable and power supply, can also provide power at the installation site or at a separate location such as an office where OptoTerminal applications are developed before deployment.

Options

High-visibility displays, additional serial ports, Power-over-Ethernet (POE), and other options are available for OptoTerminals. Contact Opto 22 for information.

Part Numbers

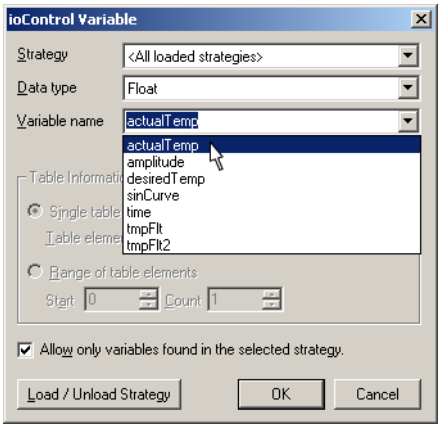
Part	Description
OPTOTERMINAL-G70 [OBSOLETE]	[OBSOLETE] Ethernet-enabled Operator Interface with Object-based Programming, 5.7 in. (145 mm) diagonal Display
OPTOTERMINAL-G75 [OBSOLETE]	[OBSOLETE] Ethernet-enabled Operator Interface with Object-based Programming, 10.4 in. (264 mm) diagonal Display
OPTOTERMCABLE [OBSOLETE]	[OBSOLETE] OptoTerminal Power Adapter and Communications Cable

SOFTWARE

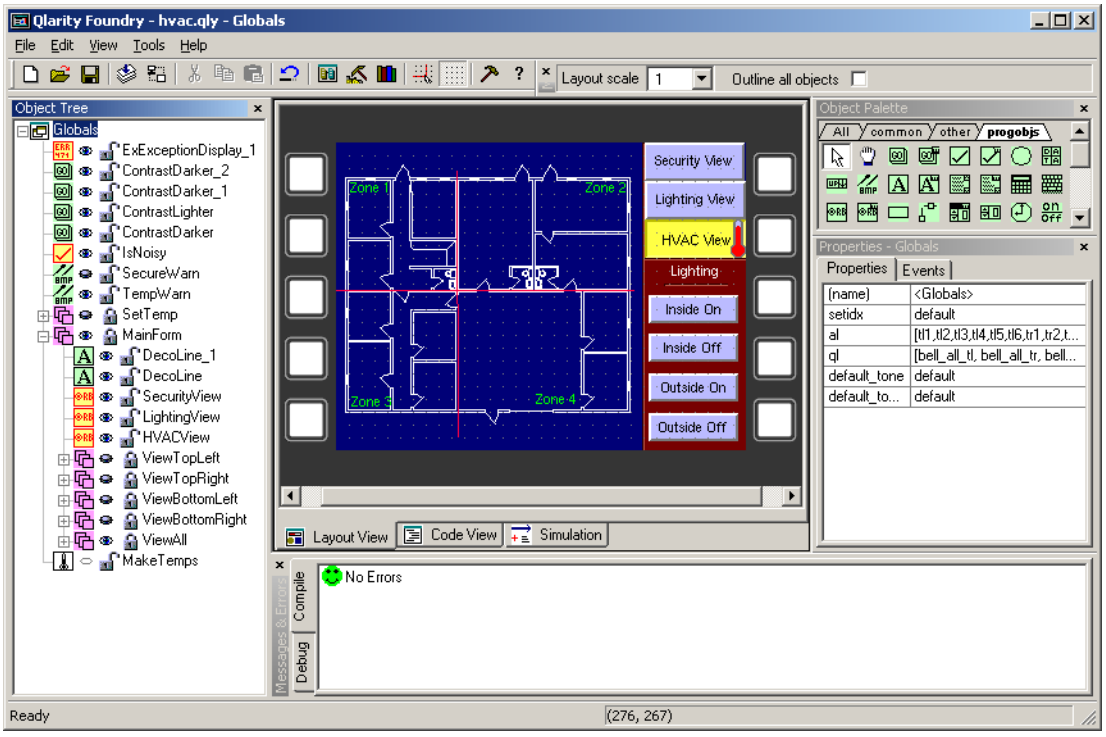
Qlarity Foundry software—included with the OptoTerminal—is used to design the interface and develop the programming logic used for a specific application. Custom Opto 22 object libraries provide easy integration with Opto 22's Ethernet-based SNAP systems.

Memory Map and ioControl Support

An OptoTerminal communicates with Ethernet-based SNAP systems by reading and writing values in the device's built-in memory map. For the SNAP PAC System, an OptoTerminal can also read and write variables in a PAC Control™ strategy running on the SNAP PAC controller.



In Qlarity Foundry, software variables from a PAC Control strategy can be easily added to an



Qlarity Foundry software provides a complete development environment for creating applications to run on Opto 22

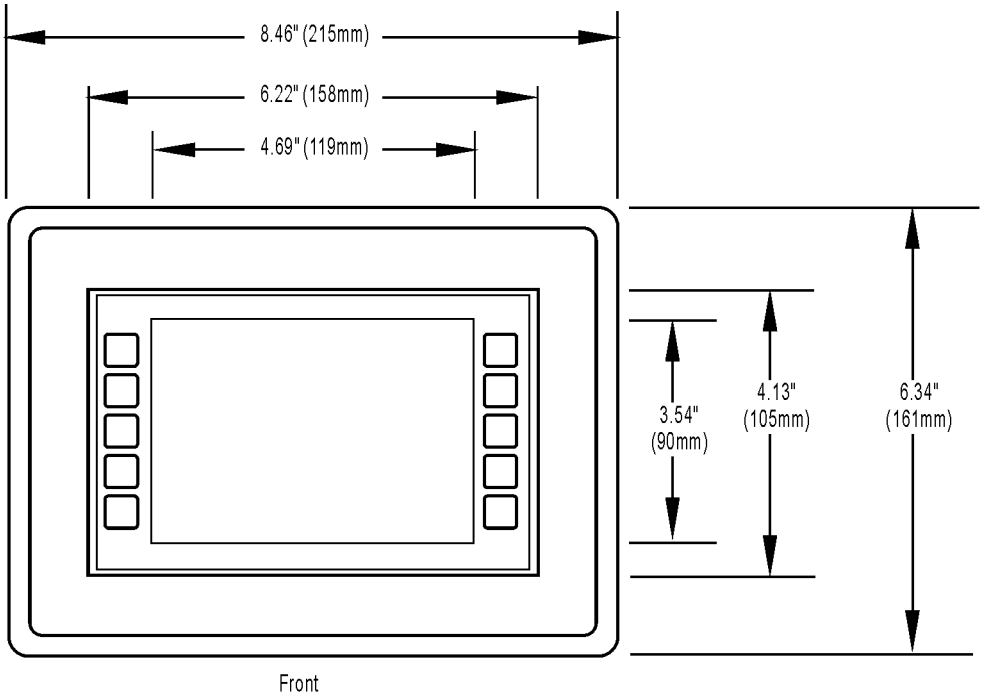
These products are obsolete

SPECIFICATIONS

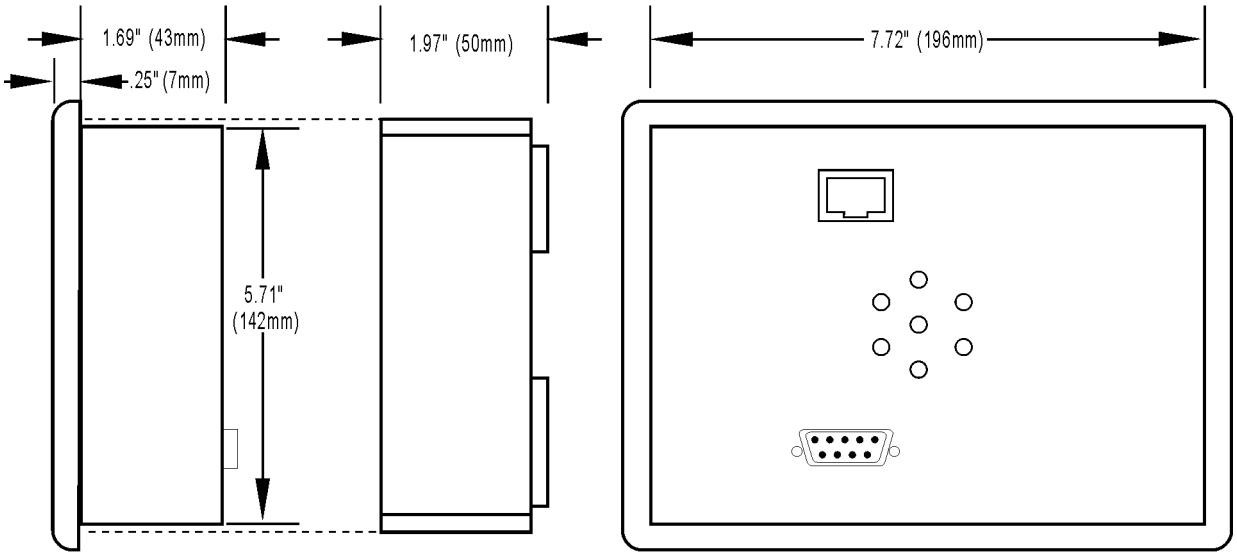
*** This product is OBSOLETE and no longer available. ***

Display	OptoTerminal-G70: 256 colors, STN (passive matrix); 320 x 240 pixels at 0.36 mm dot pitch; 5.7 in. (145 mm) diagonal display; software-controllable contrast and brightness; cold-cathode fluorescent lighting. OptoTerminal-G75: 256 colors, TFT (active matrix); 640 x 480 pixels at 0.33 mm dot pitch; 10.4 in. (264 mm) diagonal display; software-controllable brightness; cold-cathode fluorescent lighting
Touch Screen	Analog-resistive operation. Transparent touch area over viewable display, with a labeled touch area underlay on each side of the display.
Interface	10 Mbps Ethernet; EIA-232 serial port
Memory	4 MB flash; 16 MB RAM
Speaker	Software programmable in pitch and duration
Housing	OptoTerminal-G70: NEMA-4 front panel; glass-filled polyester, UL 94V-0 flame rating. Accommodates panels from 0 to 0.28 in. (0 to 7 mm) thick with standard screws. OptoTerminal-G75: NEMA-4 front panel; aluminum. Accommodates panels from 0 to 0.47 in. (0 to 12 mm) thick with standard screws.
Size and Weight	OptoTerminal-G70: 8.5 x 6.3 x 1.7 in. (215 x 161 x 43 mm); 2.5 lb. (1.16 kg) OptoTerminal-G75: 13.0 x 10.2 x 2.2 in. (330 x 260 x 55.3 mm); 6.4 lb. (2.9 kg) (Also see Dimensional Drawings on page 4 and page 5.)
Power Requirements	OptoTerminal-G70: 10 to 26 VDC; 450 mA @ 12 VDC or 275 mA @ 24 VDC (not including optional hardware) OptoTerminal-G75: 10 to 26 VDC; 1.35 A @ 12 VDC or 700 mA @ 24 VDC (not including optional hardware)
Software	Qlarity Foundry™ design environment for Microsoft® Windows® and Qlarity programming language (included)
Operating Temperature	-10 °C to 60 °C
Storage Temperature	-20 °C to 70 °C
Humidity	0–95%, non-condensing
Vibration	5 to 5,000 Hz, 4 g_{rms}
Shock	20 g, 3 ms, any axis
Certification	FCC Part 15, Class A CE Certification

DIMENSIONS—OPTOTERMINAL-G70



Front



Side

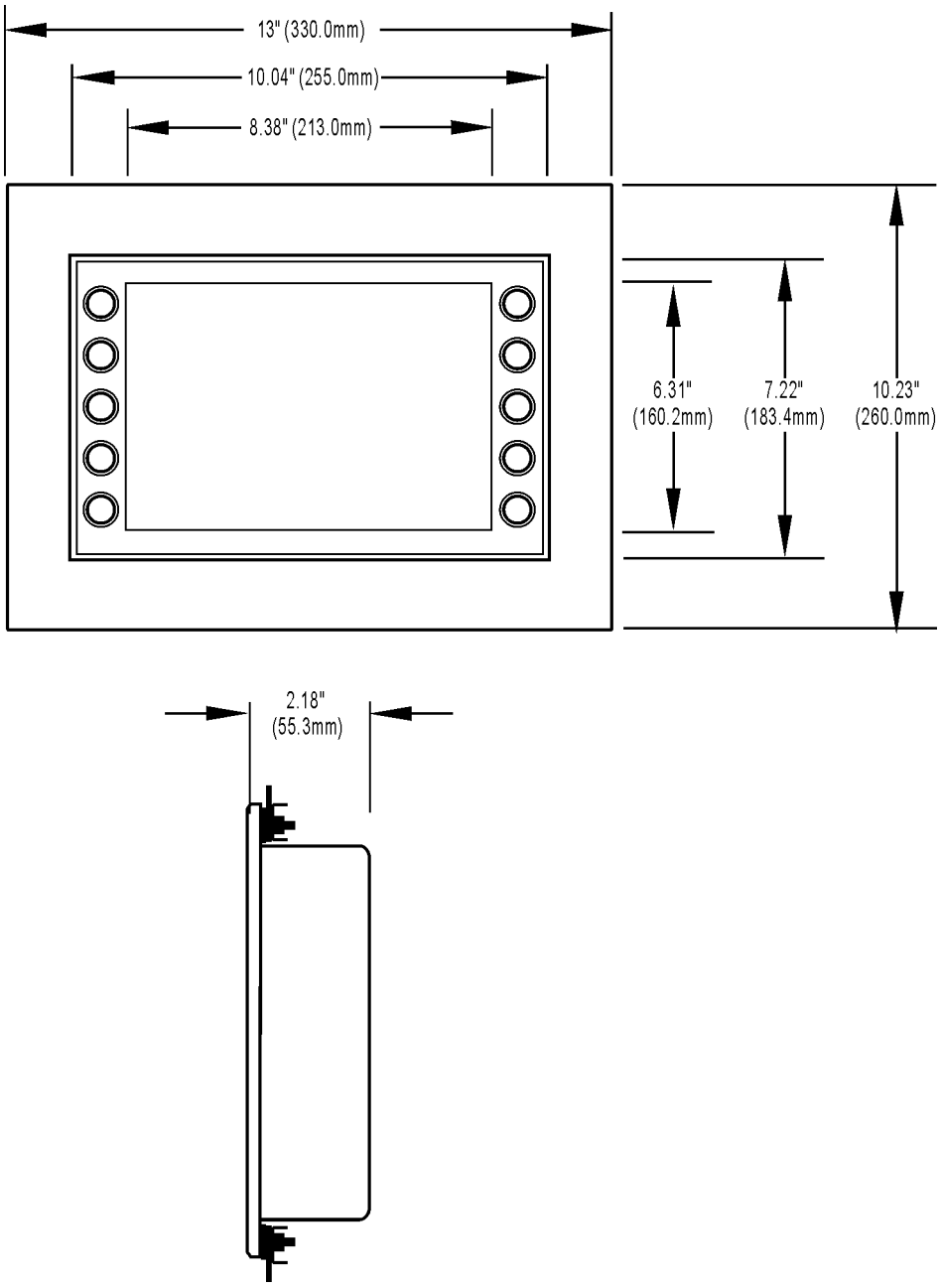
Mounting Bracket

Back

These products are obsolete

MADE IN THE USA

DIMENSIONS—OPTOTERMINAL-G75



More about Opto 22

OPTO 22

PRODUCTS

Opto 22 develops and manufactures reliable, easy-to-use, open standards-based hardware and software products. Industrial automation, process control, remote monitoring, data acquisition, and industrial internet of things (IIoT) applications worldwide all rely on Opto 22.

groov RIO®

groov RIO edge I/O offers a single, compact, PoE-powered industrial package with web-based configuration and IIoT software built in, support for multiple OT and IT protocols, and security features like a device firewall, data encryption, and user account control.

Standing alone, *groov* RIO connects to sensors, equipment, and legacy systems, collecting and securely publishing data from field to cloud. Choose a universal I/O model with thousands of possible field I/O configurations, with or without Ignition from Inductive Automation®, or a RIO EMU energy monitoring unit that reports 64 energy data values from 3-phase loads up to 600 VAC, Delta or Wye.

You can also use *groov* RIO with a Modbus/TCP master or as remote I/O for a *groov* EPIC system.

groov EPIC® System

Opto 22's *groov* Edge Programmable Industrial Controller (EPIC) system gives you industrially hardened control with a flexible Linux®-based processor with gateway functions, guaranteed-for-life I/O, and software for your automation and IIoT applications.

groov EPIC Processor

The heart of the system is the *groov* EPIC processor. It handles a wide range of digital, analog, and serial functions for data collection, remote monitoring, process control, and discrete and hybrid manufacturing.

In addition, the EPIC provides secure data communications among physical assets, control systems, software applications, and online services, both on premises and in the cloud. No industrial PC needed.

Configuring and troubleshooting I/O and networking is easier with the EPIC's integrated high-resolution color touchscreen. Authorized users can manage the system locally on the touchscreen, on a monitor connected via the HDMI or USB ports, or on a PC or mobile device with a web browser.

groov EPIC I/O

groov I/O connects locally to sensors and equipment. Modules have a spring-clamp terminal strip, integrated wireway, swing-away cover, and LEDs indicating module health and discrete channel status. *groov* I/O is hot swappable, UL Hazardous Locations approved, and ATEX compliant.

groov EPIC Software

The *groov* EPIC processor comes ready to run the software you need:

- Programming: Choose flowchart-based PAC Control, CODESYS Development System for IEC61131-3 compliant programs, or secure shell access (SSH) to the Linux OS for custom applications
- Node-RED for creating simple IIoT logic flows from pre-built nodes
- Efficient MQTT data communications with string or Sparkplug data formats
- Multiple OPC UA server options
- HMI: *groov* View to build your own HMI viewable on touchscreen, PCs, and mobile devices; PAC Display for a Windows HMI; Node-RED dashboard UI
- Ignition or Ignition Edge® from Inductive Automation (requires license purchase) with OPC-UA drivers to Allen-Bradley®, Siemens®, and other control systems, and MQTT communications

Older products

From solid state relays, to world-famous G4 and SNAP I/O, to SNAP PAC controllers, older Opto 22 products are still supported and working hard at thousands of installations worldwide. You can count on us for the reliability and service you expect, now and in the future.

QUALITY

Founded in 1974, Opto 22 has established a worldwide reputation for high-quality products. All are made in the U.S.A. at our manufacturing facility in Temecula, California.

Because we test each product twice before it leaves our factory rather than testing a sample of each batch, we can afford to guarantee most solid-state relays and optically isolated I/O modules for life.

FREE PRODUCT SUPPORT

Opto 22's California-based Product Support Group offers free technical support for Opto 22 products from engineers with decades of training and experience. Support is available in English and Spanish by phone or email, Monday–Friday, 7 a.m. to 5 p.m. PST.

Support is always available on our website, including free online training at OptoU, how-to videos, user's guides, the Opto 22 KnowledgeBase, and OptoForums.

PURCHASING OPTO 22 PRODUCTS

Opto 22 products are sold directly and through a worldwide network of distributors, partners, and system integrators. For more information, contact Opto 22 headquarters at **800-321-6786** (toll-free in the U.S. and Canada) or **+1-951-695-3000**, or visit our website at www.opto22.com.

OPTO 22 • www.opto22.com
43044 Business Park Dr. Temecula, CA 92590-3614

SALES • sales@opto22.com
800-321-6786 • 1-951-695-3000

SUPPORT • support@opto22.com
800-835-6786 • 1-951-695-3080

MADE IN THE USA

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