Intellicom
OP6700

- *C-programmable — create a custom user-interface*

- *High-visibility backlit, supertwist 4 x 20 LCD display*

- *10Base-T Ethernet interface connection for networking — program to send e-mail and serve HTML pages or send and receive data via TCP/IP*

- *Fast RS-232 and RS-485 serial ports up to 115,200 bps*

- *8 I/O for control functions*

- *128K SRAM and 512K flash provides for code and data file storage*

- *Self-healing lens is scratch, impact and abrasion resistant*

- *Can be programmed to emulate a serial terminal via Ethernet*

- *Extensive sample programs demonstrate Ethernet applications*

Wall and panel mounting is standard with gasket-fitted bezel and enclosure

The low-cost OP6700 is the only operator interface in its price class with built-in I/O and Ethernet connectivity. Being C-programmable, this intelligent terminal allows OEMs to create a custom operator interface. The Intellicom offers direct connection to a 10Base-T Ethernet network and communicates with serial devices via RS-232 or RS-485.

A high-visibility 4 x 20 character display with backlighting provides excellent character legibility, and a tactile feedback 2 x 6 keypad offers a legend that can be customized.

RS-232 and RS-485 serial ports offer fast communication over both short and long distances. Eight general-purpose I/O provide control functionality. Additional features include flash and SRAM memory and a variable frequency and volume speaker.

The unit is water-resistant when panel mounted using the supplied gasket. Wall mounting is possible using the impact-resistant plastic enclosure.

Programming the OP6700

Programs for the OP6700 are developed using the Dynamic C® Premier software development system described on page 6.
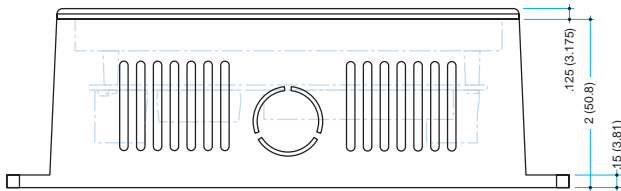
Intellicom Tool Kit

The Intellicom OP6700 Tool Kit includes all the tools needed for fast development: a manual, schematics, demonstration board, AC adapter, programming cable, and screwdriver. International orders do not include the AC adapter unless specifically requested.

Intellicom TCP/IP Capability

TCP/IP source code provided with Dynamic C® Premier includes ICMP, HTTP (includes facilities for SSI, CGI routines, cookies, and basic authentication), SMTP, FTP and TFTP (client and server). Ethernet drivers for the Realtek NE2000 chip are included. OEMs can directly write to TCP or UDP sockets to develop custom applications. No run-time royalties are required, saving OEMs significant cost over the life of their application. Intellicom Ethernet capability includes:

- **Socket-Level TCP** — Transmission Control Protocol. Provides reliable full-duplex data transmission

- **Socket-Level UDP** — User Datagram Protocol. Simple protocol that exchanges datagrams without acknowledgments or guaranteed delivery

- **ICMP** — Internet Control Message Protocol. Network layer Internet protocol that reports errors and provides other information relevant to IP packet processing

- **HTTP** — Hypertext Transfer Protocol. The protocol used by Web browsers and Web servers to transfer files, such as text and graphics files. Includes facilities for Server Side Includes (SSI) and Common Gateway Interface (CGI) routines

- **SMTP** — Simple Mail Transfer Protocol. Internet protocol providing e-mail services

- **FTP** — File Transfer Protocol. Application protocol, part of the TCP/IP protocol stack, used for transferring files between network nodes. Server with password support for file transfers between network nodes

- **TFTP** — Trivial File Transfer Protocol. Simplified version of FTP that allows files to be transferred from one computer to another over a network. Client and server available

Intellicom Enclosure Dimensions

Versions

OP6700 Full-featured terminal (see specifications)

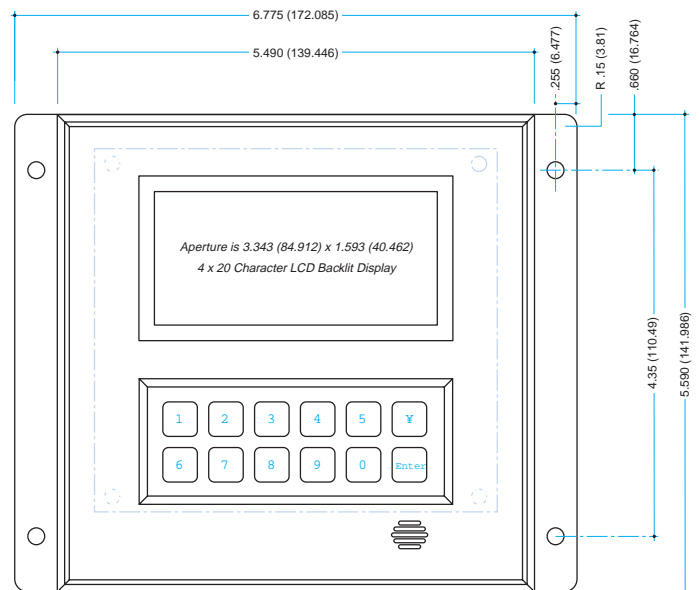**OP6600** OP6700 without Ethernet interface and only 256K flash

Options and Upgrades

Vacuum Fluorescent Display. Factory installed

SRAM. 512K. Factory installed

Intellicom OP6700 Specifications

Board Size	4.7" x 4.3" x 0.8" (119.4 x 109.2 x 20.3 mm)
Enclosure Size	6.7" x 5.5" x 2" (139.7 x 139.7 x 50.8 mm)
Operating Temp.	0°C to 50°C
Humidity	5–95%, non-condensing
Power Requirements	9–40 V DC (12 or 24 V DC nominal)
Input Current	100 mA @ 24 V DC typical (back-lighting on)
Ethernet Interface	Allows direct connection to 10Base-T Ethernet networks. RJ-45 connection
Digital Inputs	4 protected, 0–5 V DC (−36 to +36 V DC max. protection)
Digital Outputs	4 open-collector, sink (40 V DC, 200 mA)
Processor	Rabbit 2000 at 18.432 Mhz
SRAM	128K, surface mount
Flash EPROM	256K for program and data, plus 256K for file storage
Timers	6 timers: five 8-bit and one 10-bit with 2 match registers
Serial Ports	1 RS-232 3-wire port, 1 RS-485 port, and programming port
Baud Rates	Up to 115.2 kb asynchronous for both serial ports
Watchdog/Supervisor	Yes
Time/Date Clock	Yes, real-time
Connectors	15 screw terminals, 1RJ-45, and 1 RJ-12
Backup Battery	3 V lithium coin-type, 165 mA·h
Keypad and LCD	2 x 6 domed tactile keypad with customizable legend. Supertwist 4 x 20 LCD with backlighting
Speaker Output	Software adjustable frequency and volume

Note: Cutout dimensions for panel bezel mount are 5.125" x 5.125"