

OpenCLIENT™ Industrial Windows® Terminals and Nodes

DS-370040(F)



FEATURES

- Enabled by ACP ThinManager™ (ThinManager sold separately)
- 8.4" & 10.4" color flat panel display terminals or non-integrated display nodes
- Reprogrammable keypad or analog resistive touchscreen
- Built-in PCI 10/100 BaseT Ethernet
- PC/104 expansion up to two standard cards (only one on 1300 models)
- NS Geode GX1 300 MHz processors
- 128 MB DRAM
- Parallel, RS-232 and RS-485, PS/2 mouse and keyboard, and VGA ports
- NEMA 4/4X/12 front panel (units with integrated displays)
- UL listed for hazardous locations: Class I, Division 2, Groups A, B, C, D (1401, 1300HAZ - not 1300 non-HAZ models, 33XX); Class II Division 2, Groups F and G (33XX)

OpenCLIENT™ Terminals & Nodes are industrially hardened platforms used for terminal server network applications. OpenCLIENT™ terminals are designed to support ACP's ThinManager server software. Several OpenCLIENT™ models are available based on your screen size and resolution requirements.

Each OpenCLIENT™ runs what looks like a full Windows operating system. The server runs a standard version of a Microsoft® operating system designed for thin clients (Windows® NT Server, Windows® 2000 Server, or Windows® 2003 Server) that allows users to log in and establish a full Windows® session running on the server. Multiple users

can repeat this process concurrently many times. Each user gets a dedicated share of memory and access to the server's applications.

When an OpenCLIENT™ terminal is powered up it logs on to the server just as a terminal would log on to a mainframe. In addition to giving the client access to its resources, the server also creates a virtual display, which is transferred to the OpenCLIENT™ terminal via an Ethernet link. The OpenCLIENT™ also takes input from the user (via the keypad, keyboard, mouse, or touchscreen) and sends it back to the server over the same link. This allows a user to control the Windows® session as if it were running locally.

While it appears that the control screens are running locally, they are actually running on the server in the climate controlled IT department. The client's session is configured just like any Windows session - the operator can either see a standard Windows screen (with the Internet Explorer icon, the Recycle Bin, the Start Menu, etc.) or a "locked down" version with limited functionality. For dedicated lines running an HMI or SCADA package, the session is usually set to start up with the HMI display exclusively.



Reduced Maintenance Costs

Because all programs are centrally stored in the server, you can simply upgrade to the latest version of software, make any changes needed to the screens (one time, on the server) and every client in the factory is running the latest code with the updated screens.

The OpenCLIENT™ is a solid, rugged piece of equipment, with no moving parts of any kind, greatly increasing its MTBF. If the device is accidentally destroyed however, the program continues to run on the server and the application data is unaffected. To replace a damaged unit, the operator plugs in a replacement OpenCLIENT™ and turns it on. Once the client boots, it displays the same screen as the previous client. OpenCLIENT™s can be powered down and back up at any time without the risk of data loss or damage to the disk directory structure.

Enhanced Security

If an operator powers down a traditional PC while it is running there is a good chance that it will go through a disk checking procedure at startup. At that time it can be halted or restarted to gain control. A malicious operator could insert a boot disk and restart the PC to add his own programs, or worse enter setup mode during the power-up sequence. The OpenCLIENT™ avoids both of these weaknesses. It has no disk drives and does not go through the traditional PC power-up sequence.

Simplified Fault Tolerance

If a plant using individual Industrial PCs is really concerned with redundancy or fault tolerance, they must invest money to add special features to every PC in their plant. With a thin client system the IT department simply makes the server redundant and all clients linked to that server become redundant as well.

Thin Client Management Software

ThinManager™ software is as easy to read as it is to use. Administrators can simply glance at the management screen and see which terminals are online. They can create a new terminal, or replace a damaged terminal. With ThinManager™s "Default" and "AutoCreate" features, any terminal that has not been booted from that server before can be automatically

created and logged in using the parameters of the Default terminal. Clients can therefore be replaced and added directly from the floor without visiting the server. Clients at different locations frequently have different functions, requiring different configurations. If an OpenCLIENT™ must be reconfigured, the system administrator can restart it from the management interface. Since the client's software is running on the server, this will not affect the operation of any applications that are being displayed on the client.

OpenCLIENT™ terminals running the same application may have similar characteristics. In this case, terminals can be grouped together to provide a visually useful method of checking on the status of all of the clients in that group. Terminals added to the group will inherit all of the group's settings. Grouping terminals also makes it easy to apply configuration changes to every member of the group.

Special Features for Industrial Applications

OpenCLIENT™ workstations also support industry specific protocols including DeviceNet, Profibus and high-speed serial ports. The ThinManager™ software will detect the OpenCLIENT™s model number and build a basic set of modules to support its features. Settings are saved in a file on the server so wherever these OpenCLIENT™ terminals are installed they will always receive the correct software during boot up.

Flat Panel Monitor Connectivity

OpenCLIENT™ Nodes (1300 and 1401 models) support connectivity to Xycom Flat Panel Monitors creating a complete industrial solution.



Consult www.xycom.com or contact your local Xycom representative for more details on available monitors.

LIGHT-DUTY 1300 PRODUCT CONFIGURATION



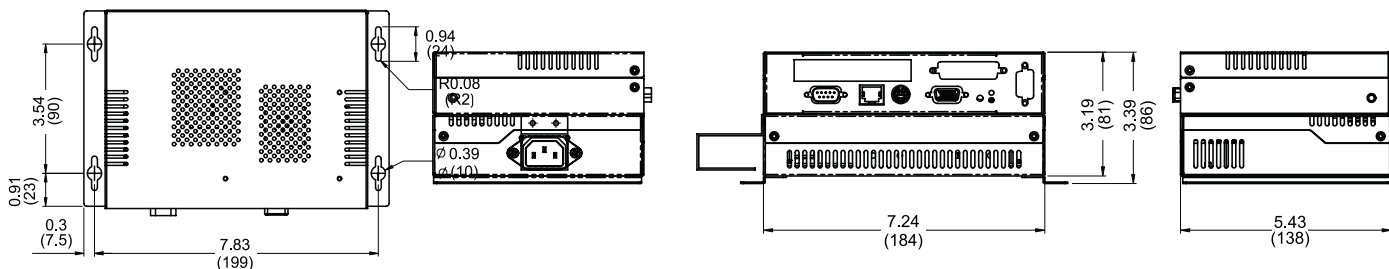
Model	1300 Node
Processor	NS Geode GX1300 MHz
System RAM	128 MB
Integrated Video Connector	
Supports:	VGA (640 x 480) SVGA (800 x 600) XGA (1024 x 768) SXGA (1280 x 1024, 256 colors max)
Ethernet	Built-in 10/100 BaseT
Expansion	PC/104 expansion (1 card only)

LIGHT-DUTY 1300HAZ PRODUCT CONFIGURATION



Model	1300HAZ Node
Processor	NS Geode GX1300 MHz
System RAM	128 MB
Integrated Video Connector	
Supports:	VGA (640 x 480) SVGA (800 x 600) XGA (1024 x 768) SXGA (1280 x 1024, 256 colors max)
Ethernet	Built-in 10/100 BaseT
Expansion	PC/104 expansion (1 card only)

1300 and 1300HAZ Product Dimensions



All dimensions are in inches [millimeters]

HEAVY-DUTY 1401 "NODE" CONFIGURATION



Model	1401 Node
Processor	NS Geode GX1 5x86 300 MHz
System Ram	128 MB
Integrated Video Connector	
Supports:	VGA (640 x 480) SVGA (800 x 600) XGA (1024 x 768) SXGA (1280 x 1024)
Ethernet	Built-in 10/100 BaseT
Expansion	PC/104 expansion (up to two cards)

For further product details, consult the 1401 datasheet available at www.xycom.com

3300 PRODUCT CONFIGURATIONS



Model	3308KP	3308T
Display	8.4" flat panel color display, 640 x 480 (VGA)	8.4" flat panel color display, 640 x 480 (VGA)
Operator Input	51-position keypad	Analog resistive touchscreen
Processor	NS Geode GX1 300 MHz	NS Geode GX1 300 MHz
System RAM	128 MB	128 MB
Ethernet	Built-in 10/100 BaseT	Built-in 10/100 BaseT
Expansion	PC/104 expansion (up to two cards)	PC/104 expansion (up to two cards)

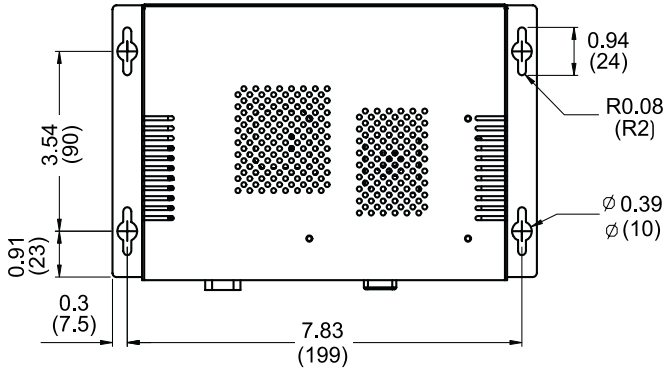


Model	3310KP(T)	3310T
Display	10.4" flat panel color display, 640 x 480 (VGA)	10.4" flat panel color display, 640 x 480 (VGA)
Operator Input	63-position keypad (touchscreen option)	Analog resistive touchscreen
Processor	NS Geode GX1 300 MHz	NS Geode GX1 300 MHz
System RAM	128 MB	128 MB
Ethernet	Built-in 10/100 BaseT	Built-in 10/100 BaseT
Expansion	PC/104 expansion (up to two cards)	PC/104 expansion (up to two cards)

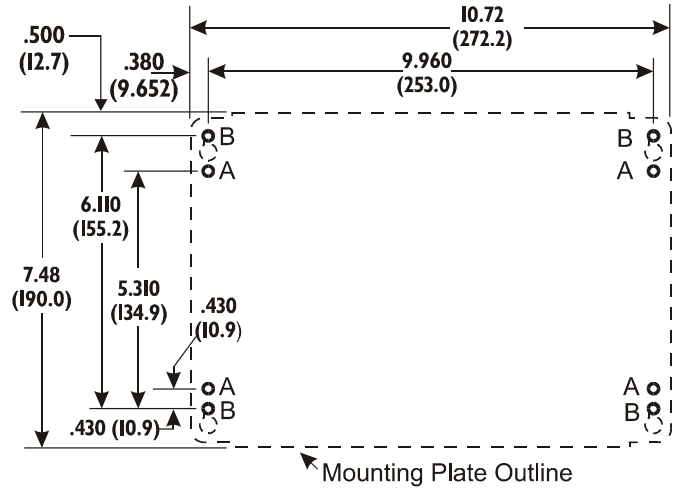
For further product details, consult the 3300 datasheet available at www.xycom.com

CUTOUTS & MOUNTING DIMENSIONS

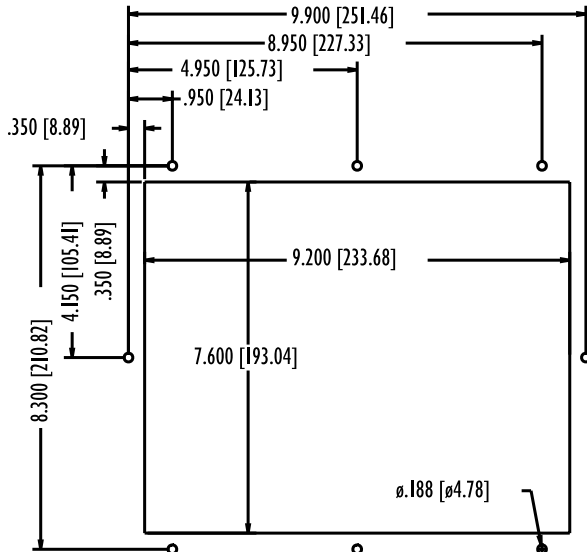
1300 & 1300HAZ



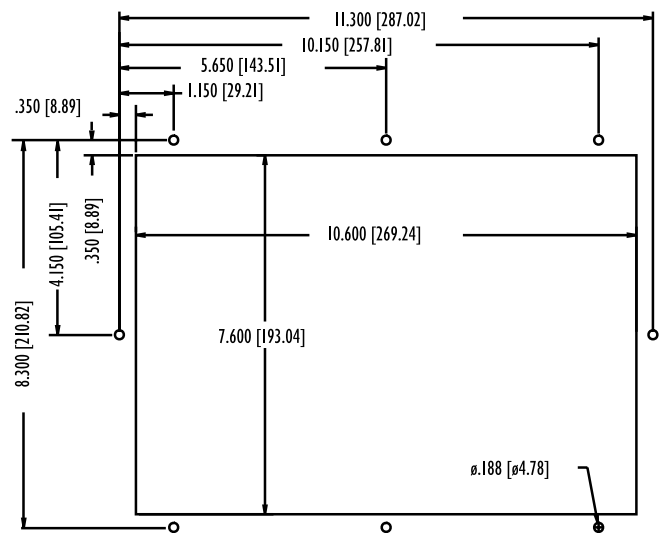
1401



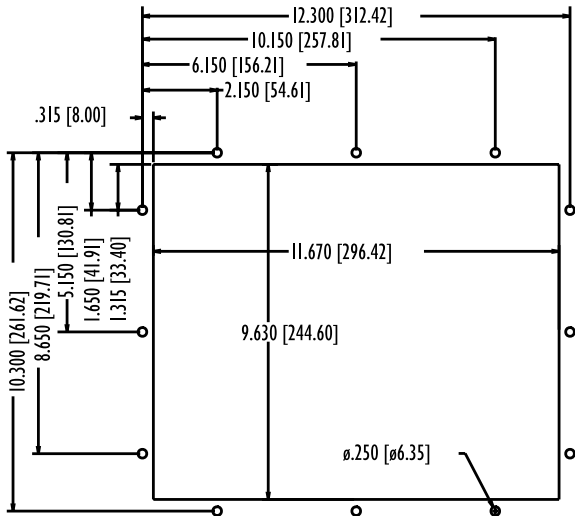
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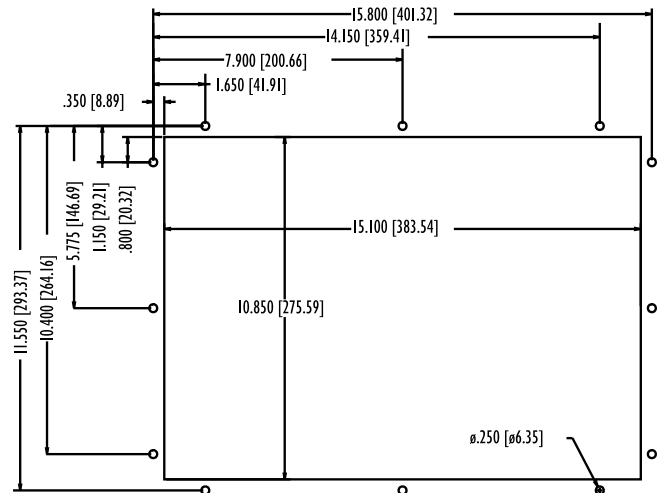
3308KP



3310T



3310KP(T)



All dimensions are in inches [millimeters]

PRODUCT SPECIFICATIONS AND RATINGS

Environmental

	Operating	Nonoperating
Thermal	0°C to 50°C	-20°C to 60°C
Humidity	20% to 80% RH, noncondensing	20% to 80% RH, noncondensing
Shock^a	15g peak acceleration, 11 msec duration	30g peak acceleration, 11 msec duration
Vibration	.006" peak to peak displacement	.015" peak to peak displacement
5-2000 Hz^a	1.0g maximum acceleration	2.5g maximum acceleration
Altitude^b	Sea level to 10,000 ft.	Sea level to 40,000 ft.

^aThese values are with solid state hard drives and not rotating media drives.

^bConsistent with internal component specifications.

Electrical

	1300 & 1300HAZ	1401	3308	3310
Power Supply	55 Watt power	40 Watt power	40 Watt power	40 Watt power
AC Power	100-240V AC wide ranging, 50/60 Hz, 0.5 A (maximum) 21 W nominal ^c	100-240V AC wide ranging, 50/60 Hz, 1 A (maximum) 22 W nominal ^c	100-240V AC wide ranging, 50/60 Hz, 1 A (maximum) 22 W nominal ^c	100-240V AC wide ranging, 50/60 Hz, 1 A (maximum) 24 W nominal ^c
DC Power	18-32V DC, 24V nominal 0.9 A (max) 21 W nominal ^c	18-30V DC, 24V nominal 3.6 A (max) 22 W nominal ^c	18-30V DC, 24V nominal 3.6 A (max) 22 W nominal ^c	18-30V DC, 24V nominal 3.6 A (max) 24 W nominal ^c

^c Nominal Power is measured for a base configuration only. Any additional expansion and/or devices will increase the input power required.

Regulatory Compliance

CE:

- EN 55022, Class A
- EN 61000-6-2
- EN 61000-3-2, Class A
- EN 61000-3-3
- IEC 60950-1

FCC:

- 47 CFR, Part 15, Class A

Front Panel

- NEMA 4/4X/12 IP65 (units with integrated displays)

Safety Agency Approvals

	1300	1300HAZ	1401	3300
UL	UL 508 Listed	UL 508 Listed UL 1604 Listed ^d	UL 508 Listed UL 1604 Listed ^d	UL 508 Listed UL 1604 Listed ^e
cUL	CSA-C22.2, #142 Listed	CSA-C22.2, #142 Listed CSA-C22.2, #213 Listed ^d	CSA-C22.2, #142 Listed CSA-C22.2, #213 Listed ^d	CSA-C22.2, #142 Listed CSA-C22.2, #213 Listed ^e
Temp. Code T6		T6	T4A	T4A

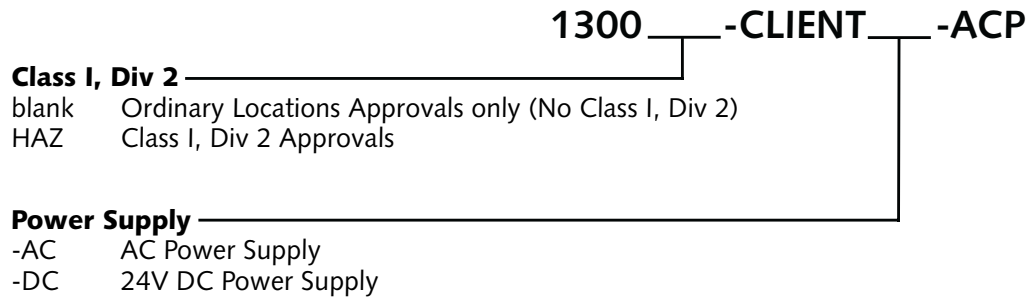
^d Class I Division 2, Groups A, B, C, D.

^e Class I Division 2, Groups A, B, C, D; Class II, Division 2, Groups F and G.

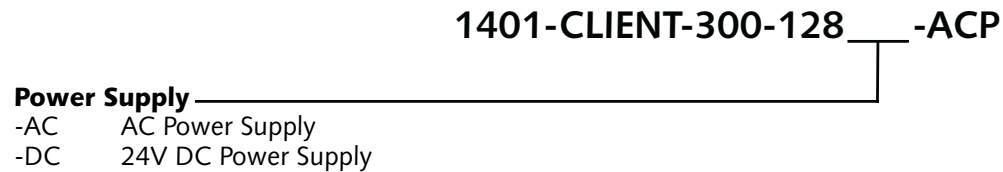
ORDERING INFORMATION

To create an order number, follow the conventions defined by the example order numbers and product configurations.

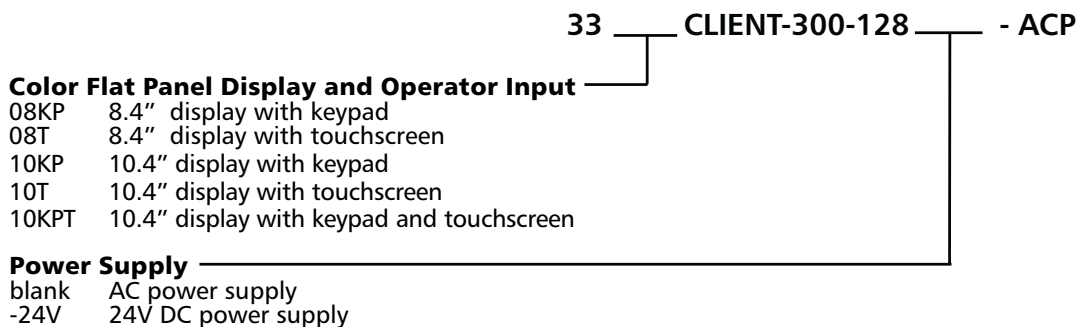
Example Order Number	Description
1300-CLIENT-AC-ACP	OpenCLIENT 1300 Industrial ThinCLIENT Node with 128 MB SDRAM.



Example Order Number	Description
1401-CLIENT-300-128-ACP	OpenCLIENT 1400 Industrial ThinCLIENT Node with 128 MB DRAM.



Example Order Number	Description
3308T-CLIENT-300-128-ACP	OpenCLIENT Terminal with 8.4" color display, analog resistive touchscreen, 128 MB RAM.



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Fax: 734-429-1010
<http://www.xycom.com>

Customer Support Hotline:
734-944-0482



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