

## Introduction

The Simplex® TrueSite Workstation (TSW) is a next-generation platform that manages an entire fire and life safety network from a single location. This computer-based graphical command center features centralized network annunciation, historical logging, report generation, and control of fire alarm network points.

## Features



Figure 1: TSW desktop application

- Graphical interface control that is connected to Simplex fire alarm networks, compatible with Simplex ES Net and 4120 networks.
- Color graphical annunciation and control capacity for up to 250,000 ES Net network points or up to 100,000 4120 network points. See [ES Net software compatibility](#) and [4120 network software compatibility](#) for additional details.
- You can use an optional interface with a Digital Alarm Communicator Receiver (DACR) to integrate multiple systems onto a single workstation.
- You can access new software features and cyber security and compatibility updates, with the Software Maintenance Agreement (SMA). The first year is included in the new system with an option to renew.
- You can use test mode to test selective devices without nuisance interruptions at the operator workstation.
- You can vector information to supervised remote clients. Select by point, event category, panel, or custom list.

### Graphic interface features

- You can display standard fire service annunciation icons to provide firefighters and first responders with critical fire response information.
- You can display custom alarm and system messages to guide emergency responders. These messages can quickly present important information, such as HAZMAT locations and contact information.
- You can choose between floatable windows or fixed dockable windows.
- With quad monitor support, you can use multiple active windows. Run separate client or server instances on individual monitors with up to four total supported monitors.
- You can use pan-and-zoom features to navigate to an area of the screen.
- You can configure coverage zones to indicate an area of activity without zooming.
- You can use auto-jump to display a graphic at a custom zoom level with the active device centered on the screen. Alternately, you can select the system to auto-jump to the Alarm List window.
- You can display Fahrenheit or Celsius temperatures for screens that show heat sensor temperatures.
- With the web browser command link, you can call up an external web page or link, such as a webcam, with a single command button on a graphic screen.

## Compatibility features

- The server and clients are compatible with Windows® 10 Professional or Enterprise, 32-bit, and 64-bit. Clients are also compatible with Windows 10 Home, 32-bit and 64-bit.
- You can use captive or non-captive modes. Captive mode supports dedicated workstation operation. Non-captive mode supports workstation operation with other Windows applications, such as word processing and spreadsheets, where workstation activity takes precedence.
- You can use a third-party interface open-architecture solution to provide enhanced information access for advanced users.
- You can use the TrueSite Workstation mobile client to access system information with compatible iOS and Android devices.
- Optional connections for printers or other compatible systems are available.
- You can easily export TSW data for report generation and customization with the Export to XML feature.
- You can use email generation to send updates to individuals or to distribution lists with selectable content.
- You can use WAV sound files to create custom audible status annunciation with local onboard speakers.

## Network features

- Multiple TCP/IP, LAN/WAN connections are available. You can connect up to 20 remote clients on a 4120 network or 60 remote clients on an ES Net network to the server for multiple remote users. With dedicated and listed fire alarm LAN equipment, listed remote clients can have control access.
- A network time protocol (NTP) time server for highly accurate time synchronization across your network.

## Logging features

- Extensive historical logging with up to 500,000 events with operator notations. The logging information is compatible with spreadsheets and databases.
- You can filter historical logs with the DACR account filter.
- Operators can log operator notes associated with individual events for historical records and retrieval.

## Backup features

- With RAID 1 support, you can generate a real-time mirror image on a secondary hard drive for enhanced life-safety workstation survivability. The operation automatically transitions to the alternate drive in the event of a drive failure without loss of operation. RAID support is available to systems that do not use the Backup Utility.
- You can configure the Backup Utility to automatically back up specified directories, including TSW job data, to the secondary hard drive. The Backup Utility is available to systems that do not use RAID.

## Security features

- Multiple password-controlled operator levels with selectable feature access.
- Password security supports 8 to 16 alphanumeric passwords with configurable lockout for failed attempts.

## Graphic screens details

- Over 30,000 custom fields, and generated and edited graphic screen capacity is available.
- Multiple import and export formats are supported. See the supported graphics formats section in [Graphics screens](#).

## Additional fire alarm network features

- Multiple workstations can be nodes on the same fire alarm network to provide redundant operations for improved survivability.
- You can connect to up to seven separate network loops.
- You can use graphical diagnostic tools to identify network node and loop status.
- With Set-Host functions you can access remote network node data including individual TrueAlarm analog sensors.
- With compatible printers, you can print events. You can view or print status and service reports, TrueAlert Self-Test reports, and graphic screens.
- Compatible with Information Management Systems (IMS) and Graphic Command Center (GCC) on the same fire alarm network.
- With the 2120 Multiplex Serial Line Interface (SLI), you can connect to up to eight 2120 Multiplex systems.
- Compatible with Connected Services Gateway.

## Selectable computer and monitor options

- Computers are available as desktop or rack mount with mouse or touchscreen operation.
- The desktop LCD widescreen, high-resolution, anti-glare monitors are 24 in. class, 23.8 in. (604 mm) diagonal. They support HDMI and are available with or without touchscreen.
- The wall-mount LCD widescreen, high-resolution monitors are 42 in. (1067 mm) diagonal. They are 1920 pixels x 1200 pixels resolution and are available with or without touchscreen.
- The rack-mount LCD high-resolution monitors are 19 in. class 18.5 in. (470 mm) diagonal. They are 1366 pixels x 768 pixels resolution and have a touchscreen.

**Note:** See [TrueSite Workstation equipment specifications](#) for monitor mounting details.

## Agency listings

- UL 864 as Fire Alarm Control Unit Annunciator (UOXX.S771)
- UL 864 as Fire Alarm Proprietary Supervising Station Control Unit (UQJZ.S771)
- UL 864 as Firefighter Smoke Control Station (UUKL.S771)
- UL 2610 as a Commercial Premises Security Alarm Unit (AMQE.S771)
- UL 2572 as Mass Notification System Supervising Station Control Unit (PGWM.S771, PGWM.S232), see [Fire smoke control station reference](#) for details.
- ULC-S527 as Fire Alarm Control Unit Annunciator (UOXX7.S771)
- ULC-S527, Commercial Supervising Control Unit (UQJZ7.S771)
- ULC/ORD-C100, Smoke Control System Equipment for Canada (UUKL7.S771)
- ULC/ORD-C1076, Proprietary Alarm System Annunciator (APOU7.S771)
- ULC-S559, Central Station Fire Alarm System Receiving Station (DAYR7.S771)

## Description

### Network annunciation

TrueSite Workstations feature annunciation, status display, and control for Simplex Fire Alarm Networks with a computer based graphical interface that has a high-resolution, color display. Response buttons with realistic icons provide control switches specific to the operation being performed.

### Remote clients

For remote viewing of TSW Server information, you can use TCP/IP LAN/WAN Ethernet communications to connect remote clients. Remote

clients can be annunciation only, or capable of system control when configured with agency-listed hardware.

### DACR compatible

For systems that require information from remote control units through Digital Alarm Communicator Transmitters (DACTs), equip the workstations to communicate directly with a compatible DACR. Refer to *TrueSite Digital Alarm Communicator Receiver (DACR) Interface Option (S4190-0028)* for details.

## Password control

### Multiple access levels

An operator's logon credentials determine their access level. You can select the access level to match the training and responsibility of the operator. Operators with additional TrueSite Workstation and fire alarm network training may be qualified for access to sensitive areas. For operators who are primarily concerned with immediate facility security, a lower access level provides the information necessary for proper response, but they cannot access key parameters that determine overall system or network operation.

## Network diagnostics

### Graphical network status views

You can use automatic, built-in diagnostics for graphical views of network topology and network status. These views clearly indicate missing communications links due to wiring breaks or shorts and inactive network nodes to guide you to return the system to normal. Use the information screens to see details about each specific network node. The graphical views display network level functions, such as timekeeper node and monitor node, and identify the node used for the diagnostic.

## Individual point service access

### Qualified operator access

You can use the workstation operator's interface for service-level access to network information that is not normally public. To access private point information for the network, use the Set-Host feature and log on to the database of the network and node. With this operation, qualified service personnel with the correct password access can access and control individual point information when required.

## Multiple network connections

When extensive network expansion or interconnection of existing separate networks is required, you can connect up to seven network loops in any combination of ES Net and 4120 network loops to the TrueSite Workstation. Each network loop is connected to its own network interface module so that the workstation can appear as a node in each individual loop.

With a multi-loop network connection, the TrueSite Workstation is a node member of each network loop, with up to 98 additional nodes for each loop. You can interconnect up to 689 total nodes and the TrueSite Workstation Server, 687 in total.

## Multi-loop operation features

### Improved survivability

- Individual network loops operate independently.
- In the event of loss of one or more loops, the remaining loops continue to operate.

### Loop independence

- You can add new loops without impacting existing loops.

### Assists with phased-in system expansion

- You can install each loop as a stand-alone network, so that local node programming can evolve as required.
- When construction or renovation reaches completion, you can combine loops for coordinated facility protection .

### Multi-Loop requirements

- Each loop requires a dedicated network interface card (NIC).
- Supports a maximum of up to seven network loops in any combination of ES Net and 4120 network loops.

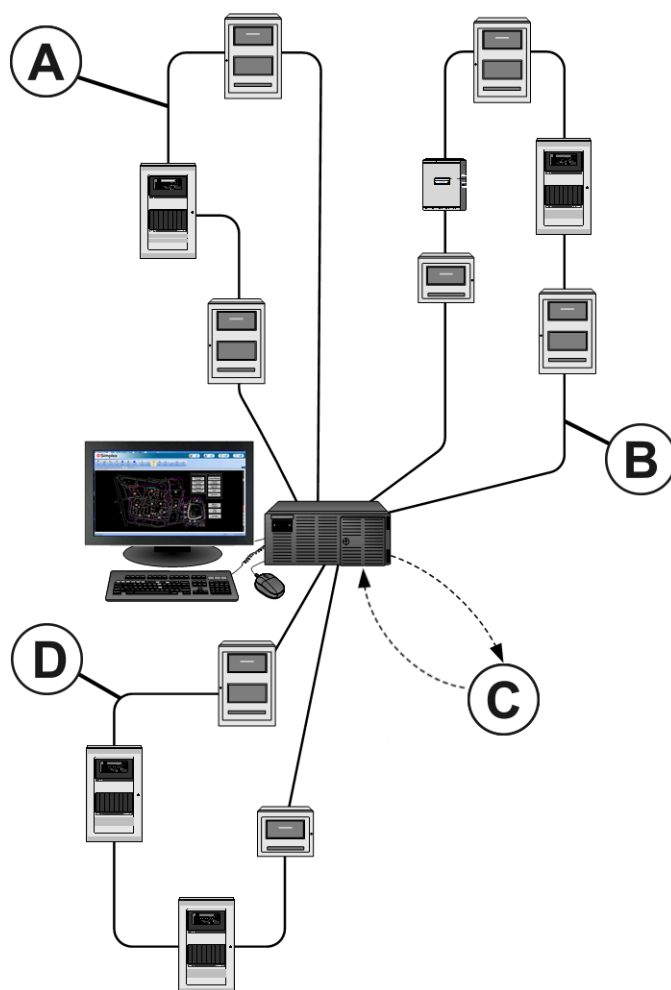


Figure 2: Typical interface of multiple network loops that use a TrueSite Workstation Server

Callout	Description	Callout	Description
A	4120 network loop 2	C	Additional network loop connections. Up to 7 loops for a network, use any combination of ES Net and 4120 network loops.
B	4120 network loop 3	D	ES Net network loop 1

**Note:** For further information regarding multi-loop or multi-topology support, refer to *ES Net Network Applications, Communications, Options and Specifications (S4100-0076)*.

## ES Net software compatibility

ES Net product compatibility with TrueSite Workstation requires the following software versions:

**Table 1: ES Net software requirements**

Software	Required software version
Network Programmer	2.04 or later
ES Programmer	6.01 or later
TrueSite Workstation	6.01 or later
TrueSite Incident Commander	6.01 or later

**Table 2: ES Net firmware requirements**

Component	Required firmware version
4100ES control unit	6.01 or later
4010ES control unit	6.01 or later
4007ES control unit	6.01 or later
ES Net NIC Application	1.04
ES Net NIC EOS	1.04

### Notes:

1. TSW 250,000 ES Net Network point capacity requires TSW Version 6.01 or later, and ES control units at Version 5.03 or later.
2. TSW supports up to 250,000 points from ES series control units on ES Net networks or DACR points only. A maximum of 100,000 points is supported from 4120 networks.
3. Where TSW supports both ES Net and 4120 network loops, the following maximum TSW point capacities apply:
  - i. Up to 250,000 ES Network Points and DACR points combined.
  - ii. Up to 100,000 4120 network points. See notes in [4120 network software compatibility](#) for additional information.
  - iii. The combination of ES Net, DACR, and 4120 points cannot exceed 250,000 TSW points total.

## TrueSite Workstation operation

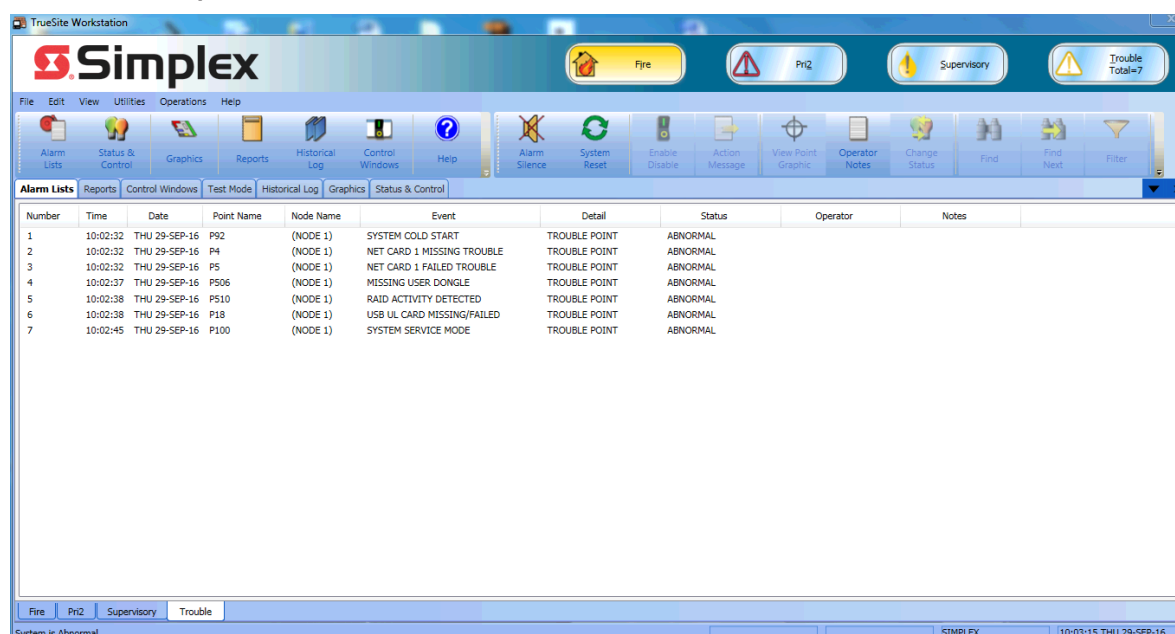


Figure 3: TrueSite Workstation sample alarm lists screen

### Operation

When fire alarm network status changes occur, the screen displays the type and location of the alarm, or other activity, and the appropriate header buttons appear. In the historical log screen in Figure 3, the Fire, Priority 2, Supervisory, and Trouble buttons appear with an active Trouble indicated.

### Sample screens

Figure 3 shows the details of the historical log screen. You can configure screen choices in accordance with your system preference. When operators use multiple optional monitors, they can view multiple windows simultaneously for convenience.

### Ease of operation

With touchscreen monitors, the operator touches the screen area that is in alarm, or uses the mouse, to access a more detailed view of the alarmed zone or device. With the proper password access, the operator can acknowledge alarm and trouble conditions, activate signal silence, and perform a system reset directly from the workstation screens.

### Programmable activity timeout

With programmable activity timeout, an unattended monitor reverts to the log on screen when the configured time period expires.

### Individual user preferences

The individual user preferences in the following table appear when the user logs on.

Table 3: Individual user preferences

Preference category	Options
Font size	Default or large
Toolbar size	Small or large
Interface theme	MS Office 2003 or system theme
Floating window options	Select to show Menu bar or show Tool bar

### Historical log and list details

The display format is similar to the display for active list items such as the alarm list, see Figure 3. You can sort the displayed information on-screen by each category shown. For example, number, time, date, and point name. You can review list information on the screen, print it at a local or remote system printer, or write to an electronic file for compatibility with spreadsheet and database programs.

### Customized response

You can add custom alarm and trouble messages and edit them in the field to provide operator response assistance. You can select point-specific information, such as hazardous material storage and lists of people to notify, to display automatically or selectively.

## Graphics screens

### Site and floor plan details

You can use the graphics screens to view site plan and floor plan information. You can customize the level of detail for the specific facility to accurately direct the operator to the immediate area of interest.

## Graphic screen controls

The graphics portion of the screen is shown as a main screen but you can set it to float and move the graphics portion to another monitor. You can add icons to identify the location and type of the device of interest, and use the graphics control toolbar, located at the top of the graphic, to pan and zoom for more precise detail. You can add programmable coverage zones with selectable area and zoom level. You can add a fixed area site plan or key plan, with action buttons and a screen locator as in Figure 4. A green rectangle in the key plan tracks pan and zoom.

## Custom banner and main screen background

You can customize the banner area shown with a Simplex logo. The bitmap area is 2250 pixels x 68 pixels. You can customize the main screen background, that is viewable before you log on, with a bitmap file of up to 1000 pixels x 525 pixels.

## Action messages

In addition to screen text or graphic information, the operator can receive specific action messages that provide emergency response information and directions. You can easily edit these action messages in the field for local requirements. The appropriate action message in the screen shown in Figure 4 would appear in the acknowledge dialog box.

## Auto-jump to graphics or alarm list

Select whether an activity causes a jump to a list format or to the associated graphic screen.

## Supported graphics formats

- DWG import formats: AutoCAD R9, 10, 11-12, 13, 14, 2000-2002, 2004-2006, 2007-2009, 2010-2011
- DXF import formats: AutoCAD R14 and 2000
- Export formats: AutoCAD 2000 DWG/DXF format, for editing in AutoCAD 2000 or later
- Import drawing files: DWG, WGS, IMS/GCC DOC files, WMF, BMP, GIF, and JPG

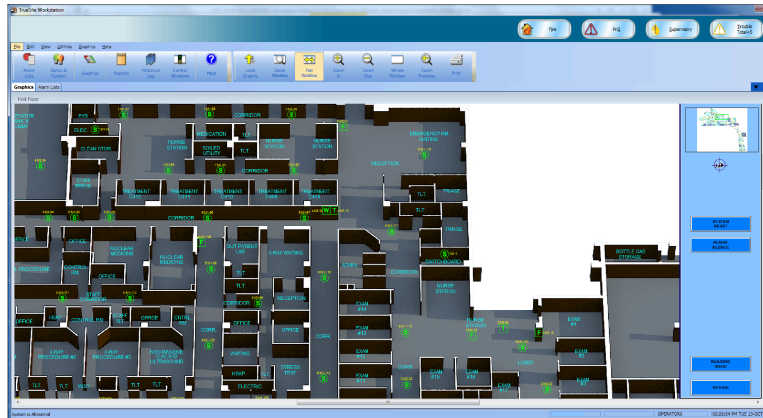


Figure 4: TrueSite Workstation sample 3D graphic screen

## Product selection

See the following tables for information and order numbers for TSW software and hardware products.

**Note:** Equipment and specifications may vary due to equipment design changes.

**Table 4: Hardware product selection**

Category	Model	Description
<b>Hardware Systems</b> Select as required, see notes	4190-8401	<b>TrueSite Workstation Annunciator</b> <b>Listings</b> For use as an Annunciator under the following listings: <ul style="list-style-type: none"> <li>UL 864 and ULC-S527 Control Units and Accessories for Fire Alarm Systems</li> <li>UL 2572 Control and Communication Units for Mass Notification Systems; UL 2610 as a Commercial Premises Security Alarm Unit (AMQE.S771)</li> </ul> Also for use as UL 864 UUKL Firefighter Smoke Control Station
		<b>TrueSite Workstation Supervising Station Control Unit</b> <b>Listings</b> For use as a Supervising Station Control Unit under UL 864. Reports and logs events. If an optional event printer is required, see Table 18 for printer information. Also for use as UL 2572 Supervising Station Control Unit for Mass Notification Systems, and UL 2610 as a Commercial Premises Security Alarm Unit (AMQE.S771) with listed DACR. Refer to <i>TrueSite Digital Alarm Communicator Receiver (DACR) Interface Option (S4190-0028)</i> for compatibility.
	4190-8410	<b>TrueSite Workstation Remote Client</b> Agency-listed control capability requires supervision and connection to a dedicated Fire Alarm LAN. <b>Note:</b> The TrueSite Workstation PC has two Ethernet ports. On ES Net networks, the ES Net NIC connection uses one Ethernet port. This leaves one Ethernet port available for a connection to either an agency-listed, dedicated, Fire Alarm LAN, or a customer's LAN, but not both. Refer to <i>Fire Alarm Network Annunciators; Fire Alarm Ethernet Switches (S4190-0018)</i> for additional information on fire alarm network Ethernet switches. <b>Listings</b> For use as an Annunciator under UL 864 and ULC-S527 Control Units and Accessories for Fire Alarm Systems.

### Notes:

- Requires selection of computer, monitor, and software from Table 5, Table 6, and Table 7.
- LAN/WAN connections require use of Transient Suppressor 4190-6010, see Table 8 for details.
- A UL-1481 Listed uninterruptible power supply (UPS) is required for secondary power in accordance with UL and ULC requirements.
- ULC listing also requires the use of a 4190-6058 Mechanical Protection Kit, ordered separately.

**Table 5: Computer product selection**

Category	Model	Description
<b>Computer type</b> Select one as required	4190-7041 4190-7043	Desktop Computer with Intel® i7 6th Gen, 3.4 GHz CPU, 8 MB Cache, 8 GB RAM, a minimum of two 1 TB Hard Drives, USB ULIO card, DVD R/W, audio in, audio out, and line in, on board video, one DVI port, two RS-232 Serial ports, seven USB ports, two RJ-45 Gigabit LAN ports. Passive backplane with eight PCI, three PCIe x 1, and one PCIe x 16 slot, USB keyboard and mouse, and charcoal grey housing. Computers come pre-installed with Windows 10 Enterprise 64 bit, including software package and license, and TrueSite Workstation software. Configure 4190-7041 with a file Backup utility and no RAID controller. Configure 4190-7043 with RAID 1 data mirroring and no file Backup utility.
<b>Mechanical protection, conduit entry kit</b>	4190-6058	The kit includes provisions for conduit connections and compliance with ULC mechanical protection requirements on all ULC listed TSW Desktop computers. The kit includes the following items: a rear bracket enclosure with conduit knockouts for all field wiring, rear access plates for routing the USB mouse, USB keyboard, monitor connections, a top access plate for access to all rear PC connections, and six USB retaining clips to secure USB device connections to the rear of the PC.
<b>USB Ethernet adapter</b>	4190-6059	USB 3.0 to Gigabit Ethernet NIC Network Adapter. With this, an additional RJ45 Ethernet port that uses available USB ports on TSW Desktop PCs can connect to an ES Net NIC card or to a building network.



**Table 5: Computer product selection**

Category	Model	Description
<b>Fire alarm Ethernet switch</b>	4190-6050	Fire alarm Ethernet switch with eight wired Ethernet connections, 24 VDC, red cabinet, with earth detection on wired connections UL 864 and ULC S527.  <b>Note:</b> Each server and client LAN connection requires a 4190-6010 Transient Suppressor, except for server to client connections when both are in the same room. See Table 8 for suppressor details. You must use a listed fire alarm power supply to provide Ethernet switch power. See datasheet <i>Fire Alarm Network Annunciators; Fire Alarm Ethernet Switches (S4190-0018)</i> for more information.
	4190-6054	Fire alarm Ethernet switch with four wired Ethernet connections and two single-mode fiber optic connections, 24 VDC, red cabinet. With Earth Detection on wired connections UL 864 and ULC S527.
	4190-6055	Fire alarm Ethernet switch with four wired Ethernet connections and two multimode fiber optic connections, 24 VDC, red cabinet. With earth detection on wired connections UL 864 and ULC S527.
<b>Note:</b> Equipment and specifications may vary due to equipment design changes.		

**Table 6: LCD color monitor product selection**

Model	Size (Diagonal)	Description
Monitor only	4190-7114 42 in. (1067 mm)	LCD monitor for horizontal wall mount applications
	4190-7132 24 in. (610 mm)	LCD monitor for desktop applications
Monitor with Touch-screen	4190-7214 42 in. (1049 mm)	Wall mount
	4190-7234 18.5 in. (470 mm)	Rack mount
	4190-7235 24 in. (610 mm)	Desktop
Select one minimum, four maximum, as required by computer choice. Connect as SVGA or DVI, both cables are included. Touchscreen models include separate serial controller cable, black or charcoal grey housings.		

**Table 7: Software and feature selection**

Option	Model	Description
Applications software, select one for each application	4190-5050	TrueSite Workstation Server Software includes license, and documentation. Requires 4190-8401, 4190-8403, or 4190-8603. The license includes a renewable one year SMA that provides access to the newest software features, and cyber-security and compatibility updates.
	4190-5053	TrueSite remote client installation software package, no operating system. Requires 4190-8410 or 4190-8605.
Server feature options	4190-5068	ES Net Supplemental Traffic. With this feature, you can support supplemental traffic for the TrueSite Workstation and connect remote clients to the TSW from any nodes on the ES Net network.  <b>Note:</b> For further information regarding supplemental traffic, refer to <i>ES Net Network Applications, Communications, Options and Specifications (S4100-0076)</i> .
	4190-5060	DACR Interface for a TrueSite Workstation Server
	4190-5064	The Third-party Interface Software Package includes the following items: 1. Third-party Interface Development Software 2. A dedicated Security Certificate for server and client access for one third-party Interface Application. 3. A third-party feature code for one third-party client connection to a single TrueSite Workstation.
	4190-5065	TrueSite Workstation Feature Upgrade. Includes the latest TrueSite Workstation software version and an Upgrade Feature Code to enable new standard features, new optional features are selected separately. Without this upgrade, installations of the latest software version include performance improvements but do not include new standard software features.
	4190-5067	TrueSite Workstation Mobile Client Feature. With a quantity of one, you can access TrueSite Workstation information from compatible mobile devices. You can enable access for mobile clients by entering an authorized feature code at the server. Refer to <i>Fire Alarm Network Annunciators TrueSite Workstation Mobile Client (S4190-0024)</i> for more information.
	4190-5069	TSW Maintenance License. Use this to obtain software updates covered under your SMA.
	4190-5061	Feature code for Remote Client with restricted features, reduced feature set
Remote Client type selection, select one for each remote client	4190-5062	Feature code for Remote Client with password protected feature access
	4190-5066	A third-party Interface Client for adding additional third-party Client connections to an existing TrueSite Workstation third-party Interface. Includes a third-party Client Feature Code for the selected quantity of concurrent third-party Client Connections to a single TrueSite Workstation, a maximum of five for each server.  <b>Note:</b> When you add third-party Interface Clients to more than one TrueSite Workstation Server, each server requires its own 4190-5066 Remote Client Selection. If a new third-party Interface Application is being developed, feature code 4190-5064 will be required to provide a unique Security Certificate.

**Note:** 4190-5064 and 4190-5066 require a 579-1155 Software Customer Information form submitted with the order.



**Table 8: Internal hardware and additional features**

Option	Model	Description
Internal hardware options, select as required	4190-6034	Quad RS-232 Serial Port Card, select when more than two serial ports are required. May be required for 2120 SLI connections. PCI Slot card with pluggable terminal block output, up to two maximum. One 4190-6026 suppressor is required for each connection, see the details in this table.
Internal hardware video card options, select as required	4190-6040	Dual video card for 64 bit operating system, PCIe x 16 slot, and two DVI outputs. Select one to support four monitors.  <b>Note:</b> Support for up to three monitors is standard. Use onboard video for the first three monitors, use the optional 4190-6040 video card for four monitors.
Transient suppressed connectors, select as required	4190-6002	Transient Protected Connector, select one for each connection to a standard RS-232 serial port
	4190-6026	Transient Protected Connector for Quad Serial Port Card, one required for each connection
	4190-6010	Transient Suppressor for LAN/WAN Connection. Required for agency listing for each TrueSite Workstation Server and Remote Client LAN/WAN connection, except for server to client connections when both are in the same room. Refer to <i>Fire Alarm Network Annunciators TrueSite Workstation Mobile Client (S4190-0029)</i> for more information.
Upgrade to DACR	4190-9807	Upgrade standard TrueSite Workstation, with Version 1.x software, or Information Management System (IMS), to add DACR capability.  <b>Note:</b> Use 4190-5060 for Version 2 or later systems.

**Table 9: Programming options**

Option	Model	Description
Programming, select	4190-8122	TrueSite Workstation Programming, select the programming items in the following cells
Programming Items, select items per system requirements, and select quantity of items as required. Requires selection of 4190-8122.	4190-4006	AutoCAD DXF or DWG file, one floor plan, multiple floor plans require dedicated files
	4190-4019	Convert SMALL floor plan to 3D-style
	4190-4020	Convert MEDIUM floor plan to 3D-style
	4190-4021	Convert LARGE floor plan to 3D-style
	4190-4008	25 Custom Action Messages
	4190-4009	25 Travel Screen Keys, selective zooming
	4190-4010	25 Status Icons
	4190-4011	25 Control Functions, for example: On/Off, Bypass.
	4190-4012	Convert one Existing IMS Screens to TrueSite Workstation Screen
	4190-4013	10 Coverage Zones, order quantity as required
	4190-4014	One Emergency Communications/Mass Notification Control Screen

**Table 10: Software only and aftermarket additions product selection**

Model	Description
4190-8603	TrueSite Workstation software only package. Refer to Table 15 for computer specifications reference. Listings and approvals are not applicable.  <b>Note:</b> Windows operating system is not provided. For software only packages purchase operating system locally as required.
4190-8901	Aftermarket hardware addition
4190-8605	Aftermarket software addition

## ES Net network options

**Note:** For additional information on ES Net networks and ES Net network product specifications see datasheet *S4100-0076*.

**Table 11: ES Net external NIC for TSW product selection**

Model	Enclosure	Description	Power	Alarm/Supv.
4190-9832	Red	Connects a TSW or Incident Commander to the ES Network. The ES control unit network supports Class B or Class X operation. TSW connections are Class B. Includes four built in Ethernet ports, supports one additional media card. You can configure Ports A and C for earth fault detection. Wall mount enclosure measures 10 in. x 10 in. x 2.5 in.	120/240 VAC	120 mA
4190-9833	Platinum		120/240 VAC	
4190-9834	Red		24 VDC	
4190-9835	Platinum		24 VDC	

**Note:** The 4190 Series External NIC is required for TSW or Incident Commander UL 1610 Central Station Burglar Alarm Control Unit applications.

**Table 12: ES Net NIC cards for 4100ES, TrueSite Workstation, or Incident Commander**

Model	Card type	Description	Size	Alarm/Supv.
4100-6104	Slot, install to a single slot in a 4100ES bay	Mounts in a 4100ES cabinet. Connects a 4100ES FACU, TrueSite Workstation, or Incident Commander to an ES Net Network. Supports Class B or Class X operation. Includes four built in Ethernet ports. Install to a single slot in a 4100ES bay. Supports up to two additional media cards. You can configure Ports A and C for earth fault detection.	One slot of a 4100ES bay	120 mA
4100-6310	Flat, install to any two vertical block space in a 4100ES bay		Two vertical blocks	

### Notes:

1. NICs include built-in Ethernet network communication ports, order optional media cards as required.
2. TrueSite Workstation connection is Class B, for Class X networks the TSW connection must be 20 ft (6 m) maximum in conduit.
3. For TSW or Incident Commander, UL 1610 Central Station Burglar Alarm Control Unit applications use the 4190 Series External NIC.

**Table 13: ES Net dual channel media modules for external NIC and 4100ES NICs**

Model	Card type	Description	Size	Alarm/Supv.
4190-9856	ES Net NIC dual channel Ethernet media card	Select in accordance with network connection requirements. Mounts on the supplied ES NICs, one media card for each external NIC network interface card.	N/A	20 mA
4190-9858	ES Net NIC Dual Channel Single-mode Fiber Media Card	Dual Channel Media Cards provide two ports for input and output connections.	N/A	135 mA
4190-9859	ES Net NIC Dual Channel Multi-mode Fiber Media Card	Field connections require proper port pairing, refer to <i>ES Net Dual Channel Fiber, Ethernet, and DSL Media Card Installation Instructions (579-1258)</i> for additional information.	N/A	135 mA
4190-9857	ES Net NIC Dual Channel DSL Media Card		N/A	155 mA

**Note:** DSL media cards are not ULC listed for fire alarm applications.

## Fiber media card service kits

**Table 14: ES Net fiber media card service kits**

Model	Fiber type	Description
4100-6412	50/125 µm multi-mode	For use in retrofit jobs where fiber optic cables with ST connectors are already installed. Includes one ST to SC 18 in. (45.7 cm) fiber optic patch cord, one ST-ST coupler, one wire clamp, and one insulating sleeve.
4100-6413	62.5/125 µm multi-mode	
4100-6414	9/125 µm single-mode	

**Note:** Fiber optic media cards must be of the same type on each end of the fiber link. When replacing a media card with a different type, replace the card on the other end of the link with a fiber optic media card of the same type.

## TrueSite Workstation equipment specifications

**Note:** Equipment and specifications may vary due to equipment design changes.

**Table 15: Computers and accessories**

Model	Description	Dimensions (W x H x D)	AC Power Input
4190-7041 4190-7043	Desktop computer	16 7/8 in. x 7 in. x 17 5/8 in. (429 mm x 178 mm x 448 mm)	Input voltage: <ul style="list-style-type: none"> <li>• 100 to 240 VAC</li> <li>• 50 / 60Hz</li> <li>• Auto-ranging</li> </ul> Input current: <ul style="list-style-type: none"> <li>• 10 A peak at 100 VAC or 5 A peak at 240 VAC</li> <li>• 2 A nominal at 100 VAC or 1 A nominal at 240 VAC</li> </ul>

**Note:** The products listed in Table 15 are agency-listed for 120 VAC. Computers and monitors are shipped with 120 VAC cord, NEMA 5-15P plug to IEC-320 C-13 connector. For use with other voltages, locally obtain a cord in compliance with local safety standards.

**Table 16: Computer minimum specifications**

Specification	Description
Server enclosure	Passive backplane with the following features: seven PCI slots and one CPU slot, key lock reset switch for added security, fan monitor card, locked door for the optional CD/DVD R/W drives, and one front mounted USB port.
Server computer	Compatible with Microsoft Windows 10, 32 and 64 bit operating systems. Intel i7 2.4 GHz CPU, or Core 2 Duo 2.1 GHz CPU, 4 GB RAM, 160 GB minimum hard drive. Two Serial ports, four USB ports, dual Gigabit LAN ports, USB keyboard and mouse. SVGA video output with 16 MB VRAM, optional CD/DVD Drive, PCI and PCIe slots, as required. Integral audio and amplified speakers, additional ports as required for custom features such as USB, Serial and more.
Remote Client	Remote Client specifications are similar to a server and also compatible with Microsoft Windows 10 Home operating system (32-bit or 64-bit). Core 2 Duo CPU minimum, 4 GB RAM minimum, single Gigabit LAN, 160 GB hard drive, SVGA video output with 16 MB VRAM, optional CD/DVD Drive, other ports as required, such as USB Serial RS-232, mouse, and keyboard.

**Note:** Simplex 4190 series computers are agency-listed for use with TrueSite Workstation software. For applications where agency listings are not required, TrueSite Workstation software should be compatible with most computers with the stated minimum specifications. However, due to computer manufacturers potentially using unique or proprietary drivers, hardware, or other software not tested with TrueSite Workstation software, there may be incompatibilities. If you use other computers, proper operation with TrueSite Workstation software may require technical adjustments by a qualified computer technician and would be the sole responsibility of the computer supplier and computer manufacturer.

**Table 17: Environmental specifications**

Specification	Rating
Operating temperature	32°F to 120°F (0°C to 49°C)
Operating humidity	Up to 93% RH, non-condensing, at 90°F (32°C)

**Table 18: Computer port reference, 4190-7041, 4190-7043**

Port	Description
RS-232 serial ports	Two standard, up to nine total with optional 4190-6034 Quad Serial Port Card.
USB serial ports	Seven in total: five in the rear, and two in the front behind the locked door.
Other ports	Two Ethernet ports.
Event printing	For agency-listed proprietary supervising station operation and for other operations, if you require an event printer, use a supervised and dedicated Simplex Model 4190-9027 agency-listed dot matrix printer. Connection is to USB or Serial RS-232 Port of the Server PC. See datasheet <i>S4190-0027</i> for printer details.
Other printing	For report, screen, or graphics printing, use a Windows compatible printer. Connection can be USB, Serial RS-232, or LAN/WAN connection through Ethernet.
Printable information	Event printing with supervised and dedicated dot matrix printer 4190-9027, see Event printing in this table. Auto-print of auto-jump graphics. Prints to Windows default printer. Reports: historical logs, system activity, TrueAlarm status, TrueAlarm service, TrueAlert Self-Test, analog monitor ZAM calibration, and active list. Displayed reports can print to a LAN connected, unsupervised, printer. Screen captures, configurable as negative images to reverse black backgrounds.

## General system listings reference

The following functions are agency-listed with the computers and monitors identified in [Product selection](#):

- TrueSite workstation PCs, whether stand-alone or functioning as a server to remote clients.
- Supervised remote clients with protected features that are connected to the server using a dedicated Fire Alarm Network.
- Refer to datasheet *Fire Alarm Network Annunciators; Fire Alarm Ethernet Switches (S4190-0018)* for details about Fire Alarm Network Ethernet Switches.

### Additional agency listings reference

You can use a facility LAN to connect restricted feature remote clients software on compatible computers, listed for standard office use. This provides only annunciation features and does not impact the system listing.

### Fire smoke control station reference

The TrueSite Workstation operates as a UL 2572 listed fire smoke control station (FSCS) when configured in accordance with the following specifications:

- Select model 4190-8401. **Note:** You cannot use this for Supervising Station or Security Monitor Applications.
- Provide an audio system microphone mounted adjacent to the TrueSite Workstation, either located within a 4100ES or 4100U Fire Alarm Control Unit or Remote Annunciator Panel, or use a Remote Microphone Assembly.
- The 4100ES/4100U microphone options are model 4100-1243 for fire alarm control units and model 4100-1244 for remote annunciator control units. Refer to *4100ES Addressable Fire Detection and Control Emergency Voice/Alarm Communications Equipment (S4100-0034)* for details.
- Remote microphone assembly model 4003-9803 mounts separate from the control unit. Refer to datasheet *Microphone Multiplex Module Model 4100-1274 (S4100-0053)* for details.

**Note:** You must connect at least two monitors to provide the necessary display information, see the following exception. One monitor is required to display the speaker zone status and the other monitor is required to display the event screen.

**Exception:** If a 4100ES/4100U Network Display Unit (NDU) is mounted adjacent to the TrueSite Workstation for network audio control with microphone access, a second monitor may not be necessary if the audio control status is viewable. Review the application with the local authority having jurisdiction (AHJ).

### Hardware reference with 24 in. desktop monitor

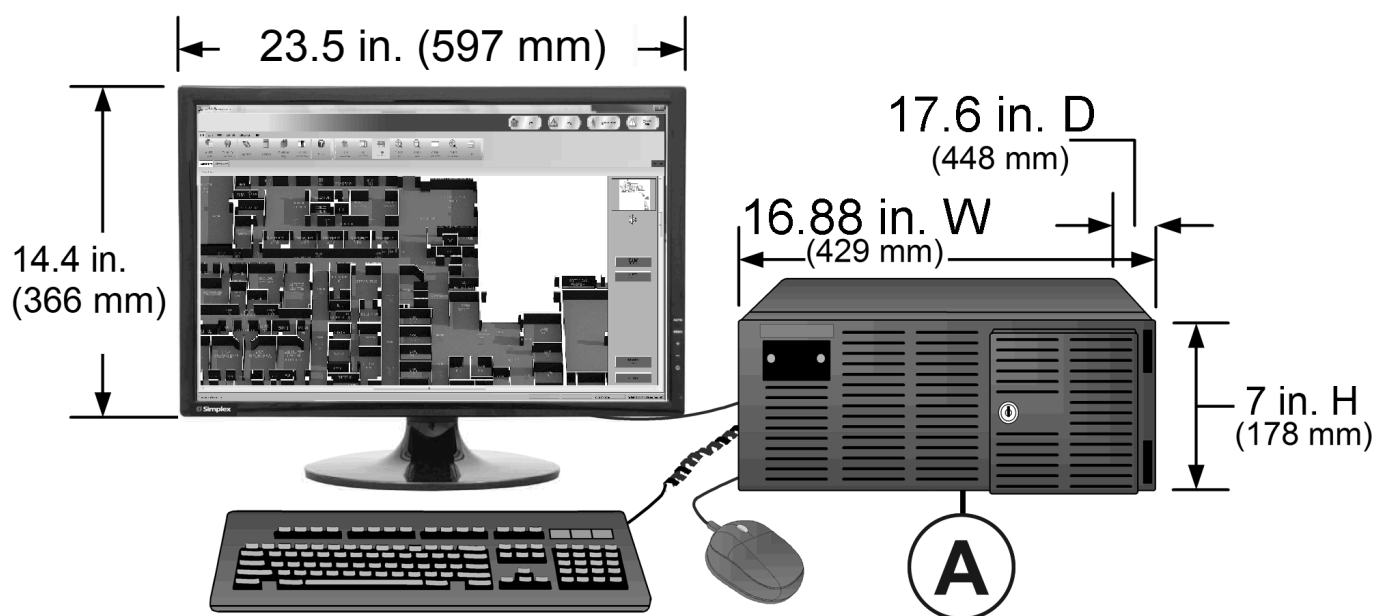


Figure 5: Hardware reference with 24 in. desktop monitor

Callout	Description
A	TrueSite Workstation CPU

## Rear mounted mechanical protection: conduit entry bracket enclosure reference

**Note:** Rear mounted mechanical protection is required for ULC listing.

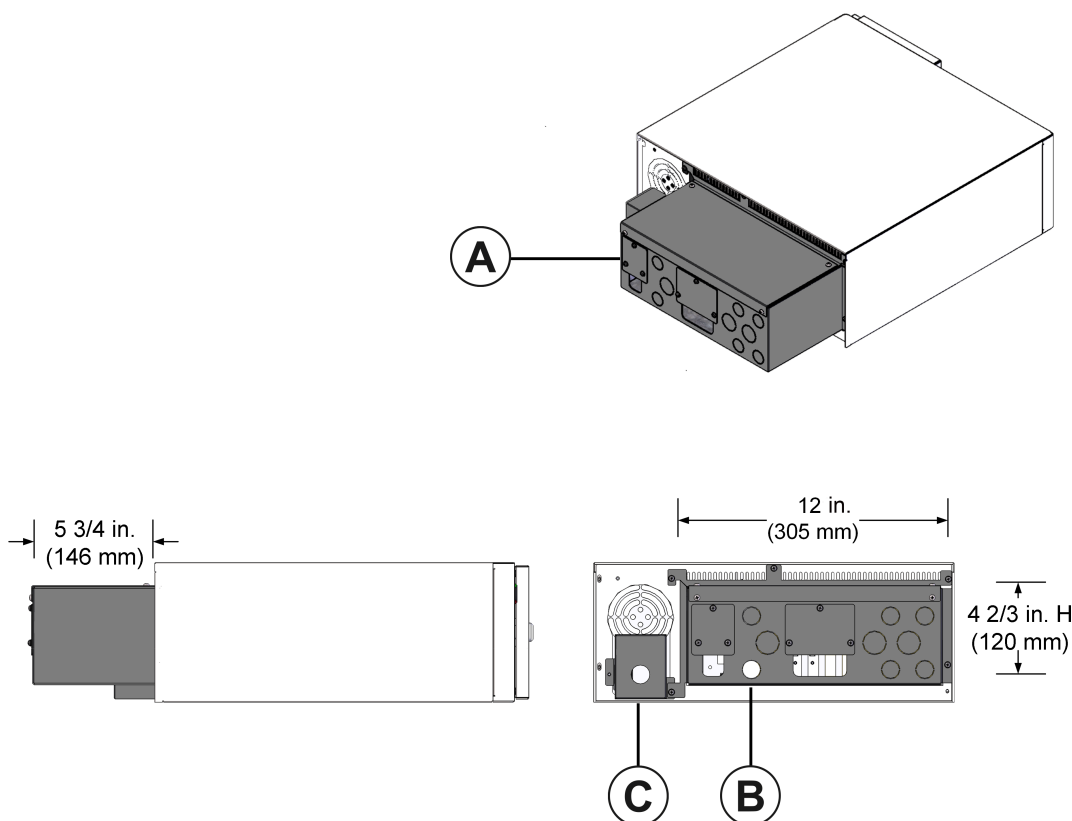


Figure 6: Rear mounted mechanical protection, conduit entry bracket enclosure reference , required for ULC listing

Callout	Description
A	4190-6058 mechanical protection. Conduit entry kit on the rear of the TSW.
B	Knockouts for access for field wiring to the conduit.
C	Additional required AC power bracket is supplied with all ULC desktop computers and all UL desktop computers for 4190-8403 Supervising Station Control Unit operation.

## Additional reference

Table 19: Additional network product reference

Description	Document
Connected Services Gateway - Central Station Communication and SafeLINC Cloud Services	S2080-0091
4120 Network Products and Specifications	S4100-0056
ES Net Network Products and Specifications	S4100-0076
4100ES Basic Panels with ES-PS Power Supplies	S4100-1031
Fire Alarm Ethernet Switches for TrueSite Workstation	S4190-0018
TrueSite Incident Commander	S4190-0020
Truesite Mobile Client	S4190-0024

## 4120 network software compatibility

4120 network product compatibility with TrueSite Workstation requires the following software versions:

**Table 20: Fire alarm network interface**

Network interface	Compatibility
4190 GCC/IMS/NPU	Master Version 2.07 or later
4100U	Master Version 11.03 or later
4100	Master Version 9.02 or later
4020	Master Version 9.02 or later
4010	Master Version 3.01 or later
4002	Network Firmware Version 3.02.92 or later

**Table 21: 2120 (SLI) Interface**

Network interface	Compatibility
2120	Master Version 5.44 or later, Network Interface Version 3.02 or later

### Notes:

1. TSW 100,000 4120 network point capacity requires TSW Version 3.04, or later, and ES control units at version 3.03.04, or later.
2. TSW supports up to 100,000 points from ES series control units on 4120 networks or DACR points only.
3. Other legacy 4000 series control units are limited to a capacity of 62,500 points on the TSW. You can mix with ES series control units reporting above the 62,500 point range.
4. A TSW with a 2120 SLI interface is limited to 62,500 points for the entire system, including ES series control units and DACR points.

## 4120 network options

**Note:** For additional information on 4120 networks and 4120 network product specifications refer to *4120 Network Communications, Options, and Specifications; International (S4100-0056)*.

**Table 22: 4120 network options**

Option	Configured	Aftermarket	Description	Size	Alarm/Supv.
Network Interface Modules, seven maximum	4190-6061	4190-9829	Modular network interface card, select media modules separately, listed in this table. PCI slot card, supports Class B or Class X operation.	One slot	46 mA
Media Modules for Modular Network Interface, as required	4190-6036	4190-9822	Wired Media	N/A	55 mA
	4190-6301	4190-9851	Left port, single-mode 4120 duplex fiber media card	N/A	55 mA
	4190-6302	4190-9852	Right port, single-mode 4120 duplex fiber media card	N/A	55 mA
	4190-6303	4190-9853	Left port, multi-mode 4120 duplex fiber media card	N/A	55 mA
	4190-6304	4190-9854	Right port, multi-mode 4120 duplex fiber media card	N/A	55 mA