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 PC-based graphical command center provides centralized network annunciation, historical logging, report generation, and control of fire alarm network points.

Features

Figure 1: TSW desktop application

· **Simplex fire alarm network connected** graphical interface control Compatible with Simplex ES Net and 4120 networks

· **Available TCP/IP, LAN/WAN connections;** up to 20 remote clients on a 4120 network, or 60 remote clients on an ES Net network, can be connected to the server for multiple remote users; with dedicated and listed Fire Alarm LAN equipment, listed remote clients can have control access

· **Supports standard fire service annunciation icons** to provide firefighter and first responders with critical fire response information

· **Custom alarm and system messages** can intuitively guide emergency responders; important information, such as HAZMAT locations, contact information and more, can be quickly presented

· **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.

· **Floatable and dockable windows** allows windows to either be fixed (docked) or floatable

· **Quad monitor support** allows multiple active windows, or run separate client/server instances on individual monitors, with up to four total supported monitors

· **Pan-and-zoom features** allow precise dynamic navigation within a graphic screen for rapid and convenient selection of the area of interest

· **Configurable coverage zones** allow user defined areas or zones within a graphics screen to indicate the area of activity without zooming into the point of interest

· **Auto-jump** allows the screen view to automatically jump to a graphic at a predetermined zoom level with the active device centered on the screen; alternately, the system can be selected to auto-jump to the Alarm List window

· **Captive or non-captive modes** support dedicated workstation operation (captive) or workstation operation with other Windows applications, such as word processing, spreadsheet and more, where workstation activity takes precedence (non-captive)

· **Extensive historical logging**; up to 500,000 events with operator notations; information is spreadsheet and database compatible for report customization

· **Optional interface to Digital Alarm Communicator Receiver** (DACR) integrates multiple systems onto a single workstation

· **DACR account filter** can filter historical log reports easily

· **Multiple password** controlled operator levels with selectable feature access

· **3rd Party interface** open-architecture solution provides enhanced information access for advanced users

· **Available optional connections** for printers or other compatible systems

· **Operating systems**; Server and clients compatible with Windows 10 Professional or Enterprise, 32-bit and 64-bit. Clients also compatible with Windows 10 Home, 32-bit and 64-bit.

· **TrueSite Workstation mobile client** allows compatible iOS and Android devices to access system information

· **Export to XML** feature allows TrueSite Workstation data to be easily exported for report generation and customization

· **Test mode** allows unobtrusive testing of selective devices without nuisance interruptions at the operator workstation

· **Password security** supports 8 to 16 alphanumeric passwords with configurable lockout for failed attempts

· **Operator notes** allows an operator to log notes associated with individual events for historical records and retrieval

· **Web browser command link** enables the ability to easily call up an external web page or link, such as web-cam and more, with a single command button on a graphic screen

· **RAID 1 support** provides a real-time mirror image on a secondary hard drive for enhanced life-safety workstation survivability; operation will automatically transition to the alternate drive on a drive failure without loss of operation. RAID support is available to systems that do not use the Backup Utility.

· **Backup utility** can be configured to automatically backup specified directories, including TSW job data, to the secondary hard drive. The Backup Utility is available to systems that do not use RAID.

· **Vector information to supervised Remote Clients**; select by point, event category, panel, or custom list

· **Email generation** is available to send updates to individuals or to distribution lists with selectable content

· **Sound files** (WAV) can be used to create custom audible status annunciation using local onboard speakers

· **Fahrenheit or Celsius** temperatures can be displayed for screens showing heat sensor temperatures

· **Software Maintenance Agreement** (SMA) provides access to new software features as well as cyber-security and compatibility updates. The first year is included with the new system with an option to renew.

Agency listings

· UL 864 as Fire Alarm Control Unit Annunciator (UOXX.S771)

· UL 864 as Fire Alarm Proprietary Supervising Station Control Unit (UOJZ.S771)

· UL 864 as Firefighter Smoke Control Station (UUKL.S771)

· UL 1076 as Proprietary Burglar Alarm Unit (APOU.BP2801)

· UL 1610 as Central Station Burglar Alarm Control Unit (AMCX.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 (UOJZ7.S771)

· ULC/ORD-C100, Smoke Control System Equipment for Canada

(UUKL7.S771)
- ULC/ORD-C1076, Proprietary Alarm System Annunciator (APOU7.S771)
- UL 1076, Proprietary Burglar Alarm Multiplex Receiving Unit (APOU.S771)
- ULC-S559, Central Station Fire Alarm System Receiving Station (DAYR7.S771)

Graphic screens details

- Over 30,000 custom fields generated and edited graphic screen capacity is available
- Multiple import and export formats are supported (see Supported Graphics Formats section in Graphics screens)

Additional fire alarm network capabilities

- Multiple workstations can be nodes on the same fire alarm network to provide redundant operations for improved survivability
- Connect to up to seven separate network loops
- Graphical diagnostic tools identify network node and loop status
- Set-host service functions allow access to remote network node data including individual TrueAlarm analog sensors
- Provides event printing (with compatible printer), view or print of status and service reports, TrueAlert Self-Test reports, and print graphic screens
- Compatible with Information Management Systems (IMS) and Graphic Command Center (GCC) on the same fire alarm network
- 2120 Multiplex Serial Line Interface (SLI) allows connection 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 operation and/or touchscreen operation providing convenient user interface
- Desktop LCD widescreen, high resolution, anti-glare monitors are 24 in. class, 23.8 in. (604 mm) diagonal, with HDMI support, and are available with or without touchscreen
- Wall mount LCD widescreen, high resolution monitors are 42 in. (1067 mm) diagonal, provide 1920 x 1200 resolution, and are available with or without touchscreen
- Rack mount LCD high resolution monitors are 19 in. class 18.5 in. (470 mm) diagonal with touchscreen and provide 1366 x 768 resolution;

Note: See TrueSite Workstation equipment specifications for important monitor mounting details

Description

Network annunciation

TrueSite Workstations provide annunciation, status display, and control for Simplex Fire Alarm Networks using a personal computer based graphical interface with 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 TrueSite Workstation Server information, Remote Clients are available and connected using TCP/IP LAN/WAN Ethernet communications. Remote Clients can be annunciation only, or capable of system control when configured with Agency Listed hardware.

DACR compatible

For systems requiring information from remote control units through Digital Alarm Communicator Transmitters (DACTs), workstations can be equipped to communicate directly with a compatible DACR; refer to S4190-0028 for details.

Password control

Multiple access levels

Operator access level is determined during log-in. Select functional access 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 level access will provide the information necessary for proper response but will not allow access to key parameters that determine overall system/network operation.

Network diagnostics

Graphical network status views

Automatic, built-in diagnostics are available to provide graphical views of network topology and network status. Missing communications links due to wiring breaks or shorts as well as inactive network nodes are indicated clearly to guide in returning the system to normal. Information screens are available to provide detail about each specific network node. Network level functions such as timekeeper node and monitor node are indicated as well as identification of the node being used for the diagnostic.

Individual point service access

Qualified operator access

The workstation operator's interface provides service level access to network information that is not normally "public." Network "private" point information can be accessed using the Set-Host feature, and logging into the database of the network and node of interest. With this operation, individual point information can be accessed and controlled as required by qualified service personnel with proper password access.

Multiple network connections

When extensive network expansion or interconnection of existing separate networks is required, up to seven network loops in any combination of ES Net and 4120 network loops may be connected to the TrueSite Workstation. Each network loop is connected to its own network interface module allowing the workstation to 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 per loop. This allows up to 686 total nodes and the TrueSite Workstation Server (687 total) to be interconnected.

Multi-loop operation features

Improved survivability

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

Loop independence

· New loops can be added without impacting existing loops

Assists with phased-in system expansion

· Each loop can be installed as a stand-alone network allowing local node programming to evolve as required
· When construction or renovation reaches completion, loops can be combined for coordinated facility protection

Multi-Loop requirements

· Each loop requires a dedicated Network Interface Card
· Supports up to seven network loops in any combination of ES Net and 4120 network loops maximum
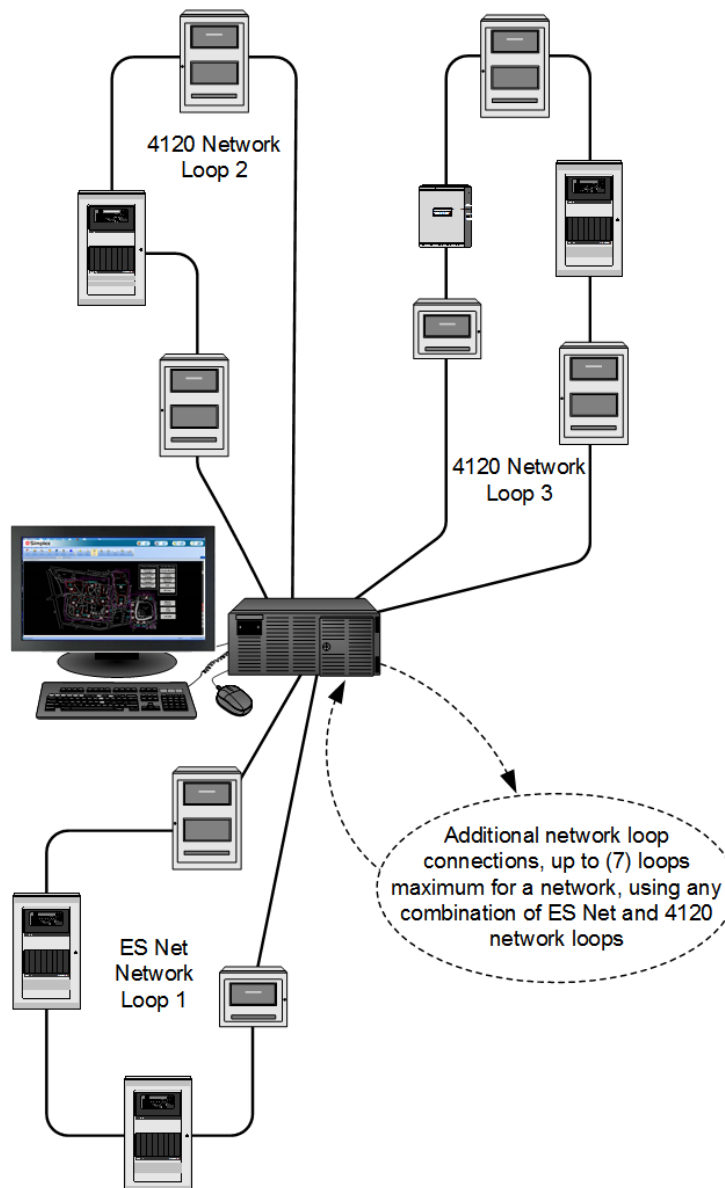
Figure 2: Typical interface of multiple network loops using a TrueSite Workstation Server

Note: For further information regarding multi-loop or multi-topology support, refer to datasheet *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 above
ES Programmer	6.01 or above
TrueSite Workstation	6.01 or above
TrueSite Incident Commander	6.01 or above

Table 2: ES Net firmware requirements

Component	Required firmware version
4100ES control unit	6.01 or above
4010ES control unit	6.01 or above
4007ES control unit	6.01 or above
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 higher, and ES control units at Version 5.03, or higher.
2. TSW supports up to 250,000 points from ES series control units on ES Net networks or DACR points only. The maximum points supported from 4120 networks is 100,000 points.
3. Where TSW supports both ES Net and 4120 network loops, the maximum TSW point capacities are the following:

   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 are not to exceed 250,000 TSW points total.
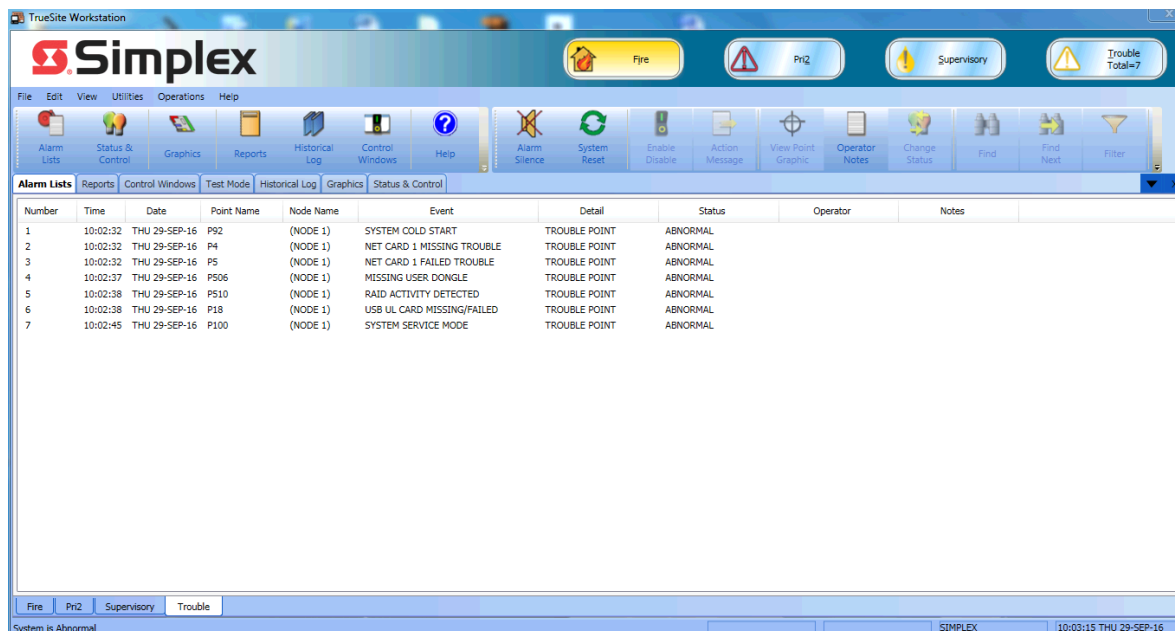
TrueSite Workstation operation

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 above in Figure 3, Fire, Priority 2, Supervisory, and Trouble buttons are shown with an active Trouble indicated.

Sample screens

Figure 3 is representative of historical log screen detail. Screen choices can be configured per system preference. However, when using multiple optional monitors, multiple windows can be visible simultaneously for operator convenience.

Ease of operation

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

Programmable activity timeout

Programmable activity timeout allows an unattended monitor to revert to the login screen when the configured time period expires.

Individual user preferences

Individual user preferences appear when the user logs in. Options include: Font Size (default or large); Toolbar Size (small or large); Interface Theme (MS Office 2003 or System); Floating Window Options (select whether to show Menu bar or show Tool bar).

Historical log and list details

Figure 3 above shows historical log details. The display format is similar to the display for active list items such as the alarm list. Displayed information can be sorted on-screen by each category shown, such as number, time, date, point name and more. List information can be reviewed on the screen, printed at a local or remote system printer, or can be written to an electronic file for compatibility with spreadsheet and database programs.

Customized response

Custom alarm and trouble messages can be added and field edited to provide operator response assistance. Point specific information, such as hazardous material storage and lists of people to notify, can be automatically or selectively displayed.

Graphics screens

Site and floor plan details

Graphics screens can provide easily recognizable 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. As shown below, you can add a fixed area site plan (key plan) with action buttons and screen locator. 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 (bitmap area is 2250 pixels x 68 pixels). You can customize the main screen background (viewable prior to login) with a bitmap of up to 1000 pixels x 525 pixels.

Action messages

In addition to screen text or graphic information, the operator can be presented with specific action messages that provide emergency response information and directions. These action messages are easily field edited for local requirements. The appropriate action message in the screen below would be located in the Acknowledge dialog box.

Auto-jump to graphics or alarm list

Select whether activity should cause 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 (allows editing in AutoCAD 2000 or later)
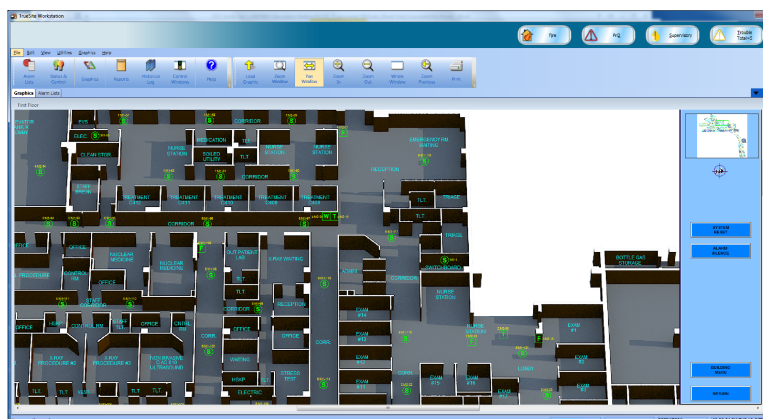· Import drawing files: DWG, WGS, IMS/GCC DOC files, WMF, BMP, GIF, and JPG

Figure 4: TrueSite Workstation sample 3D graphic screen

Product selection

See the product selection sections for information and ordering numbers for TSW software and hardware products.

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

Table 3: Hardware product selection

Category	Model	Description
Hardware Systems (select as required – see notes below)	4190-8401	**TrueSite Workstation Annunciator**
		Listings: For use as an Annunciator under: UL 864 and ULC-S527 Control Units and Accessories for Fire Alarm Systems; UL 2572 Control and Communication Units for Mass Notification Systems, UL 1076 Proprietary Burglar Alarm Units and Systems; and UL 1610 Central Station Burglar Alarm Units.
		Also for use as UL 864 UUKL Firefighter Smoke Control Station
	4190-8403	**TrueSite Workstation Supervising Station Control Unit**
		Listings: For use as a Supervising Station Control Unit under UL 864. Reports and logs events. If an optional event printer is required, see Table 17 for printer information; if using a DACR for UL 864 listing select the Bosch D6600 with CID format.
		Also for use as UL 2572 Supervising Station Control Unit for Mass Notification Systems; UL 1076 Proprietary Burglar Alarm Multiplex Receiving Unit;and UL 1610 Central Station Burglar Alarm Control Unit with listed DACR (see DACR DATASHEET for compatibility).
	4190-8410	**TrueSite Workstation Remote Client**; agency listed control capability requires supervision and connection to a dedicated Fire Alarm LAN. **Note:** The TrueSite Workstation PC has two Ethernet ports. On ES Net networks, the ES Net NIC connection uses one Ethernet port leaving one Ethernet port available for a connection to either an agency listed (dedicated) Fire Alarm LAN or a customer's LAN (not both). Refer to datasheet *S4190-0018* for additional information on Fire Alarm Network Ethernet Switches.
		Listings: For use as an Annunciator under: UL 864 and ULC-S527 Control Units and Accessories for Fire Alarm Systems.

Notes:

1. Requires selection of computer, monitor, and software from list below.
2. LAN/WAN connections require use of Transient Suppressor 4190-6010, see Table 7 for details.
3. A UL-1481 Listed Uninterruptible Power Supply (UPS) is required for secondary power per UL and ULC requirements.
4. ULC listing also requires use of 4190-6058 Mechanical Protection Kit (ordered separately).

Table 4: Computer product selection

Category	Model	Description	
Computer type (select one as required)	4190-7026 4190-7028	Desktop	Computer with Intel i7, 2.4 GHz CPU, 6MB Cache, 8GB RAM, two 1TB Hard Drives (minimum), USB ULIO card, DVD R/W, integral audio and amplified speakers, onboard video for up to three displays one SVGA and two DVI, two RS-232 Serial ports, seven USB ports, two Gigabit LAN ports, Passive backplane with eight PCI, three PCIe x 1 and one PCIe x 16 slot, USB keyboard and mouse; charcoal grey housing; Computers are pre-installed with Windows 10 Enterprise 64 bit (includes CD and license) and TrueSite Workstation software. 4190-7026 and 4190-7027 are configured with a file Backup utility and no RAID controller, 4190-7028 and 4190-7029 are configured with RAID 1 data mirroring and no file Backup utility. 4190-7027 and 4190-7029 include rackmount mounting hardware.
	4190-7027 4190-7029	Rackmount	
	4190-7030	Desktop	Order with 4190-8901 only. Same PC as 4190-7026 and 4190-7028 except without operating system or TSW software. Use for replacement of existing PCs when operating system and TSW software are available and will be installed on site. Compatible with 32 or 64 bit Windows 10 and Windows 7 operating systems.
Mechanical protection - conduit entry kit	4190-6058	Kit includes provisions for conduit connections and compliance with ULC mechanical protection requirements on all ULC listed TSW Desktop PCs. The kit includes; a rear bracket enclosure with conduit knockouts for all field wiring, rear access plates for routing the USB mouse, USB keyboard, and monitor connections, and a top access plate for access to all rear PC connections; six USB retaining clips to secure USB device connections to the rear of the PC.	
USB Ethernet Adapter	4190-6059	USB 3.0 to Gigabit Ethernet NIC Network Adapter. This allows additional RJ45 Ethernet port using available USB ports on TSW Desktop PCs to be used either for connecting to an ES Net NIC card or to a building network.	

Table 4: Computer product selection

Category	Model	Description
Fire alarm Ethernet switch	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. **Note:** 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 below for suppressor details; Ethernet Switch power shall be provided by a listed fire alarm power supply; see datasheet S4190-0018 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.
Note: Equipment and specifications may vary due to equipment design changes.		

Table 5: LCD color monitor product selection

Model		Size (Diagonal)	Description		
Monitor only	4190-7114	42 in. (1067 mm)	LCD monitor for horizontal wall mount applications		Select one minimum, four maximum, as required per computer choice; connect as SVGA or DVI, both cables are included; touchscreen models include separate serial controller cable; black/charcoal grey housings
	4190-7131	21.5 in. (546 mm)	LCD monitor for desktop applications		
	4190-7132	24 in. (610 mm)	LCD monitor for desktop applications		
Monitor with Touch-screen	4190-7214	42 in. (1049 mm)	Wall mount	LCD Monitor with touchscreen and built-in serial controller	
	4190-7233	21.5 in. (546 mm)	Desktop		
	4190-7234	18.5 in. (470 mm)	Rack mount		
	4190-7235	24 in. (610 mm)	Desktop		

Table 6: Software and feature selection

Option	Model	Description
Applications software (select one for each application)	4190-5050	TrueSite Workstation Server Software, includes: license, documentation; requires 4190-8401, 4190-8403, or 4190-8603. The license includes a renewable one year Software Maintenance Agreement (SMA) that provides access to the newest software features, and cyber-security and compatibility updates.
	4190-5053	TrueSite Remote Client Installation CD, no operating system; requires 4190-8410 or 4190-8605
Server feature options	4190-5068	ES Net Supplemental Traffic feature; enables support of supplemental traffic for the TrueSite Workstation and allows for Remote Client connections to the TSW from any nodes on the ES Net network. **Note:** For further information regarding supplemental traffic, refer to datasheet *ES Net Network Applications, Communications, Options and Specifications (S4100-0076)*.
	4190-5060	DACR Interface for a TrueSite Workstation Server
	4190-5064	3rd Party Interface Software Package; includes: 1. 3rd Party Interface Development Software; 2. A dedicated Security Certificate allowing server and client access for one 3rd Party Interface Application; 3. A 3rd Party Feature Code allowing one 3rd 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, installing the latest software version provides updated performance improvements over previous versions but does not include new standard software features.
	4190-5067	TrueSite Workstation Mobile Client Feature; quantity of one enables TrueSite Workstation information to be accessed from compatible mobile devices; access for mobile clients is enabled by entering an authorized feature code at the server; see datasheet *S4190-0024* for more information
	4190-5069	TSW Maintenance License, use to obtain software updates covered under your SMA.
Remote Client type selection (Select one for each remote client)	4190-5061	Feature code for Remote Client with restricted features (reduced feature set)
	4190-5062	Feature code for Remote Client with password protected feature access
	4190-5066	3rd Party Interface Client for adding additional 3rd Party Client connections to an existing TrueSite Workstation 3rd Party Interface; includes a 3rd Party Client Feature Code for the selected quantity of concurrent 3rd Party Client Connections to a single TrueSite Workstation (maximum of five for each server) **Note:** When adding 3rd Party Interface Clients to more than one TrueSite Workstation Server, each server requires its own 4190-5066 Remote Client Selection; if a new 3rd 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 be submitted with the order.

Table 7: 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 needed for 2120 SLI connections; PCI Slot card with pluggable terminal block output; up to two maximum; one 4190-6026 suppressor is required per connection (see below)
Internal hardware video card options (select as required)	4190-6040	Dual video card for 64 bit operating system, PCIe x 16 slot, two DVI outputs; select one to support four monitors. **Note:** Support for up to three monitors is standard; onboard video is used for first three monitors, use optional 4190-6040 video card when four monitors are installed.
Transient suppressed connectors (select as required)	4190-6002	Transient Protected Connector, select one per connection to a standard RS-232 serial port
	4190-6026	Transient Protected Connector for Quad Serial Port Card; one required per 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 S4190-0029 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. **Note:** Use 4190-5060 for Version 2 (or later) systems.

Table 8: Programming options

Option	Model	Description
Programming (select)	4190-8122	TrueSite Workstation Programming; select Programming Items below
Programming Items (select items per system requirements; 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; On/Off, Bypass, etc.
	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 9: Software only and aftermarket additions product selection

Model	Description
4190-8603	TrueSite Workstation software only package, refer to Table 14 for computer specifications reference (listings and approvals are not applicable); **Note:** 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 10: 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. 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. Ports A and C can be configured 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 11: 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 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. Ports A and C can be configured 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. Network interface cards include built-in Ethernet network communication ports, order optional media cards as required.
2. TrueSite Workstation connection is Class B, for Class X networks 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 12: 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 per network connection requirements; mounts on the supplied ES NIC(s); one media card per external NIC network interface card. Dual Channel Media Cards provide two ports for input and output connections. Field connections require proper port pairing, refer to *579-1258 ES Net Dual Channel Fiber, Ethernet, and DSL Media Card Installation Instructions* for additional information.	N/A	20 mA
4190-9858	ES Net NIC Dual Channel Single-mode Fiber Media Card		N/A	135 mA
4190-9859	ES Net NIC Dual Channel Multi-mode Fiber Media Card		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 13: 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 14: Computers and accessories

Model	Description	Dimensions	AC Power Input
4190-7026 4190-7028 4190-7030	Desktop computer	16 7/8 in. W x 7 in. H x 17 5/8 in. D (429 mm x 178 mm x 448 mm)	2 A at 120 VAC, 60 Hz (240 W) Operating Range: 95 VAC to 132 VAC; 180 VAC to 264 VAC, auto-range; 50/60 Hz
4190-7027 4190-7029	Rack mount computer	19 in. W x 7 in. H x 17 5/8 in. D (483 mm x 178 mm x 448 mm)	
N/A	Rack mount keyboard tray (included with computer)	19 in. W x 1 3/4 in. H x 12 3/4 in. D (483 mm x 44 mm x 324 mm)	N/A

Note: Products listed in Table 14 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 15: Computer minimum specifications

Specification	Description
Server enclosure	Passive backplane with: seven PCI slots and one CPU slot; security features: key lock reset switch; fan monitor card; locked door for the 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, one Parallel port, four USB ports, dual Gigabit LAN ports, USB keyboard and mouse; SVGA video output with 16 MB VRAM, CD/DVD Drive, PCI and ISA slots (as required), integral audio and amplified speakers, additional ports as required for custom features such as USB, Serial, Parallel and more.
Remote Client	Remote Client specifications are similar to 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, CD/DVD Drive, other ports as required, such as USB Serial RS-232, Parallel, mouse, keyboard and more.

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 and/or proprietary drivers, hardware, or other software not tested with TrueSite Workstation software, there may be incompatibilities. If other computers are used, 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 16: 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 17: Computer port reference (4190-7026, 4190-7027, 4190-7028, 4190-7029 and 4190-7030)

Port	Description
RS-232 serial ports	Two standard, up to nine total with optional 4190-6034 Quad Serial Port Card
USB serial ports	Seven total; five in the rear, and two in the front behind the locked door
Other ports	Two Ethernet ports and one Parallel port
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 *S4190-0027* 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.
	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)

Note: Parallel port printer connection is supported by 32-bit operating systems only.

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 *S4190-0018* for details about Fire Alarm Network Ethernet Switches

Additional agency listings reference

Restricted feature Remote Clients software on compatible computers (listed for standard office use) provide annunciation features only and can be connected using a facility LAN without system listing impact.

Fire smoke control station reference

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

• Select model 4190-8401. **Note:** Cannot be used 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 datasheet *S4100-0034* for details).

• Remote microphone assembly model 4003-9803 mounts separate from the control unit. Refer to datasheet *S4100-0053* for details.

Note: At least two monitors must be connected to provide the necessary display information, see 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).
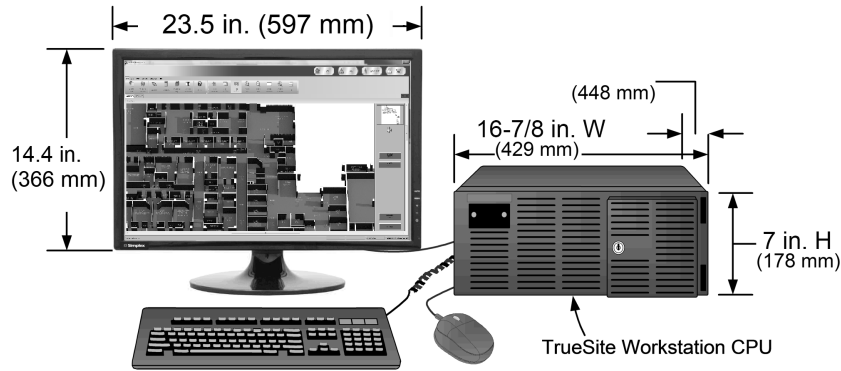
Hardware reference with 24 in. desktop monitor

Figure 5: Hardware reference with 24 in. desktop monitor

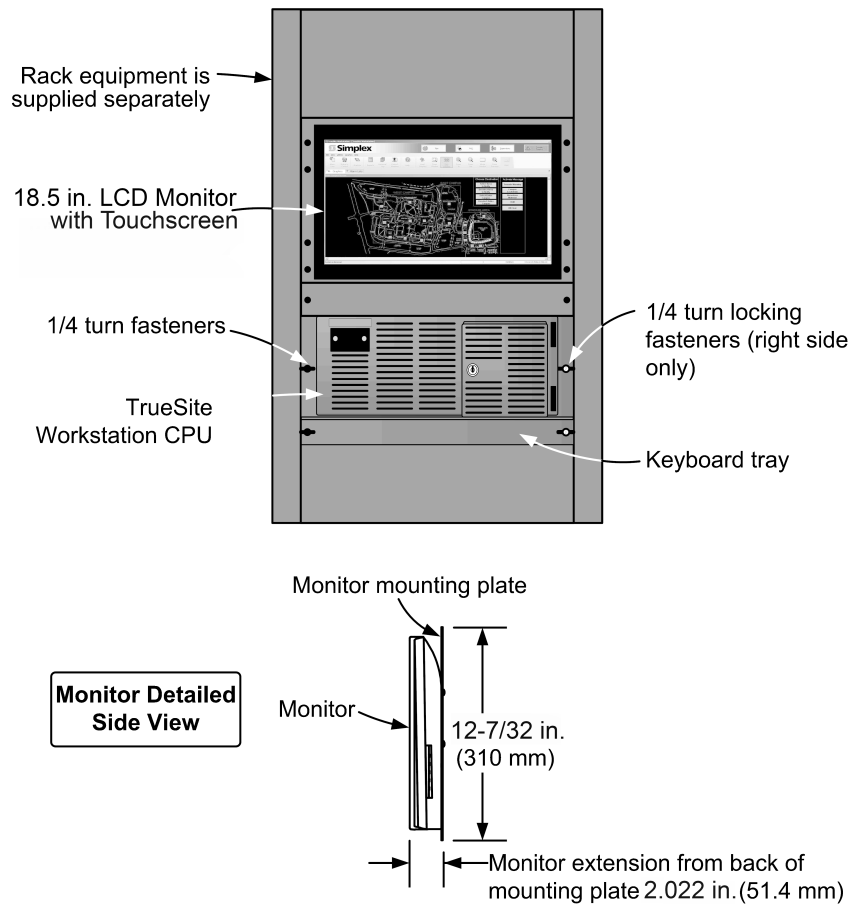## Rack mount hardware reference with 18.5 in. monitor

Figure 6: Rack mount hardware reference with 18.5 in. monitor

Note: The monitor mounting plate attaches to the rack mounting rail and the monitor will extend 2.022 in. (51.4 mm) from the front of the mounting rail. Review the specified rack enclosure to determine actual monitor extension beyond the rack frame and to ensure that a rack door (if used) has adequate clearance.

Rear mounted mechanical protection - conduit entry bracket enclosure reference

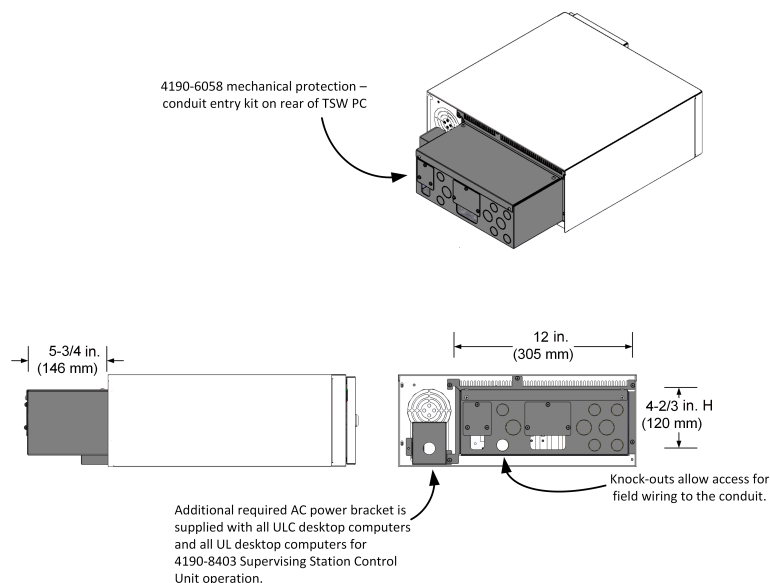**Note:** Rear mounted mechanical protection is required for ULC listing.

4190-6058 mechanical protection –
conduit entry kit on rear of TSW PC

5-3/4 in.
(146 mm)

12 in.
(305 mm)

4-2/3 in. H
(120 mm)

Knock-outs allow access for
field wiring to the conduit.

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.

Figure 7: Rear mounted mechanical protection - conduit entry bracket enclosure reference (required for ULC listing)

Additional reference

Table 18: 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 19: 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 20: 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 higher, and ES control units at version 3.03.04, or higher.

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 datasheet *S4100-0056*.

Table 21: 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 below); 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	Mounts on 4190-6061 or 4190-9829 modular network interface card (up to two media cards per network interface card). Maximum of one left port and one right port duplex fiber media card per modular network interface card. Field connections require left port to right port pairing. Order fiber media service kits for retrofit jobs where ST connectors are already installed. Refer to datasheet S4100-0056 for full fiber media module specifications and retrofit information.	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