# **5**,Simplex

UL, ULC, CSFM Listed; FM, NYC Fire Dept Approved\*

# **4007ES Fire Control Panels**

4007ES Hybrid, Fire Detection and Control Panel with Addressable and/or Conventional Initiation

# Features

# Satisfies a variety of new and retrofit applications 4.3" (109 mm) diagonal color touchscreen display:

- Provides detailed system status and point information
- Supports dual language selection, including unicode character languages
- A custom background display appears when operation is normal (see page 6 for details)

# **Eight Point Zone/Relay Module:**

- Each point is selectable as an IDC input or Relay output, Class A IDCs require 2 points (one out and one return); one module is standard, up to 3 additional modules can be field installed for a total of 4 eight point zone/relay modules per system
- Each point on the IDC/Relay Module can be configured as a control relay rated 2 A @ 30 VDC (resistive) as either normally open or normally closed
- Can be powered directly from the power supply or through the optional 25 VDC Regulator Module
- **IDC end-of-line resistor value can be selected** from a wide range of resistance values for retrofit convenience
- Electrically isolated IDNet+ addressable initiating device SLC:
- Provides built-in short circuit isolation for monitoring and control of TrueAlarm analog sensors and IDNet communications monitoring and control devices; for use with either shielded or unshielded, twisted or untwisted single pair wiring; outputs are Class A or Class B
- Standard panel SLC provides up to 100 addressable points; optional additional loop expansion modules provide an additional isolated loop with short circuit isolation for the IDNet+ channel; each loop expansion module also provides an additional 75 addressable points

# **Power Supply Features:**

- Four Notification Appliance Circuits (NACs) selectable as Class A or Class B with 6 A total available current
- NAC end-of-line resistor value can be selected from a wide range of resistance values for retrofit convenience
- Additional notification power capacity is available using the 4009 IDNet NAC Extender
- Battery backup charging of up to 33 Ah; up to 18 Ah for cabinet mounted batteries and up to 33 Ah batteries for mounting in close-nippled remote battery cabinet

# General Mechanical:

• Red or platinum cabinet; rated NEMA 1 and IP30 **4007ES Listings reference:** 

- UL 864 Control Units, System (UOJZ); Control Unit Accessories, System, Fire Alarm (UOXX); Control Units, Releasing Device Service (SYZV)
- UL 2017 Emergency Alarm System Control Units (CO detection), (FSZI)
- ULC-S559 Central Station Fire Alarm System Units (DAYRC)
- ULC-S527 Control Units, System, Fire Alarm (UOJZC); Control Unit Accessories, System, Fire Alarm (UOXXC); Control Units, Releasing Device Service (SYZVC)



4007ES Hybrid Panel Front View

#### Software Feature Summary:

- Current and previous panel configuration maintained in on-board memory
- An internal Ethernet service port is available for service computer connections to perform configuration updates, downloads and uploads; report downloads, and system software
- Internal USB interface allows a memory stick to store job revisions, update revised jobs and panel software, and save detailed system reports from the panel

# Optional modules and connections include:

- Fire Alarm Network Interface for Peer-to-Peer fire alarm network communications, supports either Class B or Class X operation
- Point or Event DACT assembly for IP Communicators
- Up to two additional IDNet+ addressable device output loop connections with short circuit fault protection and with 75 additional point capacity each
- Front mounted 48 LED annunciator with custom label inserts; LEDs are programmable for up to 24 IDC zones of alarm and trouble annunciation or other custom annunciation requirements
- Remote LED annunciator support via RUI communications port for use with UTP wiring
- Dual RS-232 ports (for printer, PC annunciator or third party interface)
- TrueInsight Remote Gateway
- Alarm relays and auxiliary relays
- City connections, with or without disconnect switch
- 4003EC Voice Control Panels
- 4009 IDNet NAC Extenders to extend NAC capability for power and distance
- Battery brackets for seismic area protection (see page 2)

\* This product has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7165-0026:0378 for allowable values and/or conditions concerning material presented in this document. NYC Fire Dept COA #6191A. Additional listings may be applicable; contact your local Simplex product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Fire Protection Products.

#### Introduction

#### **4007ES Series Fire Detection and Control Panels**

provide extensive installation, operator, and service features with point and module capacities suitable for a wide range of system applications. Panels can be configured for stand-alone or networked fire control operation. The convenient and intuitive color touchscreen provides easy access for typical system response actions and for detailed system review or configuration updates with password control to limit user access.

Flexible for new and retrofit applications. Standard conventional IDCs and addressable IDNet+ communications provide flexibility for both new and retrofit systems. IDC and NAC end-of-line resistor values are selectable to match a wide range of existing initiating device circuits and notification appliance circuits.

# **Operator Interface**

Convenient Status Information. With the locking door closed, the glass window allows viewing of the display status LEDs. The user interface is a 4.3" diagonal color touchscreen LCD with separate status LEDs as shown below.

LED indicators describe the general category of activity being displayed with the LCD providing more detail. For the authorized user, unlocking the door provides access to the control functions and allows further inquiry by scrolling the display for additional detail.

## **Operator Interface and Software Features**

- Convenient and detailed operator information is easily accessed using a logical, menu-driven touchscreen display with password access control
- Multiple automatic and manual diagnostics for maintenance reduction

# **Operator Interface Features** (Continued)

- ٠ Alarm and Trouble History Logs (up to 1000 entries for each, 2000 total events) are available for viewing from the display or for printing to a connected printer, or downloaded to a service computer
- Module level ground fault searching assists installation and service by locating and isolating modules with grounded wiring
- WALKTEST silent or audible system test performs an automatic self-resetting test cycle and supports up to 8 WALKTEST groups
- Install Mode allows grouping of multiple troubles for uninstalled modules and devices into a single trouble condition (typical with future phased expansion); with future equipment and devices grouped into a single trouble, operators can more clearly identify events from the commissioned and occupied areas

# **Mechanical Description**

- Locking door with acrylic insert ٠
- Latching front panel assembly swings forward for convenient internal access
- Smooth box surfaces are provided for locally cutting • conduit entrance holes exactly where required
- Modules are power-limited (except as noted, such as relay modules)
- Battery compartment (bottom) accepts two batteries, up to 18 Ah, to be mounted within the cabinet without interfering with module space; charger capacity is up to 33 Ah; for batteries greater than 18 Ah, refer to page 6 for external battery cabinet details
- Cabinet assembly design has been seismic tested and is certified to IBC and CBC standards as well as to ASCE 7 categories A through F, requires battery brackets as detailed on data sheet S2081-0019

## **Touchscreen Display with LED Status Indicators** (approximately full size)





#### IDNet+ Addressable Device Control

**Overview.** The 4007ES Hybrid provides an IDNet+ addressable initiating device Signaling Line Circuit (SLC) that supervises wiring connections and the individual device communications status on the SLC. With 2-wire IDNet+ SLCs, initiation, monitoring, and control devices such as manual fire alarm stations, TrueAlarm sensors, control relays, and sprinkler waterflow switches can communicate their identity and status and receive fire alarm system control. Additional addressable interface modules include circuit isolators, conventional IDC zone adapters, and interface to other system circuits such as fans, dampers, and elevator controls.

# IDNet+ Addressable Device Operation

Each addressable device on the IDNet+

communication channel is continuously interrogated for status condition such as: normal, off-normal, alarm, supervisory, or trouble. Both Class B and Class A operation is available. Sophisticated poll and response communication techniques ensure supervision integrity and allow for "T-tapping" of the circuits for Class B operation. Devices with LEDs pulse the LED to indicate receipt of a communications poll and can be turned on steady from the panel. With addressable devices, the location and status of the connected device is monitored, logged, and displayed on the operator interface LCD with each device having its own 40 character custom label for precise identification.

# **TrueAlarm Addressable Sensor Operation**

Addressable initiating device communications include operation of TrueAlarm smoke and temperature sensors. Smoke sensors transmit an output value based on their smoke chamber condition and the CPU maintains a current value, peak value, and an average value for each sensor. Status is determined by comparing the current sensor value to its average value. Tracking this average value as a continuously shifting reference point filters out environmental factors that cause shifts in sensitivity.



**Programmable sensitivity** of each sensor can be selected at the control panel for different levels of smoke obscuration (shown directly in percent) or for specific heat detection levels. To evaluate whether the sensitivity should be revised, the peak value is stored in memory and can be easily read (or downloaded as a report) and compared to the alarm threshold directly in percent.

**CO sensor bases** combine an electrolytic CO sensing module with a TrueAlarm analog sensor to provide a single multiple sensing assembly using one system address. The CO sensor can be enabled/disabled, and can be used in LED/Switch modes and custom control. (refer to data sheet S4098-0052 for details) **TrueAlarm heat sensors** can be selected for fixed temperature detection, with or without rate-of-rise detection. Utility temperature sensing is also available, typically to provide freeze warnings or alert to HVAC system problems. Readings can selected as either Fahrenheit or Celsius.

**TrueSense Early Fire Detection.** Multi-sensor 4098-9754 provides photoelectric and heat sensor data using a single 40070ES IDNet+ address. The panel evaluates smoke activity, heat activity, *and their combination*, to provide TrueSense early detection. For more details on this operation, refer to data sheet \$4098-0024.

# **Diagnostics and Default Device Type**

**Sensor Status.** TrueAlarm operation allows the control panel to automatically indicate when a sensor is almost dirty, dirty, and excessively dirty. The NFPA 72 requirement for a test of the sensitivity range of the sensors is fulfilled by the ability of TrueAlarm operation to maintain the sensitivity level of each sensor. CO Sensors track their 10 year active life status providing indicators to assist with service planning. Indicators occur at: 1 year, 6 months, and end of life.

**Modular TrueAlarm sensors** use the same base and different sensor types (smoke or heat sensor) and can be easily interchanged to meet specific location requirements. This allows intentional sensor substitution during building construction when conditions are temporarily dusty. Instead of covering smoke sensors (causing them to be disabled), heat sensors may be installed without reprogramming the control panel. The control panel will indicate an incorrect sensor type, but the heat sensor will operate at a default sensitivity to provide heat detection for building protection at that location.

# IDNet+ Device Wiring Reference

**IDNet+ Addressable Channel Capacity.** The 4007ES Hybrid provides an isolated output IDNet+ signaling line circuit (SLC) that supports up to 250 addressable monitor and control points intermixed on the same pair of wires. (250 total requires two 4007-9803 IDNet+ Loop Expansion Modules.)

#### **IDNet+ SLC Wiring Specifications**

Maximum Distance from Control Panel	0 to 125	4000 ft (1219 m); 50 ohms			
per Device Load	126-250	2500 feet (762 m); 35 ohms			
Total Wire Length Allov "T" Taps for Class B W		Up to 12,500 ft (3.8 km); 0.60 μF			
Maximum Capacitance	e Between	1 μF			
Loading per device		0.8 mA supv., 1 mA alarm; 2 mA per activated device LED			
Wire Type and Connec	ctions	Shielded or unshielded, twisted or untwisted wire*			
Connections		Terminal blocks for 18 to 12 AWG			
Compatibility includes	IDNiet een	amunicating devices and			

Compatibility includes: IDNet communicating devices and TrueAlarm sensors *including* QuickConnect and QuickConnect2 sensors; see data sheet S4090-0011 for additional reference

\* Some applications may require shielded wiring. Review your system with your local Simplex product supplier.

# Power Supply Output and Zone/Relay Module Details

#### Power Supply Output Details:

- **RUI Communications** controls up to 10 remote devices at up to 2500 ft (762 m) for single run, or 10,000 ft (3048 m) total if wiring is Class B and T-tapped; selectable as Class B or Class A
- Compatible RUI remote equipment includes: 4606-9202 and 4606-9205 Color Touchscreen Annunciators (up to 6 total), 4100 Series 24 I/O and LED/Switch modules, 4602 Series LED/Switch and I/O Annunciator modules, including 4602-9101 Status Command Units (SCU), and 4602-9102 Remote Command Units (RCU)
- IDNet+ SLC Output provides electrically isolated Class B or Class A communication; standard capacity is up to 100 addressable points with expansion for up to 250 points using up to two 4007-9803 IDNet+ Loop Expansion Modules (as described on page 4)
- 6 A Output Rating. This includes current for: special application notification appliances; IDNet devices; module currents; and auxiliary output current (battery charging, CPU, and power supply current does not subtract from the 6 A); when NACs are controlling Regulated 24 DC Appliances, total NAC current available is 3 A
- Four on-board Class B/Class A NACs, rated 3 A each for Special Application appliances; selectable for SmartSync horn and strobe control, or strobe synchronization; rated 2 A each for Regulated 24 DC appliances

Product Selection

#### **Power Supply Output Details** (Continued):

- NAC end-of-line (EOL) resistor values are selectable as: 10 kΩ, 3.9 kΩ, 4.7 kΩ, 5.1 kΩ, 5.6 kΩ, or 15 kΩ
- **Battery Charger** is dual rate, temperature compensated, and charges up to 18 Ah sealed lead-acid batteries mounted in the battery compartment, and charges up to 33 Ah batteries mounted in an external cabinet
- Battery and Charger Monitoring includes battery charger status and low or depleted battery conditions; status information provided to the master controller includes analog values for: battery voltage, charger voltage and current, actual system voltage and current, and NAC current
- Low Battery Voltage Cutout is selectable when required (required for ULC listing applications)
- 2 A Auxiliary Output (AUX/SNAC) can be selected either as resettable auxiliary power of 2 A @ 24 VDC, or selected to be a simple NAC (SNAC) for sounder base power, 4-wire detector power, or door holder power

#### **Zone/Relay Module Details:**

- Select as IDC or Relay; configure up to 8, Class B IDCs, or up to 4, Class A IDCs; or up to 8, Relay outputs rated 2 A resistive @ 30 VDC (N.O. or N.C.); or combinations of IDCs and Relays; each zone is separately configurable as an IDC or Relay output
- **IDC Support.** Each IDC supports up to 30, two-wire devices
- IDC EOL resistor values are selectable as: 3.3 kΩ, 2 kΩ, 2.2 kΩ, 3.4 kΩ, 3.9 kΩ, 4.7 kΩ, 5.1 kΩ, 5.6 kΩ, 6.34/6.8 kΩ, and 3.6 kΩ + 1.1 kΩ; see instructions for more details

Model*	Color	Description	Supv.	Alarm
4007-9101(BA)	Red	4007ES Hybrid with 4 conventional 3 A NACs and a 6 A output power supply/battery charger; includes IDNet+ communications for 100 addressable points and 1, 4007-9801 Zone/Relay module; Note: Add optional module and other currents separately for battery	145 mA	190 mA
4007-9102(BA)	Platinum	calculations; base panel current does not subtract from the 6 A power available for optional modules and external loads	145 MA	190 IIIA

\* Models with (BA) are available assembled in the USA by adding the suffix "BA".

# Module and Accessories Selection Information

Factory	Model	Description			
Programmi	ng 4007-8810	Factory Programming (select)			
Options	4007-0831 Custom Labels and Programming (requires 4007-8810)				
Field Install	ed Optional Modul	es (refer to diagram on page 7 for module locations)			
Model	Description		Supv.	Alarm	
4007-9801	require 2 points (or	<b>Relay Module</b> , each point is selectable as an IDC input or Relay output, Class A IDC: ne out and one return); one module is included as standard, select up to 3 additional; r 8 Class B IDCs with 4 in alarm, <i>detector current is added separately</i>	83 mA max	351 mA max	
	25 VDC Regulator	Module; 2 A maximum output; use to power Zone/Relay modules with 1 module	e 190 mA	445 mA	
4007-9802				801 mA	
	publication 579-83	2, 2-Wire Detector Compatibility Chart for application details with 3 modules	390 mA	1156 mA	
4007-9803		ansion Module; provides an additional isolated loop with short circuit isolation to the annel, also provides an additional 75 addressable points to the IDNet+ channel of two	NA	NA	
	Panel Mounted 48	LED Status Annunciator Module; provides 24 Yellow LEDs, 20 Red no LEDs or	10 mA	10 mA	
4007-9805		Green LEDs that are programmable for up to 24 IDC zones of alarm with station, or as required for custom annunciation requirements LEDs or		per LED, A max	
4007-9806	SDACT Module for Point or Event Reporting; order 2080-9047 connection cables as required (see cable details under accessories)			40 mA	
4007-9807	City Circuit Module with Disconnect Switch			36 mA	
4007-9808	City Circuit Modu	le without Disconnect Switch	20 mA	36 mA	
4007-9809	Relay Module; rela	ays for Alarm, Supervisory, and Trouble; rated 2 A resistive @ 32 VDC	15 mA	37 mA	
4007-9812		face Module; Compatible with Simplex remote printer, PC annunciator or third party /connections maximum)	60 mA	60 mA	

# Module and Accessories Selection Information (Continued)

			Modules						
Model	Descrip							Supv.	Alarm
4190-8001*	TrueInsi	ght re	emote service	gateway module and	programming s	election			
	TrueInsi	ght re	emote service	gateway module insta	allation kit; includes module and Required			62 mA	73 mA
4190-6106 *	harness	; con	figured for dyr	namic IP address oper	operation unless ordered with Selection			02 IIIA	73 IIIA
	4190-40	16							
4190-4016 *	TrueInsi	ght re	emote service	gateway module for f	xed IP Address	ing; optional, sel	ect if applicati	on will use fixed II	P address
4007 0040	Modular	Netv	work Interface	Card; Class B or Clas	s X (requires u	o to two media ca	ards; ordered	30 mA (with no	00
4007-9810	separate	ely, s	ee below)					cards installed)	30 mA
4007-9813	Wired m	eihe	card			cards as required		55 mA	55 mA
4007-9613					4007-9810 m	odular network in	terface card	55 IIIA	55 IIIA
4007-6301	Left port	, sing	gle-mode 4120	) duplex fiber media		cards as required	,	55 mA	55 mA
	card					odular network in	,	55 IIIA	55 IIIA
4007-6302			ngle-mode 412	20 duplex fiber		left port and 1 ri		55 mA	55 mA
	media c		11	duntar Channes P		edia card per mo ace. Field conne			
4007-6303		, mul	iti-mode 4120	duplex fiber media		nt port pairing. Or		55 mA	55 mA
	card					kits for retrofit jo			
						e already installe			
4007-6304		rt, m	ulti-mode 412	0 duplex fiber media		100-0056 for full		55 mA	55 mA
4007-0304	card				module specif	ications and retro	ofit	00 11.7	00 11.7
					information)				
* Deferte det	1 10								
Relef to data	a sheet S	4100	-0063 for addi	tional TrueInsight serv	vice gateway de	tails			
Batteries	a sheet S	4100	-0063 for addi	tional TrueInsight serv	vice gateway de	tails			
Batteries Model	Capaci	ty I	-0063 for addi Battery Moun		vice gateway de	tails			
Batteries Model 2081-9272	Capacit 6.2 Ah	ty I			vice gateway de	tails			
Batteries Model	Capaci	iy I	Battery Moun				stem standby	requirements; orc	der quantity o
Batteries Model 2081-9272	Capacit 6.2 Ah	iy I	Battery Moun	ting Details	select one batt		stem standby	requirements; orc	der quantity o
Batteries Model 2081-9272 2081-9274	<b>Capaci</b> 6.2 Ah 10 Ah	iy I	Battery Moun	ting Details	select one batt		stem standby	requirements; orc	der quantity o
Batteries Model 2081-9272 2081-9274 2081-9288	Capacin 6.2 Ah 10 Ah 12.7 Al	t <b>y  </b>	Battery Moun 12 V Batteries two; to be wire	ting Details	select one batt	ery model per sy		requirements; orc g; see battery cat	
Batteries   Model   2081-9272   2081-9274   2081-9288   2081-9275	Capacia 6.2 Ah 10 Ah 12.7 Al 18 Ah	t <b>y  </b>	Battery Moun 12 V Batteries two; to be wire For remote mo	t <b>ing Details</b> for cabinet mounting; d in series for 24 VDC	select one batt	ery model per sy		•	
Batteries Model 2081-9272 2081-9274 2081-9288 2081-9275 2081-9287 2081-9271	Capacin 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah	t <b>y  </b>	Battery Moun 12 V Batteries two; to be wire For remote mo	ting Details for cabinet mounting; d in series for 24 VDC punt in Battery Box 400	select one batt	ery model per sy Batteries for re		•	
Batteries Model 2081-9272 2081-9274 2081-9288 2081-9275 2081-9287 2081-9271	Capacin 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah	ty   	Battery Moun 12 V Batteries two; to be wire For remote mo	ting Details for cabinet mounting; d in series for 24 VDC punt in Battery Box 400	select one batt	ery model per sy Batteries for re		•	
Batteries Model 2081-9272 2081-9274 2081-9288 2081-9275 2081-9287 2081-9271 Battery Acco Model	Capacir 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah cessorie Color	ty I	Battery Moun 12 V Batteries two; to be wire For remote mo For remote mo	ting Details for cabinet mounting; ed in series for 24 VDC ount in Battery Box 40 ount in Battery Box 40 Dimensions 16 ¼" W x 13 ½" H x	select one batt 09-9801 09-9802 5 ¾" D	ery model per sy Batteries for re below Description	mote mountin	g; see battery cal	binet details
Batteries Model 2081-9272 2081-9274 2081-9278 2081-9275 2081-9287 2081-9271 Battery Acc	Capacii 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah essorie	ty I	Battery Moun 12 V Batteries two; to be wire For remote mo For remote mo acity up to 25 Ah eries	ting Details for cabinet mounting; ed in series for 24 VDC ount in Battery Box 40 ount in Battery Box 40 Dimensions 16 ¼" W x 13 ½" H x (413 mm x 343 mm >	select one batt 09-9801 09-9802 5 ¾" D < 146 mm)	ery model per sy Batteries for re below Description External batter	mote mountin	g; see battery cat	pinet details
Batteries Model 2081-9272 2081-9274 2081-9288 2081-9275 2081-9287 2081-9271 Battery Acc Model 4009-9801	Capacin 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah cessorie Color Beige	ty I	Battery Moun 12 V Batteries two; to be wire For remote mo For remote mo For remote mo encity up to 25 Ah eries up to 33 Ah	ting Details for cabinet mounting; ed in series for 24 VDC ount in Battery Box 400 ount in Battery Box 400 Dimensions 16 ¼" W x 13 ½" H x (413 mm x 343 mm x) 25 ¾" W x 20 ¾" H x	select one batt 09-9801 09-9802 5 ¾" D (146 mm) 4 ⅛" D	ery model per sy Batteries for rebelow Description External batter door and batte	mote mountin y cabinet <b>with</b> ry harness; fo	g; see battery cal	pinet details
Batteries   Model   2081-9272   2081-9274   2081-9288   2081-9275   2081-9277   2081-9277   Battery Accommodel   4009-9801   4009-9802	Capacii 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah cessorie Color Beige Beige	ty I	Battery Moun 12 V Batteries two; to be wire For remote mo For remote mo acity up to 25 Ah eries	ting Details for cabinet mounting; ed in series for 24 VDC ount in Battery Box 40 ount in Battery Box 40 Dimensions 16 ¼" W x 13 ½" H x (413 mm x 343 mm >	select one batt 09-9801 09-9802 5 ¾" D (146 mm) 4 ⅛" D	ery model per sy Batteries for re below Description External batter	mote mountin y cabinet <b>with</b> ry harness; fo	g; see battery cat	pinet details
Batteries   Model   2081-9272   2081-9274   2081-9274   2081-9275   2081-9275   2081-9271   Battery Acc   Model   4009-9801   4009-9802   Accessorie	Capacii 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah cessorie Color Beige Beige	ty I n t I S Cap For batte	Battery Moun 12 V Batteries two; to be wire For remote mo For remote mo For remote mo encity up to 25 Ah eries up to 33 Ah	ting Details for cabinet mounting; ed in series for 24 VDC ount in Battery Box 400 ount in Battery Box 400 Dimensions 16 ¼" W x 13 ½" H x (413 mm x 343 mm x) 25 ¾" W x 20 ¾" H x	select one batt 09-9801 09-9802 5 ¾" D (146 mm) 4 ⅛" D	ery model per sy Batteries for rebelow Description External batter door and batte	mote mountin y cabinet <b>with</b> ry harness; fo	g; see battery cat	pinet details
Batteries   Model   2081-9272   2081-9274   2081-9288   2081-9287   2081-9287   2081-9287   2081-9287   4009-9801   4009-9802   Accessorie   Model	Capacit 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah cessorie Color Beige Beige Beige	ty I	Battery Moun 12 V Batteries two; to be wire For remote mo For remote mo For remote mo encity up to 25 Ah eries up to 33 Ah eries	ting Details for cabinet mounting; ed in series for 24 VDC ount in Battery Box 40 ount in Battery Box 40 Dimensions 16 ¼" W x 13 ½" H x (413 mm x 343 mm x) 25 ¾" W x 20 ¾" H x (654 mm x 527 mm x)	select one batt 09-9801 09-9802 5 ¾" D < 146 mm) 4 1⁄s" D < 105 mm)	ery model per sy Batteries for re below <b>Description</b> External batter door and batte alarm control p	mote mountin y cabinet <b>with</b> ry harness; fo panel cabinet	g; see battery cat rout charger, with r close-nippled me	Dinet details
Batteries   Model   2081-9272   2081-9274   2081-9288   2081-9287   2081-9287   2081-9271   Battery Acc   Model   4009-9801   4009-9802   Accessorie   Model   2080-9047	Capacit 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah cessorie Color Beige Beige Beige S Descrip DACT ca	ty I n 1 For batte tion	Battery Moun 12 V Batteries two; to be wire For remote mo For remote mo acity up to 25 Ah eries up to 33 Ah eries	ting Details for cabinet mounting; ed in series for 24 VDC ount in Battery Box 40 ount in Battery Box 40 Dimensions 16 ¼" W x 13 ½" H x (413 mm x 343 mm x) 25 ¾" W x 20 ¾" H x (654 mm x 527 mm x)	select one batt 09-9801 09-9802 5 ¾" D (146 mm) 4 ⅛" D (105 mm) nd, spade lugs of	ery model per sy Batteries for re below <b>Description</b> External batter door and batter alarm control p	mote mountin y cabinet with ry harness; fo panel cabinet er one per pho	g; see battery cat rout charger, with r close-nippled me ne line connection	Dinet details
Batteries   Model   2081-9272   2081-9274   2081-9288   2081-9287   2081-9275   2081-9271   Battery Acc   Model   4009-9801   4009-9802   Accessorie   Model   2080-9047   2975-9812	Capacit 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah cessorie Color Beige Beige Beige S Descrip DACT ca Red sem	ty I n 1 For batte batte tion able, ni-flus	Battery Moun 12 V Batteries two; to be wire For remote mo For remote mo For remote mo acity up to 25 Ah eries up to 33 Ah eries 14 ft (4.3 m) lo sh box trim; 1	ting Details for cabinet mounting; ed in series for 24 VDC bunt in Battery Box 400 bunt in Battery Box 400 bunt in Battery Box 400 Dimensions 16 $\chi''$ W x 13 $\chi''$ H x (413 mm x 343 mm x) 25 $\chi''$ W x 20 $\chi''$ H x (654 mm x 527 mm x) ong, RJ45 plug one er $\overline{\chi}_{16}$ " (37 mm) wide, for	select one batt 09-9801 09-9802 5 ¾" D (146 mm) 4 ¼" D (105 mm) nd, spade lugs ( ar corners and t	ery model per sy Batteries for re below Description External batter door and batter alarm control p	mote mountin y cabinet with ry harness; fo panel cabinet er one per pho p, bottom, and	g; see battery cat rout charger, with r close-nippled mo ne line connection sides	Dinet details
Batteries   Model   2081-9272   2081-9274   2081-9288   2081-9287   2081-9287   2081-9287   2081-9287   4009-9801   4009-9802   Accessorie   Model   2080-9047	Capacit 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah cessorie Color Beige Beige Beige S Descrip DACT ca Red sem Platinum	ty I n 1 S Cap For batte batte tion able, ni-flus sem	Battery Moun 12 V Batteries two; to be wire For remote mo For remote mo	ting Details for cabinet mounting; ad in series for 24 VDC bunt in Battery Box 40 bunt in Battery Box 40 <b>Dimensions</b> 16 $\%''$ W x 13 $\%''$ H x (413 mm x 343 mm) 25 $\%''$ W x 20 $\%''$ H x (654 mm x 527 mm) ong, RJ45 plug one er $\overline{7}_{16}''$ (37 mm) wide, fou m; 1 $\overline{7}_{16}''$ (37 mm) wide	select one batt 09-9801 09-9802 5 ¾" D (146 mm) 4 1⁄8" D (105 mm) nd, spade lugs ( ur corners and t e, four corners a	ery model per sy Batteries for rebelow Description External batter door and batter alarm control p on the other; order rim pieces for top and trim pieces for	mote mountin y cabinet with ry harness; fo panel cabinet er one per pho b, bottom, and or top, bottom,	g; see battery cat rout charger, with r close-nippled mo ne line connection sides and sides	Dinet details
Batteries   Model   2081-9272   2081-9274   2081-9274   2081-9274   2081-9274   2081-9274   2081-9275   2081-9275   2081-9271   Battery Acc   Model   4009-9801   4009-9802   Accessorie   Model   2080-9047   2975-9812   2975-9813	Capacit 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah cessorie Color Beige Beige Beige S Descrip DACT ca Red sem Platinum Series re	s Cap For batte For batte tion able, ni-flus sem	Battery Moun 12 V Batteries two; to be wire For remote mo For remote mo	ting Details for cabinet mounting; ad in series for 24 VDC bunt in Battery Box 40 bunt in Battery Box 40 <b>Dimensions</b> 16 $\%''$ W x 13 $\%''$ H x (413 mm x 343 mm) 25 $\%''$ W x 20 $\%''$ H x (654 mm x 527 mm) ong, RJ45 plug one er $\overline{7}_{16}''$ (37 mm) wide, fou m; 1 $\overline{7}_{16}''$ (37 mm) wide CS (N.O. water flow a	select one batt 09-9801 09-9802 5 ¾" D (146 mm) 4 1⁄s" D (105 mm) 10, spade lugs ( ir corners and t a, four corners and t a, four corners and t and tamper on sa	ery model per sy Batteries for rebelow Description External batter door and batte alarm control p on the other; order rim pieces for top and trim pieces for ame circuit, wires	mote mountin y cabinet with ry harness; fo panel cabinet er one per pho b, bottom, and or top, bottom, a after water file	g; see battery cat rout charger, with r close-nippled mo ne line connection sides and sides ow and before tan	pinet details locking solition ounting to fir n required
Batteries Model 2081-9272 2081-9274 2081-9288 2081-9275 2081-9287 2081-9271 Battery Acc Model 4009-9801 4009-9802 Accessorie Model 2080-9047 2975-9812	Capacit 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah cessorie Color Beige Beige Beige S Descrip DACT ca Red sem Platinum Series re 1 W, end	s Cap For batte tion able, ni-flus sem capsu	Battery Moun 12 V Batteries two; to be wire For remote mo For remote mo	ting Details for cabinet mounting; ad in series for 24 VDC bunt in Battery Box 40 bunt in Battery Box 40 bunt in Battery Box 40 <b>Dimensions</b> 16 $\%$ " W x 13 $\%$ " H x (413 mm x 343 mm) 25 $\%$ " W x 20 $\%$ " H x (654 mm x 527 mm) bong, RJ45 plug one er $\overline{7}_{16}$ " (37 mm) wide, fou m; 1 $\overline{7}_{16}$ " (37 mm) wide CS (N.O. water flow a AWG leads (0.82 mm	select one batt 09-9801 09-9802 5 ¾" D (146 mm) 4 1⁄s" D (105 mm) 10, spade lugs ( ir corners and t a, four corners and t a, four corners and t and tamper on sa	ery model per sy Batteries for rebelow Description External batter door and batte alarm control p on the other; order rim pieces for top and trim pieces for ame circuit, wires	mote mountin y cabinet with ry harness; fo panel cabinet er one per pho b, bottom, and or top, bottom, a after water file	g; see battery cat rout charger, with r close-nippled mo ne line connection sides and sides ow and before tan	pinet details locking solid ounting to fir n required
Batteries Model 2081-9272 2081-9274 2081-9288 2081-9275 2081-9287 2081-9271 Battery Acc Model 4009-9801 4009-9802 Accessorie Model 2080-9047 2975-9812 2975-9813 2081-9031	Capacin 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah 25 Ah 33 Ah 25 Ah 33 Ah 25 Ah 39 Ah 25 Ah 30 Ah 26 Ah 30 Ah 26 Ah 30 Ah 27 Al 30 Ah 26 Ah 30 Ah 27 Ah 30 Ah 26 Ah 30 Ah 3	tion able, abl	Battery Moun 12 V Batteries two; to be wire For remote mo For VSO, ID Jated, two 18 initiating zones	ting Details for cabinet mounting; ad in series for 24 VDC bunt in Battery Box 400 bunt in Battery Box 400 Dimensions 16 ¼" W x 13 ½" H x (413 mm x 343 mm x) 25 ¾" W x 20 ¾" H x (654 mm x 527 mm x) ong, RJ45 plug one er 7/16" (37 mm) wide, fou m; 1 7/16" (37 mm) wide C/S (N.O. water flow a AWG leads (0.82 mm s.	select one batt 09-9801 09-9802 5 ¾" D (146 mm) 4 ⅛" D (105 mm) nd, spade lugs of ir corners and t e, four corners a nd tamper on s 2 ), 2 ½" L x 1 ¾	ery model per sy Batteries for rebelow Description External batter door and batte alarm control p on the other; orde rim pieces for top and trim pieces for and trim pieces for ame circuit, wires w W x 1" H (64 m	mote mountin y cabinet with ry harness; fo panel cabinet er one per pho b, bottom, and or top, bottom, a after water file	g; see battery cat rout charger, with r close-nippled mo ne line connection sides and sides ow and before tan	pinet details locking solie ounting to fir n required
Batteries Model 2081-9272 2081-9274 2081-9288 2081-9275 2081-9287 2081-9271 Battery Acc Model 4009-9801 4009-9802 Accessorie Model 2080-9047 2975-9812 2975-9813	Capacin 6.2 Ah 10 Ah 12.7 Al 18 Ah 25 Ah 33 Ah cessorie Color Beige Beige Beige S Descrip DACT ca Red sem Platinum Series re 1 W, end addressa 3.3 kΩ, 2	in 1 s Cap For batte For batte tion able, ii-flus sem sisto capsu able i W e	Battery Moun 12 V Batteries two; to be wire For remote mo For remote mo For remote mo For remote mo acity up to 25 Ah eries 14 ft (4.3 m) k sh box trim; 1 ni-flush box trim; 1 n	ting Details for cabinet mounting; ad in series for 24 VDC bunt in Battery Box 40 bunt in Battery Box 40 bunt in Battery Box 40 <b>Dimensions</b> 16 $\%$ " W x 13 $\%$ " H x (413 mm x 343 mm) 25 $\%$ " W x 20 $\%$ " H x (654 mm x 527 mm) bong, RJ45 plug one er $\overline{7}_{16}$ " (37 mm) wide, fou m; 1 $\overline{7}_{16}$ " (37 mm) wide CS (N.O. water flow a AWG leads (0.82 mm	select one batt 09-9801 09-9802 $5 \frac{3}{100}$ $4 \frac{1}{100}$ mm) $4 \frac{1}{100}$ mm) and, spade lugs of and tamper on significant the $2$ ), $2 \frac{1}{100}$ L x 1 $\frac{3}{100}$ addressable initi	ery model per sy Batteries for rebelow Description External batter door and batte alarm control p on the other; orde rim pieces for top and trim pieces for ame circuit, wires " W x 1" H (64 m iating zones	mote mountin y cabinet with ry harness; fo panel cabinet er one per pho b, bottom, and or top, bottom, a after water file	g; see battery cat rout charger, with r close-nippled mo ne line connection sides and sides ow and before tan	pinet details locking solid ounting to fir n required

# **General Specifications**

	100 \/10				
Input Power		t 2 A maximum @ 102 to 132 VAC, 50/60 Hz			
input i onei	240 VAC Input	It 1 A maximum @ 204 to 264 VAC, 50/60 Hz			
	Power Supply	Including module currents and auxiliary power outputs;	Output switches to battery backup		
	Output Rating	6 A total			
4007ES Hybrid Power		3 A each for Special Application Appliances	during mains AC		
Supply Output Ratings	NAC Ratings	2 A each for Regulated 24 DC Appliances	failure or brownout		
	Auxiliary Power Tap	2 A maximum, 24 VDC nominal (19.5 to 31.1 VDC)	conditions		
Special Application Non- Appliances	Addressable	Simplex horns, strobes, and combination horn/strobes and speaker/strobes (contact your Simplex product representative for compatible appliances)			
Regulated 24 DC Non-Addressable Appliances		Power for other UL listed appliances; use associated external synchronization modules where required			
Battery Charger	Battery capacity range	UL and ULC listed for battery charging of 6.2 Ah up to 33 Ah (batteries larger than 18 Ah require a remote battery cabinet)			
Ratings (sealed lead-acid batteries)	Charger characteristics and performance	Inours per LIL Standard 864' to 70% canacity in 12 nours per LILL. Standard			

#### **General Specifications** (Continued)

Custom Background Display Details		Supported file types: JPG, BMP, GIF, and PNG Recommended image type is JPG, recommended image size is 480 x 240, and the file size limit is 100 kb
Environmental	Operating Temperature	32° to 120°F (0° to 49° C)
Environmental	Operating Humidity	Up to 93% RH, non-condensing @ 90° F (32° C) maximum

# 4007ES Mounting and Module Location Reference



#### **Module Locations:**

- A. CPU and User Interface assembly.
- B. Location for optional 4007-9805 LED Module.
- C. Power Supply Assembly.
- D. 4007-9806 SDACT location. Note: The SDACT includes a 650-1838 flat mounting bracket (available separately). Some pre-existing systems with an angled SDACT bracket will need to be replaced with the flat mounting bracket when a Network Interface Card is installed.
- E. Location for 4007-9801 Zone/Relay Module, 4007-9812 Dual RS-232 Interface, or (as shown) 4007-9802 25 V Regulator Module
- F. Primary location for 4007-9801 Zone/Relay Module, or 4190-6106 TrueInsight Remote Service Gateway.
- G. Location for additional 4007-9801 Zone/Relay Module.
- H. Identical to Block G above.
- I. 4007-9807 or 4007-9808 City Circuit Module, or 4007-9809 Relay Module.
- J. 4007-9803 IDNet+ Loop Expansion Modules, maximum of two (two are shown).
- K. Identical to block J above.
- L. Block L is an additional block that sits on spacers above Block G and H. The 4007-9810 NIC can be mounted in block L with or without modules mounted below it in blocks G and H. When fiber media cards are used and an SDACT is present, the SDACT requires a 650-1838 flat mounting bracket (ordered separately).
- M. Battery location for up to 18 Ah batteries. Note: No conduit entry or wiring in this area, 14-7/8" (378 mm) wide.
- **Note:** A system ground must be provided for Earth Detection and transient protection devices. This connection shall be made to an approved, dedicated Earth connection per NFPA 70, Article 250, and NFPA 780.

# 4007ES Hybrid Additional Reference



4007ES Hybrid with optional 48 LED Annunciator Module (4007-9805)



4606-9205 (Platinum) Color LCD Touchscreen Remote Annunciator



4606-9202 (Red) Color LCD Touchscreen Remote Annunciator

#### Additional Compatible Equipment and Reference

Subject	Data Sheet	Subject	Data Sheet
4009 IDNet NAC Extender	S4009-0002	Battery and Battery Cabinet Reference	S2081-0006
4003EC Voice Control Panel	S4003-0002	Seismic Battery Brackets Reference	S2081-0019
4606 Series Color LCD Touchscreen Remote Annunciator	S4606-0003	Addressable Device Compatibility, IDNet Communication Sensors and Devices	S4090-0011
Graphic I/O Modules	S4100-0005	Serial DACT (SDACT)	S2080-0009
4602 Series SCU/RCU	S4602-0001	TrueInsight Remote Service	S4100-0063
Agent Release Accessories	S2080-0010	Network Communications S4100-0056	S4100-0056
Fire Alarm Network Overview	S4100-0055	Multi-Signal Fiber Optics S4100-0049	S4100-0049
Network Communications	S4100-0056	PC Annunciator S4190-0013	S4190-0013
Automatic Extinguishing, Deluge and Preaction Sprinkler System Releasing Control for 4007ES	S4007-0003	120 VAC Desktop Remote Printer	S4190-0011

#### Additional Technical Reference

Description	Document	Description	Document
Installation Manual	579-1102	Single Page Operator Instructions	579-1109
Zone/Relay Module Installation Manual	579-1103	2-Wire Detector Compatibility Chart	579-832
Detailed Operator's Manual	579-1165		

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