

# 4007ES Fire Detection and Control with Addressable Initiation and Addressable Notification

#### **Features**



Figure 1: 4007ES Panel Front View

# Flexible standard combination of addressable initiation and addressable notification 4.3" (109 mm) Diagonal color touchscreen display:

- Convenient and intuitive user interface provides detailed system status and individual point information
- Supports dual language selection, including unicode character languages
- · A custom background display appears when operation is normal

# Includes a 3 A IDNAC SLC (signaling line circuit) output power supply that provides enhanced power delivery to addressable notification appliances:

- A constant 29 VDC source voltage is maintained during alarm, even during battery operation, allowing strobes to operate at higher voltage with lower current and ensuring a consistent current draw and voltage drop margin under both primary power and secondary battery standby
- Efficiencies include lower strobe currents, wiring distances up to 2 to 3 times farther than with conventional notification, support for more appliances per IDNAC SLC, and smaller gauge wiring. This provides installation and maintenance savings. with high assurance that appliances will operate as normal during worst case alarm conditions
- IDNAC SLCs are compatible with both TrueAlert ES and TrueAlert addressable notification appliances, and remote 4009 IDNAC Repeaters to extend power and wiring distance even farther and provide for up to 127 addressable notification appliances
- Power supply provides 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

#### Electrically isolated IDNet+ addressable initiating device SLC:

- Provides built-in short circuit isolation for monitoring and control of TrueAlarm analog sensors and IDNet communications 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 to the IDNet+ channel capacity for a total of up to 250 addressable points

#### **Software Feature Summary:**

- Current and previous panel configuration are both maintained in onboard memory to allow easy selection of desired revision
- An internal Ethernet service port is available for service computer connections to perform configuration updates, downloads and uploads; report downloads, and system software updates
- Internal USB interface allows a memory stick/thumb drive 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 that is compatible with IP Communicators
- Up to two additional IDNet+ addressable device output loop connections with 75 additional point capacity each
- Front mounted 48 LED annunciator with custom label inserts.
- · Dual Class A IDNAC Isolator (DCAI)
- Remote LED annunciator support via RUI (remote unit interface) communications port for use with unshielded, twisted pair wiring (UTP)
- Eight Point Zone/Relay Modules individually selectable as IDC or relay rated 2 A @ 30 VDC (resistive)
- Alarm relays and auxiliary relays
- Dual RS-232 ports (for printer, PC annunciator or third party interface)
- TrueInsight Remote Gateway
- · City connections, with or without disconnect switch
- 4003EC Voice Control Panels
- · 4009 Series IDNAC Repeaters
- Battery brackets for seismic area protection

#### **General Mechanical:**

 Compact red or platinum cabinet for convenient surface or semi-flush mounting; 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)

#### Introduction

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

4007ES 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.

<sup>\*</sup> Additional listings may be applicable; contact your local product supplier for the latest status.

### 4007ES Fire Detection and Control with Addressable Initiation and Addressable Notification

IDNet+ addressable initiation communications and IDNAC addressable notification communications are standard features. (Refer to data sheet AC4007-0001 for 4007ES panels providing conventional notification.)

#### **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.

#### **Touchscreen Display with LED Status Indicators**

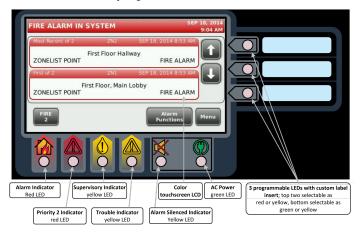


Figure 2: Touchscreen Display with LED Status Indicators

#### **Operator Screen Reference**

Main Menu Screen provides easy navigation to the function required. Buttons A, B, and C have programmable functions.



System Trouble Screen identifies Point Information Screen allows active troubles with custom labels displayed, arrows allow navigation through the list



System Alarm Screen identifies active alarms with custom labels displayed, arrows allow navigation through the list



review of point details, arrows allow navigation through the information.



#### **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

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 selfresetting 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 polycarbonate window
- · Latching front panel assembly swings forward for convenient internal
- 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 AC2081-0019

#### **IDNet+ Addressable Device Control**

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.

Page 2 AC4007-0002 Rev. 11 9/2017

#### Table 1: TrueAlarm Addressable Sensor Reference





Figure 3: TrueAlarm Photo Sensor with Base

Figure 4: TrueAlarm Photo/ Heat Sensor in CO Base

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 *AC4098-0052* 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 A4098-9754 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 *AC4098-0024*.

#### **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**

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+ 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 A007-9803 IDNet+ Loop Expansion Modules.)

Table 2: IDNet+ SLC Wiring Specifications

Specification		Rating	
Maximum Distance	0 to 125	4000 ft (1219 m); 50 ohms	
from Control Panel per Device Load		2500 feet (762 m); 35 ohms	
Total Wire Length Allowed With "T" Taps for Class B Wiring		Up to 12,500 ft (3.8 km); 0.60 μF	

#### **Table 2: IDNet+ SLC Wiring Specifications**

Specification	Rating	
Maximum Capacitance Between IDNet+ Channels	1 μF	
Loading per device	0.8 mA supv., 1 mA alarm; 2 mA per activated device LED	
Wire Type and Connections	Shielded or unshielded, twisted or untwisted wire*	
<b>Connections</b> Terminal blocks for 18 to 12 A		
Compatibility includes: IDNet communicating devices and TrueAlarm sensors including QuickConnect and QuickConnect2 sensors.		

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

#### **TrueAlert ES Appliance Self-Test Operation**

#### **On-Board Test Sensors**

TrueAlert ES appliances are equipped with on-board sensors to detect strobe and/or horn output allowing efficient and unobtrusive Self-Testing. When Automatic Self-Test is initiated from the control panel, each appliance within the selected VNAC group will briefly operate and then report its Self-Test status to the control panel, all within several seconds. Silent Self-Test can be selected to test only visible appliance if desired. The control panel is in a trouble condition during testing and in the event of an alarm, Self-Test is automatically terminated.

#### **Automatic Self-Test**

Results are communicated to the control panel with a time and date stamp and are stored in memory. Results are viewable at the front panel display and printed reports are available from the panel USB port.

#### Individual Self-Test

Self-Test is selected from the control panel when individual appliances need to be observed to operate. Each appliance in the selected VNAC group will turn on its LED until individually activated by applying a magnet. After performing the individual test, the appliance LED turns off to indicate completion. Results are recorded the same as during the automatic test.

# IDNAC SLC Control of TrueAlert and TrueAlert ES Addressable Notification

#### Addressable notification appliance communications

Addressable notification appliance communications include operation of TrueAlert and TrueAlert ES Visible only (V/O, strobe), Audible only (A/O, horn), Audible/Visible (A/V, horn/strobe), and strobes of Speaker/Visible (S/V) notification appliances. (S/V appliances require separate speaker wiring.) IDNAC SLC addressable communications allow each horn and strobe to be individually controlled using a single two-wire circuit, confirms the wiring connections to the individual notification appliance's electronic circuit, and confirms communications between each appliance and the fire alarm control unit. Addressable communications increases supervision integrity versus conventional notification systems by providing supervision beyond the circuit wiring to each individual appliance and by constantly verifying the ability of each appliance to communicate with the control unit.

#### **Individual Appliance Status and Settings**

The fire alarm control unit monitors and records each addressable notification appliance status, type of appliance, and its configured appliance settings. A fault in any individual appliance automatically reports a trouble condition to the control unit.

Page 3 AC4007-0002 Rev. 11 9/2017



#### Table 3: TrueAlert ES Addressable Appliance Reference







Figure 5: A/O horn

Figure 6: V/O strobe

Figure 7: A/ V horn/strobe

#### **Virtual NACs**

For control convenience, IDNAC notification appliances can be grouped into Virtual NACS (VNACs) for group control, grouping that can be made across SLCs, not defined by their wiring connection.

#### **Panel Control Convenience**

Applicable operation settings for each appliance can be programmed without having to replace appliances or remove them from the wall or ceiling. An appliance's VNAC notification zone can be easily changed through programming without having to add additional circuits, conduit, and wiring. Audible and visible appliances for non-fire emergency communications notification can be programmed to operate separately on the same pair of wires as the fire alarm notification appliances. The result is lower installation, retrofit, and overall life-cycle cost of ownership compared with traditional conventional notification systems

#### Installation, Retrofit, and Life-Cycle Cost Benefits

With each addressable appliance capable of being controlled separately on the same two-wire IDNAC SLC, installation time and expense for both retrofit and new construction can be significantly reduced. When Class B wiring is used, wiring can be "T-tapped" allowing more savings in distance, wire, conduit (size and utilization), and overall installation efficiency.

#### **Location Information, Diagnostics and Troubleshooting**

Each addressable notification appliance has its own 40 character custom label to identify the location of the appliance and to aid in troubleshooting fault conditions. In conventional notification systems, conventional appliances are not capable of communicating with the control unit. Fault reporting on a conventional system is limited to the circuit wiring and the entire area (zone) covered by appliances on the notification appliance circuit (NAC) making it much more difficult and costly to locate and correct the source of a problem. Using the TrueAlert magnet test allows each appliance to individually identify its candela setting and address and to briefly operate if desired, and using the TrueAlert ES Appliance Self-Test feature provides detailed performance verification per appliance.

#### **IDNAC SLC Hardware Reference**

The 4007ES provides a 3 A IDNAC SLC for control and power to TrueAlert ES and TrueAlert addressable notification appliances. The power supply incorporates an efficient switching design that provides a regulated output of 29 VDC, even during battery operation. With 29 VDC minimum output at the panel, addressable notification SLCs can support wiring distances 2 to 3 times farther than available with conventional notification, or support more appliances per SLC, or work with smaller gauge wiring, or combinations of these benefits. The result is installation and maintenance savings with high assurance that appliances that operate during normal system testing will operate during worst case alarm conditions.

#### **IDNAC SLC Appliance Wiring Reference**

#### **IDNAC SLC Capacity**

Up to 127 addresses and up to 139 unit loads (appliances are typically one unit load, devices such as Isolators may require more than one load, refer to individual device data sheet for specific information.

**Table 4: IDNAC SLC Appliance Wiring Reference** 

Wiring Reference	Description
Recommended Wire Type	UTP, unshielded twisted pair
Maximum wire length allowed with "T-Taps" for Class B wiring, per SLC	10,000 ft (3048 m)
Maximum wire length per SLC to any appliance	4000 ft (1219 m)
Appliance Supervisory Current	1 unit load = 0.8 mA per appliance
Wiring Connections	Terminals for 20 to 12 AWG (0.52 mm2 to 3.31 mm2)

# Power Supply Output and Zone/Relay Module Details

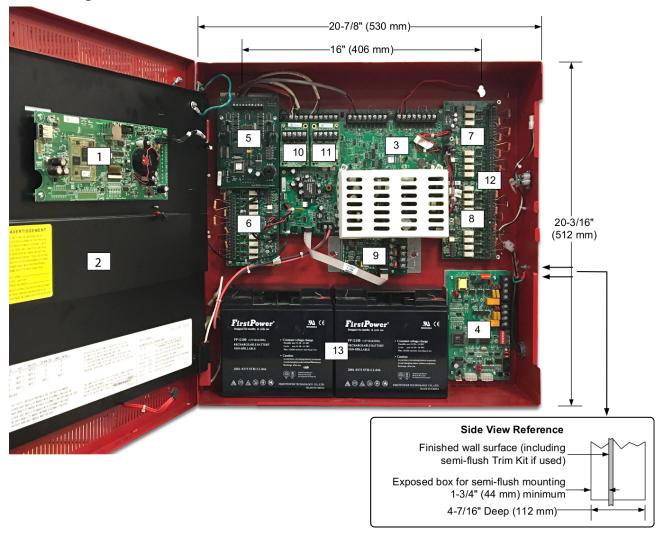
#### **Power Supply Output Details:**

- 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
- 4 A Output Rating. This includes current for: IDNAC controlled notification appliances; IDNet devices; module currents; and auxiliary output current (battery charging, CPU, and power supply current are not subtracted from the 4 A)
- Low Battery Voltage Cutout is selectable when required (required for ULC listing applications)
- 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 IDNAC SLC current
- Battery Charger is dual rate, temperature compensated, and charges up to 18 Ah sealed lead-acid batteries in the battery compartment, and charges up to 33 Ah batteries in an external cabinet
- 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 A007-9803 IDNet+ Loop Expansion Modules (as described on page 4)
- Compatible RUI remote equipment includes: A4606-9202 and A4606-9205 Color Touchscreen Annunciators (up to 6 total), 4100 Series 24 I/O and LED/Switch modules, A602 Series LED/Switch and I/ O Annunciator modules, including A602-9101 Status Command Units (SCU), and A602-9102 Remote Command Units (RCU)
- 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; output is selectable as Class B or Class A

Page 4 AC4007-0002 Rev. 11 9/2017

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#### **4007ES Mounting and Module Location Reference**



#### **Module Locations**

- 1. CPU and User Interface assembly.
- 2. Location for optional A007-9805 LED Module.
- 3. Power Supply Assembly.
- 4. A007-9806 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.

- 5. Location for A007-9801 Zone/Relay Module, A007-9812 Dual RS-232 Interface, or (as shown) A007-9802 25 V Regulator Module
- 6. Primary location for A007-9801 Zone/Relay Module.
- 7. Location for additional A007-9801 Zone/Relay Module.
- 8. Identical to Block 7 above.
- 9. A007-9807 or A007-9808 City Circuit Module, or A007-9809 Relay Module.
- 10. A007-9803 IDNet+ Loop Expansion Modules, maximum of two (two are shown).
- 11. Identical to block 10 above.
- 12. Block 12 is an additional block that sits on spacers above Block 7 and 8. The A007-9810 NIC can be mounted in block L with or without modules mounted below it in blocks 7 and H. When fiber media cards are used and an SDACT is present, the SDACT requires a 650-1838 flat mounting bracket (ordered separately).
- 13. Battery location for up to 18 Ah batteries. Note: No conduit entry or wiring in this area, 14-7/8" (378 mm) wide.

  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.

Page 5 AC4007-0002 Rev. 11 9/2017



#### **Product Selection**

#### **Table 5: Product Selection**

SKU	Color	Description	Supv.	Alarm
A007-9201	Red	4007ES with a 3 A, Class B, IDNAC SLC for up to 127 addressable notification appliances,		
		and 4 A output power supply/battery charger; includes IDNet+ communications for 100 addressable points	180 mA	185 mA
A007-9202	Platinum	<b>Note:</b> Add optional module and other currents separately for battery calculations; base panel current does not subtract from the 4 A power available for optional modules and external loads	TOUTILA	TOSTIA

#### **Module and Accessories Selection Information**

#### **Table 6: Factory Programming Options**

SKU	Description
A007-8810	Factory Programming (select)

#### **Table 7: Field Installed Optional Modules**

SKU	Description	Supv.	Alarm
A007-9801	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); select up to 4 maximum; current shown is for 8 Class B IDCs with 4 in alarm, detector current is added separately (refer to 4007ES Hybrid data sheet <b>S4007 -0001</b> for additional information)	83 mA max	350 mA max
	25 VDC Regulator Module; 2 A maximum output; use to power Zone/Relay modules with 1 module	190 mA	445 mA
A007-9802	connected to initiating devices requiring nominal 25 VDC voltage; refer to technical with 2 modules	290 mA	801 mA
	publication 579-832 2-Wire Detector Compatibility Chart for application details with 3 modules		1156 mA
A007-9803	IDNet+ Loop Expansion Module; provides an additional isolated loop with short circuit isolation to the existing IDNet+ channel, also provides an additional 75 addressable points to the IDNet+ channel capacity, maximum of two	NA	NA
A007-9804	Dual Class A IDNAC Isolator (DCAI); converts a single Class B IDNAC SLC input to two Class A or two Class B SLC outputs; provides short circuit isolation between each Class A or B output circuit; requires one IDNAC address; the total current remains controlled by the Class B input source SLC at 3 A maximum	8.3 mA	18.5 mA
	Panel Mounted 48 LED Status Annunciator Module; provides 24 Yellow LEDs, 20 Red LEDs, no LEDs on	10 mA	10 mA
A007-9805	and 4 Red/Green LEDs that are programmable for up to 24 IDC zones of alarm and trouble annunciation, or as required for custom annunciation requirements	1.75 mA pe mA max	r LED, 105
A007-9806	SDACT Module for Point or Event Reporting; order connection cables as required (see cable details under accessories).	30 mA	40 mA
A007-9807	City Circuit Module with Disconnect Switch	20 mA	36 mA
A007-9808	City Circuit Module without Disconnect Switch	20 mA	36 mA
A007-9809	Relay Module; relays for Alarm, Supervisory, and Trouble; rated 2 A resistive @ 32 VDC	15 mA	37 mA
A007-9812	Dual RS-232 Interface Module, compatible with Autocall remote printer, PC annunciator or third party interface (two ports/connections maximum).	60 mA	60 mA

## Table 8: Field Installed Optional Network Modules

SKU	Description		Supv.	Alarm
A007-9810	Modular Network Interface Card; Cl. see below)	ass B or Class X (requires up to two media cards; ordered separately,	30 mA (with no cards installed)	30 mA
A007-6301	Left port, single-mode 4120 duplex fiber media card	network interface card; Maximum of 1 left port and 1 right port duplex fiber media card per modular network interface. Field connections require left port to right port pairing. Order fiber media service kits	55 mA	55 mA
A007-6302	Right port, single-mode 4120 duplex fiber media card		55 mA	55 mA
A007-6303	Left port, multi-mode 4120 duplex fiber media card		55 mA	55 mA
A007-6304	Right port, multi-mode 4120 duplex fiber media card	retrofit information)		55 mA

Page 6 AC4007-0002 Rev. 11 9/2017

#### 4007ES Fire Detection and Control with Addressable Initiation and Addressable Notification

#### **Table 9: Batteries**

SKU	Capacity	Battery Mounting Details				
2081-9272	6.2 Ah	12 V Batteries for cabinet mounting; select one b	12 V Batteries for cabinet mounting; select one battery model per system standby requirements; order quantity			
2081-9274	10 Ah	of two; to be wired in series for 24 VDC	of two; to be wired in series for 24 VDC			
2081-9275	18 Ah	12 V Batteries for cabinet mounting; select one battery model per system standby requirements; order quantity of two; to be wired in series for 24 VDC				
2081-9271	33 Ah	For remote mount in Battery Box 4009-9802	Batteries for remote mounting; see battery cabinet details below			

#### **Table 10: Battery Accessories**

SKU	Color	Capacity	Dimensions	Description
A009-9801	Beige	For up to 25 Ah batteries	16 ¼" W x 13 ½" H x 5 ¾" D (413 mm x 343 mm x 146 mm)	External battery cabinet without charger, with locking solid door and battery harness; for close-nippled mounting to fire
4009-9802	Beige	For up to 33 Ah batteries		alarm control panel cabinet

#### Table 11: Accessories

SKU	Description	
A2975-9812	Red semi-flush box trim; 1 7/16" (37 mm) wide, four corners and trim pieces for top, bottom, and sides	
A2975-9813	Platinum semi-flush box trim; 1 7/16" (37 mm) wide, four corners and trim pieces for top, bottom, and sides	
A4081-9018	10 kΩ, 1 W end-of-line resistor harness for non-addressable NACs (if A007-9801 is used)	

## Additional Compatible Equipment and Reference

#### **Table 12: Datasheet reference**

Subject	Data Sheet
4009 IDNet NAC Extender	AC4009-0002
A4606 Series Color LCD Touchscreen Remote Annunciator	AC4606-0003
Graphic I/O Modules	AC4100-0005
A602 Series SCU/RCU	AC4602-0001
Agent Release Accessories	AC2080-0010
Battery and Battery Cabinet Reference	AC2081-0006
Seismic Battery Brackets Reference	AC2081-0019
Serial DACT (SDACT)	AC2080-0009
Multi-Signal Fiber Optics	AC4100-0049
PC Annunciator	AC4190-0013
120 VAC Desktop Remote Printer	AC4190-0011

#### **Table 13: Additional Technical Reference**

Description	Document
Installation Manual	579-1102AC
Zone/Relay Module Installation Manual	579-1103AC
Detailed Operator's Manual	579-1165AC
Single Page Operator Instructions	579-1109AC
4007ES Hybrid Data Sheet	AC4007-0001

Page 7 AC4007-0002 Rev. 11 9/2017



## **General Specifications**

**Table 14: General Specifications** 

Specification			Rating	
Input Power 240 VAC Input Battery		120 VAC Input	2 A maximum @ 102 to 132 VAC, 50/60 Hz	
		240 VAC Input	1 A maximum @ 204 to 264 VAC, 50/60 Hz	
		Battery	6 A maximum @ 24 VDC (during battery operation)	
Power Supply O Rating		r Supply Output	4 A output for "Special Application" appliances  Note:  The 4 A output rating was determined such that optional module currents, and external device and appliance currents can be	
4007ES Power Supply Output Ratings	IDNA	SLC Ratings	directly added together, not to exceed 4 A total.  3 A, regulated 29 VDC during Alarm, 127 addresses, 139 unit loads; DC-DC converter circuit is >92% efficient over operating range	mains AC failure or
	IDNAC SLC Wiring		Output terminals are rated for 18 to 12 AWG with duplicate output terminals rated for two wires each, allowing up to four (4) Class B branch circuit T-taps to be made in the cabinet; additional T-taps may be made in external wiring junction cabinets or boxes	brownout conditions
	Auxilia	ary Power Tap	2 A maximum, 24 VDC nominal (19.5 to 31.1 VDC)	
Compatible Special Application Appliances		ppliances	Autocall TrueAlert ES and TrueAlert addressable notification appliances; contact your Autocall product representative for compatible appliances	
Battery Charger Ratings (sealed lead- acid batteries)	Battery capacity range		battery charging of 6.2 Ah up to 33 Ah (batteries larger than 18 Ah require a remote battery cabinet)	
	Charger characteristics and performance		Temperature compensated, dual rate, recharges depleted batteries within 48 hours per UL Standard 864; to 70% capacity in 12 hours per ULC Standard S527	
			Supported file types: JPG, BMP, GIF, and PNG	
Custom Background Display Details			Recommended image type is JPG, recommended image size is $480 \times 240$ , and the file size limit is $100 \text{ kb}$	
Environmental	Operating	Temperature	32° to 120°F (0° to 49° C)	
Liivii oiiiiiciitai	Operating	; Humidity	to 93% RH, non-condensing @ 90° F (32° C) maximum	

Page 8 AC4007-0002 Rev. 11 9/2017



#### **4007ES Additional Reference**



Figure 8: 4007ES with IDNAC Notification and optional 48 LED Annunciator Module (A007-9805)



Figure 9: A4606-9205 (Platinum) Color LCD Touchscreen Remote Annunciator



Figure 10: A4606-9202 (Red) Color LCD Touchscreen Remote Annunciator



Figure 11: 4007ES with IDNAC Notification Operator View with door open

Page 9 AC4007-0002 Rev. 11 9/2017



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