## **ES-50X**

# Intelligent Addressable FACP with Communicator



Addressable Fire Alarm Control Panels

#### General

The **ES-50X** is the latest intelligent addressable fire alarm control panel (FACP) from Fire+Lite Alarms and is a direct replacement for the MS-9050UD/LS. The ES-50X comes with a pre-installed communi-cator and supports up to 50 addressable devices in any combination of detectors or modules. With an extensive list of powerful features, the ES-50X programs just like Fire+Lite's other addressable panels, yet fits into applications previously served only by conventional panels.

The pre-installed IPOTS-COM is a dual technology (POTS and IP) communicator. The POTS transmits system status (alarms, troubles, AC loss, etc.) to a Central Station via the public switched telephone network. The IP communicator's internet monitoring capability sends alarm signals over the Internet saving the monthly cost of two dedicated business telephone lines. Although not required, the secondary telephone line may be retained providing backup communication over the public switched telephone line. Optional cellular reporting is available using the CELL-MOD or CELL-CAB-FL.

Remote and local programming of the control panel is possible using the FS-Tools Upload/Download utility. Programming databases can be uploaded/downloaded via the panel's USB port (and USB cable) or via an ethernet connection using the IPOTS-COM communicator. The USB port also allows for the download or upload of the entire program, history file, walk-test data, current status and system voltages by means of a USB flash drive.

The power supply and all electronics are contained on a circuit board supported on a new quick install chassis and housed in a metal cabinet. Available accessories include local and remote upload/download software, remote annunciators, and reverse polarity/city box transmitter (4XTMF).

#### **Features**

- · Listed to UL Standard 864, 10th edition
- Pre-installed IPOTS-COM Ethernet IP and POTS (Plain Old Telephone Service) Central Station Communicator
- Optional CELL-MOD or CELL-CAB-FL GSM Central Station Communicator over AlarmNet®
- · Compatible with SWIFT® wireless devices
- Auto-programming (learn mode) reduces installation time.
   Reports two devices set to the same address
- Two independently programmable, built-in Style Z (Class A) or Style Y (Class B) NAC circuits
- Selectable strobe synchronization for System Sensor, Wheelock, and Gentex devices
- · Notification Appliance Circuit End of Line resistor matching
- · Four programmable function keys for ease of maintenance
- · Two programmable relays and one fixed trouble relay
- Built-in Programmer
- Integral 80-character LCD display with backlighting
- · Real-time clock/calendar with automatic daylight savings control
- · History file with 1,000 event capacity
- Addressable sounder base
- Multi-criteria detector (smoke, heat, CO) with programmable response
- Control module delay timer
- · Automatic detector sensitivity testing (NFPA 72 compliant)
- Automatic device type-code verification
- Point trouble identification
- · Waterflow selection per module point
- · Alarm verification selection per detector point



- Maintenance alert warns when smoke detector dust accumulation is excessive
- · One-person audible or silent walktest with walktest log & printout
- · System alarm verification selection per detector point
- PAS (Positive Alarm Sequence) and Pre-signal per point (NFPA 72 compliant)
- Up to 16 ANN-BUS annunciators- 8 per each ANN-Bus
- Remote Acknowledge, Alarm Silence, Reset and Drill via addressable modules or remote annunciator
- Upload/Download of program and data via USB with optional FS-Tools Programming Utility

#### **SLC COMMUNICATION LOOP**

- Supports LiteSpeed<sup>™</sup> and CLIP protocols
- SLC operates up to 10,000 ft. (3,000 m) in LiteSpeed mode with twisted, unshielded wire
- Single addressable SLC loop which meets NFPA Class B and Class A requirements
- 50 addressable device capacity (any combination of addressable detectors and modules)
- Compatible with Fire•Lite's addressable devices (refer to the SLC Wiring Manual)

#### **NOTIFICATION APPLIANCE CIRCUITS (NACS)**

- Two independently programmable output circuits. Circuits can be configured for the following outputs:
  - Style Y (Class B)
  - Style Z (Class A)
- Silence Inhibit and Autosilence timer options
- Continuous, March Time, Temporal, or California code for main circuit board NACs with two-stage capability
- Selectable strobe synchronization per NAC
- 2.5 A special application, 250mA regulated, total power for NACs **NOTE**: Maximum or total 24VDC system power shared between all NAC circuits and the ANN-BUS is 2.7 A

#### PROGRAMMING AND SOFTWARE

Autoprogramming (learn mode) reduces installation time

- Custom English labels (per point) may be manually entered or selected from an internal library file
- · Two programmable Form-C relay outputs
- 50 software zones
- · Continuous fire protection during online programming
- Program Check automatically catches common errors not linked to any zone or input point
- OFFLINE PROGRAMMING: Create the entire program in your office using FS-Tools, a Windows®-based software package, and upload/download system programming locally. Offline programming requires an ethernet connection. FS-Tools is available on www.firelite.com.

#### **User interface**

#### LED INDICATORS

- · Fire Alarm (red)
- · CO Alarm (red)
- · AC Power (green)
- Supervisory (yellow)
- Trouble (yellow)
- Ground fault (yellow)
- Battery fault (yellow)
- Disabled (yellow)
- · Maintenance (yellow)
- Communication (yellow)
- Alarm Silenced (yellow)
- F1-F4 Programmable Function Keys (yellow)

#### KEYPAD

- 16 key alpha-numeric pad
- Acknowledge
- Alarm Silence
- Drill (Manual Evacuate)
- Four (4) programmable function keys
- Reset (lamp test)

#### **Product Line Information**

**ES-50X:** Addressable Fire Alarm Control Panel with one SLC loop. Includes main circuit board with display, pre-installed IPOTS-COM communicator, chassis with transformer, backbox with door, plastic bag containing screws, cables, key, etc. (For ES-50XC, refer to DF-60954.)

**FS-Tools:** Programming software for Windows®-based PC computer. Available for download at <a href="www.firelite.com">www.firelite.com</a>.

**CELL-CAB-FL/CELL-MOD:** Optional GSM communicators.

**IPOTS-COM:** Dual technology (POTS and **IP**) communicator. (replacement board)

**DP-ES-R**: Optional dress panel for the ES-50X.

TR-CE: Optional trim ring for semi-flush mounting.

BB-2F: Optional cabinet for one or two modules.

**BB-6F:** Optional cabinet for up to six modules mounted on CHS-6 chassis

**BB-26:** Battery backbox, holds up to two 25 AH batteries & CHG-75.

BB-55F: Battery box, houses two 55 AH batteries

**CHS-6:** Chassis, mounts up to six multi-modules in a BB-6F cabinet. **CHG-75:** Battery charger for lead-acid batteries with a rating of 25 to 75 AH.

**CHG-120F:** Remote battery charging system for lead-acid batteries with a rating of 55 to 120 AH. Requires additional BB-55F for mounting

BAT Series: Batteries, see data sheet DF-52397.

PRN Series: UL listed compatible event printer. Uses tractor-fed paper,

#### **OPTIONAL MODULES**

**4XTMF Reverse Polarity Transmitter Module:** Provides a supervised output for local energy municipal box transmitter, alarm and trouble. Includes a disable switch and disable trouble LED.

#### **COMPATIBLE ANNUNCIATORS**

**ANN-80:** Remote, red LCD annunciator mimics the information displayed on the FACP LCD display. Recommended wire type is unshielded.

**ANN-100:** Remote LCD annunciator mimics the information displayed on the FACP LCD display. Recommended wire type is unshielded. For use in FM applications only.

**ANN-I/O:** LED Driver Module provides connections to a user supplied graphic annunciator. (See DF-52430.)

**ANN-LED:** Annunciator Module provides three LEDs for each zone: Alarm, Trouble, and Supervisory. Ships with red enclosure. (See DF-60241.)

**ANN-RLED:** Provides alarm (red) indicators for up to 30 input zones or addressable points. (See DF-60241.)

**ANN-RLY:** Relay Module provides 10 programmable Form-C relays. Can be mounted inside the cabinet. (See DF-52431.)

**ANN-S/PG:** Serial/Parallel Printer Gateway module provides a connection for a serial or parallel printer. (See DF-52429.)

#### ADDRESSABLE DEVICES

All feature a polling LED and rotary switches for addressing.

**SD365:** Addressable low-profile photoelectric smoke detector. Lite-Speed only.

**SD365-IV:** Addressable low-profile photoelectric smoke detector. Ivory. LiteSpeed and CLIP mode.

**SD365T:** Addressable low-profile photoelectric smoke detector with thermal sensor. LiteSpeed only.

 ${\bf SD365T\text{-}IV:} \ \, {\bf Addressable } \ \, {\bf low\text{-}profile } \ \, {\bf photoelectric } \ \, {\bf smoke } \ \, {\bf detector } \ \, {\bf with } \ \, {\bf thermal } \ \, {\bf sensor. } \ \, {\bf lvory. } \ \, {\bf LiteSpeed } \ \, {\bf and } \ \, {\bf CLIP } \ \, {\bf mode. } \ \,$ 

**SD365R:** Remote test capable addressable photoelectric smoke detector for use with DNR(W) duct detector housing. LiteSpeed only.

**SD365R-IV**: Remote test capable addressable photoelectric smoke detector for use with DNR(W) duct detector housing. Ivory. Lite-Speed and CLIP mode.

H365: Low-profile 135°F fixed thermal sensor. LiteSpeed only.

 $\mbox{H365-IV}\colon\mbox{Low-profile }135^{\circ}\mbox{F}$  fixed thermal sensor. Ivory, LiteSpeed and CLIP mode.

**H365R:** Low-profile, intelligent, rate-of-rise thermal sensor. Lite-Speed only.

**H365R-IV:** Low-profile, intelligent, rate-of-rise thermal sensor. Ivory. LiteSpeed and CLIP mode.

**H365HT**: Low-profile intelligent 190°F/88°C fixed thermal sensor. LiteSpeed only.

**H365HT-IV**: Low-profile intelligent 190°F/88°C fixed thermal sensor. Ivory. LiteSpeed and CLIP mode.

#### Legacy Devices

SD355: Addressable low-profile photoelectric smoke detector.

**SD355T:** Addressable low-profile photoelectric smoke detector with thermal sensor.

**SD355R:** Remote test capable addressable photoelectric smoke detector for use with DNR(W) duct detector housing.

**SD355CO:** Addressable, low-profile device that provides fire, heat, and carbon monoxide (CO) detection.

H355: Fast-response, low-profile heat detector.

**H355R:** Fast-response, low-profile heat detector with rate-of-rise option.

**H355HT:** Fast-response, low-profile heat detector that activates at 190°F/88°C.

**AD355:** Low-profile, intelligent, "Adapt" multi-sensor detector (B350LP base included).

B200S: Programmable, addressable sounder base

**B200SR:** Addressable sounder base. **BEAM355:** Intelligent beam smoke detector.

**BEAM355S:** Intelligent beam smoke detector with integral sensitivity test.

**D355PL:** InnovairFlex low-flow non-relay duct-detector housing; includes SD355R.

**DNR:** InnovairFlex low-flow non-relay duct-detector housing. (Order SD355R/SD365R separately.)

**DNRW:** InnovairFlex low-flow non-relay duct-detector housing, with NEMA-4 rating. Watertight. (Order SD355R/SD365R separately.)

#### Addressable Modules

**MMF-300:** Addressable Monitor Module for one zone of normally-open dry-contact initiating devices. Mounts in standard 4.0" (10.16 cm.) box. Includes plastic cover plate and end-of-line resistor. Module may be configured for either a Style B (Class B) or Style D (Class A) IDC.

**MDF-300**: Dual Monitor Module. Same as MMF-300 except it provides two Style B (Class B) only IDCs.

**MMF-301:** Miniature version of MMF-300. Excludes LED and Style D option. Connects with wire pigtails. May mount in device backbox.

**MMF-302:** Similar to MMF-300. Addressable Monitor Module for one zone of conventional two-wire detectors. Requires resettable 24 VDC power. Refer to the *Device Compatibility Document* for listed compatible devices and quantity limitation.

**CMF-300:** Addressable Control Module for one Style Y/Z (Class B/A) zone of supervised polarized Notification Appliances. Mounts directly to a 4.0" (10.16 cm.) electrical box. NAC option requires external 24 VDC to power notification appliances.

**CRF-300:** Addressable relay module containing two isolated sets of Form-C contacts, which operate as a DPDT switch. Mounts directly to a 4.0" (10.16 cm.) box, surface mount using the SMB500.

**BG-12LX:** Addressable manual pull station with interface module mounted inside.

**1300:** This module isolates the SLC loop from short circuit conditions (required for Style 6 or 7 operation).

**ISO-6:** Six-fault isolator module. Mount one or two modules in a BB-2F cabinet (optional). Mount up to six modules on a CHS-6 chassis in a BB-6F cabinet.

SMB500: Used to mount all modules except MMF-301 and M301.

**MMF-300-10:** Ten-input monitor module. Mount one or two modules in a BB-2F cabinet (optional). Mount up to six modules on a CHS-6 chassis in a BB-6F cabinet.

**MMF-302-6:** Six-zone interface module. Mount one or two modules in a BB-2F cabinet (optional). Mount up to six modules on a CHS-6 chassis in a BB-6F cabinet.

**CMF-300-6:** Six-circuit supervised control module. Mount one or two modules in a BB-2F cabinet (optional). Mount up to six modules on a CHS-6 chassis in a BB-6F cabinet.

**CRF-300-6:** Six-relay control module (Form-C relays). Mount one or two modules in a BB-2F cabinet (optional). Mount up to six modules on a CHS-6 chassis in a BB-6F cabinet.

#### **SWIFT Wireless Devices**

W-GATE: LiteSpeed Wireless Gateway

W-SD355: LiteSpeed intelligent, wireless photo detector.

 $\mbox{W-H355R:}$  LiteSpeed intelligent wireless rate of rise (135°) heat detector.

W-SD355T: intelligent wireless photo/heat detector.

W-H355: LiteSpeed intelligent wireless fixed-temperature (135°) heat detector.

**W-MMF**: LiteSpeed Intelligent wireless monitor module. **W-CRF**: LiteSpeed Intelligent wireless relay module.

W-BG12LX: LiteSpeed Intelligent wireless pull station.

WAV-RL, WAV-WL, WAV-CRL, WAV-CWL: LiteSpeed Intelligent AV bases.

**W-USB:** Wireless USB radio/antenna dongle that plugs into the USB port of a PC running SWIFT Tools.

**SWIFT Tools:** Programming and diagnostic utility for the Wireless Gateway and devices. Available for download from firelite.com.

**NOTE:** For more information on Compatible Addressable Devices for use with the ES-50X, see the following data sheets (document numbers): SD365 Series (DF-61010), H365 Series (DF-61011), AD355 (DF-52386), BG-12LX (DF-52013), CMF-300-6 (DF-52365), CRF-300-6 (DF-52374), CMF/CRF Series (DF-52130), CP355 (DF-52383), H355 Series (DF-52385), I300 (DF-52389), ISO-6 (DF-60485), MMF-300 Series/MDF-300 (DF-52121), MMF-300-10 (DF-52347), MMF-302-6 (DF-52356), SD355/SD3557 (DF-52384), and SLC Wiring Manual (51309).

**NOTE:** Legacy 300 Series detection devices such as the CP300/CP350, SD300(T)/SD350(T) and older modules such as the M300, M301, M302, C304, and BG-10LX are not compatible with LiteSpeed polling. If the SLC contains one of these devices, polling must be set for standard CLIP protocol. Please consult factory for further information on previous 300 Series devices.

#### ADDRESSABLE DEVICE ACCESSORIES

**End-of-Line Resistor Assembly (R-47K and R-3.9K):** The 47k ohm assembly supervises the MMF-300, MDF-300, MMF-301, and CMF-300 module circuits. The 3.9k ohm assembly supervises the MMF-302 module circuit. These resistors are included with each module.

**Power Supervision Relay:** Supervises the power to 4-wire smoke detectors and notification appliances.

#### **Wiring Requirements**

While shielded wire is not required, it is recommended that all SLC wiring be twisted-pair to minimize the effects of electrical interference. Refer to the panel manual for wiring details.

# SYSTEM SPECIFICATIONS

#### **System Capacity**

•	Intelligent Signaling Line Circuits	1
	Addressable device capacity	
•	Programmable software zones	.50
•	Annunciators	.16

#### **Electrical Specifications**

**AC Power:** Operates in either 120 or 240 VAC, 50/60 Hz, 3.25 A, auto-sensing- no switch required. Wire size: minimum 14 AWG (2.00 mm2) with 600 V insulation. Nonpower-limited, supervised.

**Battery:** Two 12 V 18 AH lead-acid batteries. Battery Charger Capacity: 7-18 AH (ES-50X cabinet holds maximum of two 18 AH batteries.)

Communication Loop: Supervised and power-limited.

**Notification Appliance Circuits:** Terminal Block provides connections for two NACs, Style Y (Class B) or Style Z (Class A). Special Application power. Power-limited, supervised circuitry. Maximum signaling current per circuit: 2.5 amps special application, 250mA regulated. End-of-Line Resistor: 4.7k ohm,  $\frac{1}{2}$  watt (P/N 71252 UL listed) for Style Y (Class B) NAC; system capable of 1.9 k $\Omega$  - 22 k $\Omega$  ELR range. Refer to the *Fire+Lite Device Compatibility Document* for listed compatible devices.

Two Programmable Relays and One Fixed Trouble Relay: Contact rating: 2.0 A @ 30 VDC (resistive), 0.5 A @ 30 VAC (resistive). Form-C relays, non-power-limited, non-supervised.

#### **Cabinet Specifications**

**Door:** 19.26" (48.92 cm.) high x 16.82" (42.73 cm.) wide x 0.72" (1.82 cm.) deep. **Backbox:** 19.00" (48.26 cm.) high x 16.65" (42.29 cm.) wide x 5.25" (13.34 cm.) deep. **Trim Ring (TR-CE):** 22.00" (55.88 cm.) high x 19.65" (49.91 cm.) wide.

#### **Shipping Specifications**

**Weight:** 26.9 lbs. (12.20 kg.) **Dimensions:** 20.00" (50.80 cm.) high x 22.5" (57.15 cm.) wide x 8.5" (21.59 cm.) deep.

### **Temperature and Humidity Ranges**

This system meets NFPA requirements for operation at  $0-49^{\circ}\text{C}/32-120^{\circ}\text{F}$  and at a relative humidity  $93\% \pm 2\%$  RH (noncondensing) at  $32^{\circ}\text{C} \pm 2^{\circ}\text{C}$  ( $90^{\circ}\text{F} \pm 3^{\circ}\text{F}$ ). However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room temperature of  $15-27^{\circ}\text{C}/60-80^{\circ}\text{F}$ 

#### **NFPA Standards**

The ES-50X complies with the following NFPA 72 Fire Alarm Systems requirements:

- LOCAL (Automatic, Manual, Waterflow and Sprinkler Supervisory).
- AUXILIARY (Automatic, Manual and Waterflow) (requires 4XTMF).
- REMOTE STATION (Automatic, Manual and Waterflow) (Where a DACT is not accepted, the alarm, trouble and supervisory relays may be connected to UL 864 listed transmitters. For reverse polarity signaling of alarm and trouble, 4XTMF is required.)
- PROPRIETARY (Automatic, Manual and Waterflow).
- CENTRAL STATION (Automatic, Manual and Waterflow, and Sprinkler Supervised).
- OT, PSDN (Other Technologies, Packet-switched Data Network)
- IBC 2012, IBC 2009, IBC 2006, IBC 2003, IBC 2000 (Seismic).
- CBC 2007 (Seismic)

#### **Agency Listings and Approvals**

The listings and approvals below apply to the basic ES-50X control panel. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

UL: S624FM approved

• CSFM: 7165-0075:0500 • FDNY: COA #6261

NOTE: See DF-60954 for ULC-listed model.

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This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.



For more information, contact Fire•Lite Alarms. Phone: (800) 627-3473, FAX: (877) 699-4105. www.firelite.com

# **SD365 Series**

#### **Addressable Photoelectric Smoke Detectors**



Addressable Devices

The Fire\*Lite® Alarms SD365(A), SD365R(A), and SD365HT(A) intelligent plug-in smoke detectors are designed for both performance and aesthetics, and are direct replacements for the SD355 Series. A new modern, sleek, contemporary design and enhanced optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources in accordance with more stringent code standards.

Exclusively for use with Fire•Lite's addressable fire alarm control panels, the SD365(A) Series point ID capability allows each detector's address to be set with rotary, decimal address switches, providing exact detector location for emergency personnel to quickly locate a fire during its early stages, potentially saving precious rescue time while also reducing property damage. Two LEDs on each sensor light to provide a local, visible sensor indication.

The SD365(A) Series also offers 135°F (57°C) fixed temperature thermal sensing on the SD365T(A) and a remote test capable detector on the SD365R(A) for use with DNR(A)/DNRW duct smoke detector housings.

#### **Features**

#### SLC LOOP:

- · Two-wire SLC loop connection
- · Unit uses base for wiring
- Compatible with LiteSpeed<sup>™</sup> and CLIP protocol systems
- · Stable communication technique with noise immunity

#### ADDRESSING:

- · Addressable by device
- Rotary, decimal addressing (Refer to the Fire\*Lite panel manuals for device capacity.)

#### ARCHITECTURE:

- Sleek, low-profile, stylish design
- Unique single-source design to respond quickly and dependably to a broad range of fires
- · Integral communications and built-in device-type identification
- Built-in tamper resistant feature
- Remote test feature from the panel
- Walk test with address display (an address on 121 will blink the detector LED: 12-[pause]-1(LiteSpeed systems only)
- Built-in functional test switch activated by external magnet
- Removable cover and insect-resistant screen for simple field cleaning
- · Expanded color options

#### **OPERATION:**

- Designed to meet UL 268 7th Edition
- Factory preset at 1.5% nominal sensitivity for panel alarm threshold level
- LED "blinks" when the unit is polled (communicating with the fire panel) and latches in alarm.
- · Low standby current

#### **MECHANICALS:**

- Sealed against back pressure
- SEMS screws for wiring of the separate base
- Designed for direct-surface or electrical-box mounting



- Plugs into separate base for ease of installation and maintenance
- Separate base allows interchange of photoelectric, ionization and thermal sensors

#### **OPTIONS:**

· Optional relay, isolator, and sounder bases

#### Installation

SD365 Series plug-in intelligent smoke detectors use a detachable base to simplify installation, service and maintenance. Installation instructions are shipped with each detector.

Mount detector base (all base types) on an electrical backbox which is at least 1.5" (3.81 cm) deep. For a chart of compatible junction boxes, see *DF-60059*.

**NOTE:** Because of the inherent supervision provided by the SLC loop, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Class "B" wiring only.

When using relay or sounder bases, consult the I300(A) installation sheet I56-3626 for device limitations between isolator modules and isolator bases.

#### Construction

These detectors are constructed of fire-resistant plastic. The SD365 Series plug-in intelligent smoke detectors are designed to commercial standards and offer an attractive appearance.

#### **Operation**

Each SD365 Series detector uses one of the panel's addresses (total limit is panel dependent) on the Fire•Lite Signaling Line Circuit (SLC). It responds to regular polls from the control panel and reports its type and the status. If it receives a test command from the panel (or a local magnet test), it stimulates its electronics and reports an alarm. It blinks its LEDs when polled and turns the LEDs on when commanded by the panel. The SD365 Series offers features and performance that represent the latest in smoke detector technology.

#### **Detector Sensitivity Test**

Each detector can have its sensitivity tested (required per NFPA 72, Chapter 14 on *Inspection, Testing and Maintenance*) when installed/connected to an Fire•Lite addressable fire alarm control panel. The results of the sensitivity test can be printed for record keeping.

#### **Product Line Information**

NOTE: "-IV" suffix indicates CLIP and LiteSpeed device.

NOTE: "A" suffix indicates Canadian version.

SD365: White, low-profile intelligent photoelectric sensor, LiteSpeed

only

SD365A: Same as SD365 but with ULC listing

SD365-IV: Ivory, low-profile intelligent photoelectric sensor

SD365A-IV: Same as SD365-IV but with ULC listing

SD365T: White, same as SD365 but includes a built-in 135°F (57°C)

fixed-temperature thermal device, LiteSpeed only

SD365TA: Same as SD365T but with ULC listing

SD365T-IV: Ivory, same as SD365T but includes a built-in 135°F

(57°C) fixed-temperature thermal device

SD365TA-IV: Same as SD365T-IV but with ULC listing

SD365R: White, low-profile intelligent photoelectric sensor, remote

test capable, for use with DNR/DNRW, LiteSpeed only

SD365RA: Same as SD365R but with ULC listing, for use with

DNRA

SD365R-IV: Ivory, low-profile intelligent photoelectric sensor, remote

test capable, for use with DNR/DNRW

SD365RA-IV: Same as SD365R-IV but with ULC listing, for use with

**DNRA** 

#### INTELLIGENT BASES

NOTE: For details on intelligent bases, see DF-60059.

B300-6: White, 6" base, standard flanged low-profile mounting base

(CSFM: 7300-1653:0109)

B300-6-IV: Ivory,6" base, standard flanged low-profile mounting

base (CSFM: 7300-1653:0109)

B300A-6: Same as B300-6, ULC listed

B300A-6-IV: Ivory, 6" standard flanged low-profile mounting base,

**ULC listed** 

B300-6-BP: Bulk pack of B300-6, package contains 10

B501-WHITE: White, 4" standard European flangeless mounting

base. UL/ULC listed (CSFM: 7300-1653:0109)

B501-BL: Black, 4" standard European flangeless mounting base.

UL/ULC listed (CSFM: 7300-1653:0109)

B501-IV: Ivory color, 4" standard European flangeless mounting

base. UL/ULC listed (CSFM: 7300-1653:0109)

B501-WHITE-BP: Bulk pack of B501-WHITE contains 10

B224RB-WH: White, relay base (CSFM: 7300-1653:0216)

B224RB-IV: Ivory, relay base (CSFM: 7300-1653:0216)

B224RBA-WH: White, relay base, ULC listing

B224RBA-IV: Ivory, relay base, ULC listing

B224BI-WH: White, isolator detector base (CSFM: 7300-1653:0216)

B224BI-IV: Ivory isolator detector base (CSFM: 7300-1653:0216)

B224BIA-WH: White, isolator detector base, ULC listing

B224BIA-IV: Ivory isolator detector base, ULC listing

**B200S-WH:** White, Intelligent addressable sounder base capable of producing sound output in high or low volume with ANSI Temporal 3, ANSI Temporal 4, continuous tone, marching tone, and custom tone.

Uses LiteSpeed protocol. (CSFM: 7300-1653:0213)

**B200S-IV:** Ivory, Intelligent addressable sounder base capable of producing sound output in high or low volume with ANSI Temporal 3, ANSI Temporal 4, continuous tone, marching tone, and custom tone.

Uses LiteSpeed protocol. (CSFM: 7300-1653:0213)

B200SA-WH: Same as B200S-WH, ULC listing

B200SA-IV: Same as B200S-IV, ULC listing

**B200SCOA-WH:** White, Intelligent, programmable sounder base in English/French (required in Canada for ULC applications with CO

Series detector applications

**B200SCOA-IV:** Ivory Intelligent, programmable sounder base in English/French (required in Canada for ULC applications with CO

Series detector applications, ULC listing

**B200S-LF-WH:** White, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/-10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. (*CSFM:* 7300-1653:0238)

**B200S-LF-IV:** Ivory, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/-10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. (*CSFM: 7300-1653:0238*)

**B200SR-WH:** White, Intelligent sounder base capable of producing sound output with ANSI Temporal 3 or continuous tone. Intended for retrofit applications. (CSFM: 7300-1653:0213)

**B200SR-IV:** Ivory, Intelligent sounder base capable of producing sound output with ANSI Temporal 3 or continuous tone. Intended for retrofit applications. (CSFM: 7300-1653:0213)

B200SRA-WH: Same as B200SR-WH with, ULC listing

B200SRA-IV: Same as B200SR-IV in Ivory color, ULC listing

**B200SR-LF-WH:** White, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/-10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. Intended for retrofit applications. (*CSFM:* 7300-1653:0238)

**B200SR-LF-IV:** Ivory, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/-10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. Intended for retrofit applications. (*CSFM: 7300-1653:0238*)

#### **MOUNTING KITS AND ACCESSORIES**

TR300: White, replacement flange for B210LP(A) base

TR300-IV: Ivory, replacement flange for B210LP(A) base

**RA100Z(A):** Remote LED annunciator. 3-32 VDC. Mounts to a U.S. single-gang electrical box. For use with B501(A) and B300-6(A).

M02-04-00: Test magnet

M02-09-00: Test magnet with telescoping handle

CK300: Color Kit (includes cover and trim ring), white, 10-pack

**CK300-IV:** Color Kit (includes cover and trim ring), ivory, 10-pack **CK300-BL:** Color Kit (includes cover and trim ring), black, 10-pack

### SYSTEM SPECIFICATIONS

#### Sensitivity:

• UL Applications: 0.5% to 4.0% per foot obscuration.

ULC Applications: 0.5% to 3.5% per foot obscuration

Size: 2.0" (51mm) high; base determines diameter

B300-6: 6.1" (15.6 cm) diameterB501: 4" (10.2 cm) diameter

For a complete list of detector bases see DF-60983

**Shipping weight:** 3.4 oz. (95 g) **Operating temperature range:** 

• SD365: 32°F to 122°F (0°C to 50°C)

• SD365T Series: 32°F to 100°F(0°C to 38°C)

• SD365R Series installed in a DNR/DNRW, -4°F to 158°F (-20°C

10 70 0)

UL/ULC Listed Velocity Range: 0-4000 ft/min. (1219.2 m/min.),

suitable for installation in ducts

Relative humidity: 10% – 93% non-condensing

**Thermal ratings:** fixed-temperature set point 135°F (57°C), rate-of-rise detection 15°F (8.3°C) per minute, high temperature heat 190°F

(88°C)

**ELECTRICAL SPECIFICATIONS** 

Voltage range: 15 - 32 volts DC peak

Standby current (max. avg.): 200µA @ 24 VDC (o ne communica-

tion every 5 seconds with LED enabled)

Max current: 4.5 mA @ 24 VDC ("ON")

#### **DETECTOR SPACING AND APPLICATIONS**

Fire•Lite recommends spacing detectors in compliance with NFPA 72. In low airflow applications with smooth ceiling, space detectors 30 feet (9.1m). For specific information regarding detector spacing, placement, and special applications refer to NFPA 72. A *System Smoke Detector Application Guide*, document SPAG91, is available at www.systemsensor.com.

**Listings and Approvals** 

Listings and approvals below apply to the SD365 Series detectors. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

• UL/ULC Listing: S1059

FM Approved

• CSFM: 7272-0075:0502

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This document is not intended to be used for installation purposes.

We try to keep our product information up-to-date and accurate.

We cannot cover all specific applications or anticipate all requirements.

All specifications are subject to change without notice.

For more information, contact Fire•Lite Alarms. Phone: (800) 627-3473, FAX:(877) 699-4105. www.firelite.com



# Sole Path Cellular Commercial Fire Alarm LTE Communicators

- Universal full event sole path cellular commercial fire alarm reporting from any panel brand, virtually anywhere
- Code-compliant, replaces 2 POTs lines per FACP saves thousands of dollars per year over the leased landlines
- Supports 12V-24 control panels and FACPs that communicate using Contact ID and 4/2 (such as on legacy panels), as primary or backup
- Full data Reporting to any Central Station nationwide, via Verizon® LTE Network, "The Nations largest and most reliable LTE network. Rated #1 overall network, proven to deliver consistently fast speeds ad i more places than any other network" ‡
- Communicate critical life and safety alarm reports on LTE (Long Term Evolution) 10+ year life, cyber-protected multi-billion dollar cellular network, for maximum life safety & liability protection
- Easiest installation, powered by panel, NO extra power supply, NO conduit, self supervised on 4 wires
- Over-the-Air Upgradable Communicator Firmware.
   Remote ability for critical/mandatory updates, without a truck-roll
- Cost-saving models and plans for any code requirement.
   Substantial savings over monthly dedicated landline charges.
   And, \$100 saving incentive for system upgrades from old radios (all makes) and old POTs landlines, as well as new installations

StarLink
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StarLink

Code-compliant standard or mercantile metal models (right and left, respectively) .

**UL and NFPA 72 Fire Code-Compliant,** the StarLink Series Wireless Commercial Fire Alarm Sole Path Communicators provide universal support for any brand 12V to 24V fire alarm control panel, reporting in Contact ID and 4/2. With broadest Verizon LTE coverage footprint available, via most extensively deployed LTE CAT1, using proven StarLink circuitry, they are also available in mercantile locking metal models. All provide the most economical solution for easy, versatile installation. Also regional compliances, i.e., CSFM, NYCFD, LAFD and more.

Easy, Universal Installation at Every Application; Panel-Powered Technology™. StarLink Fire Communications are easily connected to any panel or Fire Alarm Control Panel (FACP) standardly operating between 12V and 24V. Flexible in any application, StarLink Fire also comes in standard, or Mercantile Models in metal housings, with code-compliant supervision, and choice of power options, Panel-Powered Technology™ (powered by the panel), or direct-connect 120VAC models. Signal Boost circuitry & dual diversity antennae for maximum signal acquisition & null avoidance, receiving signals simultaneously on both antennae.

Flexible Performance & Reporting Options. StarLink Fire provides full data reporting, in sole path, as a primary or backup, to any central station of your choice, without requiring any special equipment on premises. Ultraaffordable plans are available to meet various codes and requirements, with supervisory check-ins from 200 seconds, to 5 minutes, to an hour. The units are very easily activated, plans and options are selected, and 24/7 account management is provided all through www.napcocomnet.com.

# Napco StarLink Universal Fire Alarm Communicators

- Choice of plans (varies by model) check-ins from 200 seconds, to 5-minutes to 1 hour, Verizon LTE Network
- Patented Signal Boost™ and Dual Diversity Antennae for maximum signal acquisition & null avoidance, receiving signals simultaneously on both antennae
- · Money-saving Tradeup incentive credit
- Bonus: Full High-Speed Napco Panel remote uploading/ downloading
- COMPLIANCES: NFPA72 Editions: 2016, 2013, 2010, 2007; UL 864, 9th Ed., UL1610, UL985, UL1023, NYCFD; CSFM; LAFD







# Sole Path Cellular Commercial Fire Alarm LTE Communicators

## StarLink Fire Specifications

#### **STANDARD MODELS:**

- Advanced LTE Dual Diversity Antennae for optimized performance
- Durable ABS plastic housing includes three keyhole slots for mounting (for commercial application, aligns with triple gang boxes)
- Panel Powered Technology<sup>™</sup> (powered by panel), Low current draw, 71mA standby, 200mA transmit
- Dimensions: 5-3/8"x 7-7/8"x 1-7/8" (HxWxD)
- Weight: 13.5 oz
- 3 LED Indicators Green, Signal Strength; Amber- Busy/ Activation; Red-Trouble
- Patented Signal Boost™ signal amplification circuit and highgain performance antennae
- Operating Environment: 0 to 49° C (32-120°F), up to 93% humidity (non-condensing)
- 12V 24V Universal FACP Support, auto-current sensing. Support all brands communicating in Contact ID and 4/2

#### MERCANTILE MODELS (similar to above, with):

- Locking Metal Enclosure with Hinged door & 2 key-slots for wall mounting (LED indicators, inside)
- Dimensions: 9-5/8"x 11-3/4" x 3-3/8"D (HxWxD)
- Weight: 8 lbs (max., power supply models)
- · Electrical Ratings for 120VAC, 60Hz
- For Models with Power Supply:
  - Input Voltage: 120VAC Nominal
  - Input Current: 400mA maximum
  - Maximum Charging Current: 200mA
- Electrical Ratings for +12V
- For Models without Power Supply:
  - Input Voltage: 11-15VDC (power-limited output from listed control panel)
  - Input Current: 71mA with peak RF transmission current of 200mA
- Electrical Ratings for the IN 1 Burg/Fire Input:
  - Input Voltage: 9-15VDC
  - Maximum Input Current: Up to 2mA from FACP NAC circuit
- Electrical Ratings for IN 2 and IN 3:
  - Maximum Loop Voltage: 15VDC
  - Maximum Loop Current: 1.2mA
- Electrical Ratings for 3 PGM Outputs:
  - Open Collector Outputs: Maximum voltage 3V when active;
     15V maximum when not active
  - Maximum PGM Sink Current: 50mA mount
- Operating Environment 0 to 49° C (32-120°F), up to 93% humidity (non-condensing)
- 12V 24V Universal FACP Support, auto-current sensing.
   Support all brands communicating in Contact ID and 4/2

# **Ordering Information**

# COMMERCIAL FIRE SOLE PATH CELLULAR & DUAL PATH CELLULAR &/OR IP ("I" MODELS):\*

**SLE-LTEV-FIRE** Sole Path Cellular Communicator, connected by Verizon LTE™, ABS. Low current draw, panel-powered technology™ (powered by control panel)

**SLELTEV-CFB** Commercial Fire Sole Path Mercantile model in red metal housing on LTE, Verizon LTE Network, powered directly from control panel

**SLETEV-CFB-PS** Commercial Fire Sole Path Mercantile model in red metal housing, LTE, Verizon LTE Network. Direct 120VAC Powered (w/ provisions for backup battery/charger). Or, Optional TRF12 plug-in transformer may be used, where codes permit

#### **ACCESSORIES:**

Free Commercial Fire Tradeup Trifold Brochures / Mailers/Stuffers (A720) for new and existing fire accounts

**SLE-ANTEXT75** Optional extended antenna with 75' cable (new conical shape)

SLE-ANTEXT50 As above, with 50' cable

**SLE-ANTEXT30** As above, with 30' cable

**SLE-DLEXT** Optional, as above, for downloading, extends distance to Napco panel up to 100'

TRF12 Optional Plug in AC Transformer, 16.5V / 20VA (use is subject to local code compliance)

SLE-DLCBL Optional High-Speed Napco Panel Up/download cable

## New! FireLink™ Integrated Fire Alarm Control Panel w/ StarLink Fire LTE Built In



Award Winning FL-FACP-LTEVS
Firewolf 8 Zone 24V Conventional
Commercial Fire Alarm Control
Panel with onboard StarLink Fire®
Sole Path, Verizon LTE Cellular
Alarm Communicator and integral
menu-driven LCD annunciator, w/
4amp, 24V power supply. Optionally
expandable up to 32 points/zones via
commercial addressable, wireless or
conventional fire devices (2 onboard
NACs providing up to 4A notification
power). Locking, mercantile red
enclosure,(surface or flush mount®)
removable 16"x17" door with
14.25"x16" base. Houses 16Ah battery
backup





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