







FDNY





Conventional meets Analog

The 521LX and LXT Smoke Detectors are the industry's first conventional smoke detectors with analog features.

- Remote maintenance reporting (CleanMe™)
- Drift compensation
- Multi-criteria detection
- Single-zone, addressable module allowing LX-Bus[™] connection

The 521LXT also includes a heat sensor for fire detection. The multi-criteria, fast response, heat detector algorithms allow the 521LXT to give fast responses to a broad range of fires.

521LX & 521LXT PHOTOELECTRIC SMOKE DETECTORS

FEATURES

- CleanMe[™] remote maintenance reporting reduces false alarms
- Built-in drift compensation to reduce false alarms
- Field replaceable optical chamber for easy servicing
- LED indicates normal or CleanMe[™] condition

- Easy 4-wire LX-Bus™ connection
- 521LXT includes multi-criteria heat detector
- Proven design ensures stability and performance
- Easy rotary addressing; no difficult binary switches



CLEANME™ REMOTE MAINTENANCE/TROUBLE REPORTING FEATURE

The 521LX/521LXT has a unique feature that allows the unit to send a signal when the smoke chamber has surpassed the UL Listed sensitivity range or if a hardware fault exists. In most cases the signal comes from the detectors becoming dirty over time and, as a result, are over-sensitive. This condition could cause false alarms.

The CleanMe™ signal enables the panel to receive a service signal, allowing an installer time to clean the detector by replacing an inexpensive optical chamber with a new one. This service information can also be transmitted to the central station.

DRIFT COMPENSATION BUILT-IN

Built-in drift compensation means the 521LX/521LXT detectors automatically adjust their sensitivity, up to a maximum of 1.0% per foot, as they become dirty. This feature increases immunity to dust and dirt by 30-50%.

SENSITIVITY LEVEL TEST MODE

Each unit also includes a special sensitivity level test mode that is activated by holding a magnet near the internal reed switch for more than one second. Once the routine starts, the alarm LED flashes from one to nine times, indicating the actual unit sensitivity and whether service is required.

COMPATIBLE WITH LX-BUS™ SYSTEMS

The 521LX/521LXT can be used on the LX-Bus[™] of the XR Series Panels. Each detector connects to the 4-wire bus and uses one zone address. Addressing the detectors is simple using the two on-board rotary switches and a small slotted screwdriver. Up to 100 individual detectors can be supervised on one DMP LX-Bus. More than 40 detectors requires a Model 710 Bus Splitter/ Repeater Module.

HEAT DETECTOR IN 521LXT

The multi-criteria 521LXT photoelectric smoke detector also features a fixed rate-of-rise heat detector. The rate-of-rise detector includes fast response algorithms for a quick response to both flaming and smoldering fires. Fast response algorithms allow the heat detectors to work intelligently together with the photoelectric smoke detector. As soon as the heat sensor detects a rapid rise in temperature, the sensitivity of the photoelectric sensor increases allowing it to detect smaller particles of combustion faster.

SPECIFICATIONS

Operating Range 8.8 to 15.0 VDC

Standby Current 8.8mA Alarm Current 28mA

Maximum Ripple $10\% (V_{p-p})$ peak to peak Sensitivity Photoelectric 3.1% + 0.50 to 1.00% Operating Temperature $32^{\circ}F$ to $100^{\circ}F$

Humidity Range 0 to 95% non-condensing RFI Immunity 20V/m minimum; 0 to

1000MHz

Heat Sensor (LXT Only) 135°F

Rate of Rise 15°F/min and >105°F

Power Up Time 15 seconds
Drift Compensation 1.0%/ft. max.

Detector Head Dimensions 5" Diameter, 2" Height
Mounting Dimensions 4.75" Diameter, 3" Height

Color White

LISTINGS AND APPROVALS

California State Fire Marshal (CSFM)

FDNY COA #6123 FDNY COA #6145

Underwriters Laboratories (UL) Listed
UL 268 Smoke-Automatic Fire Detectors

COMPATIBILITY

The 521LX/521LXT Smoke Detectors are compatible with the following panels:

• XR Series Panels

ACCESSORIES

521LXTPCB Replacement Smoke Detector Board

525 Replacement Optical Chamber

526 Smoke! in a Can™

