

Conventional Fire Alarms Smoke Detectors

500 Series



Edwards 500 Series two-wire conventional photoelectric smoke detectors work on a light-scattering principle. A pulsed infrared light-emitting diode serves as the light source, and a high-speed photo diode as the sensing element. This design protects against nuisance alarms caused by dust, insects, RF interference, and ambient light. Built-in drift compensation allows the detector to automatically adjust its sensitivity over time as it becomes dirty.

The 500 Series optical chamber is field replaceable. In the event of a confirmed alarm the LED will light continuously. The unit indicates trouble by flashing the LED every second. This meets the NFPA 72 field sensitivity testing requirements.

The 500 Series offers sounders in two-wire applications, specifically to meet residential code requirements. Units with built-in 85dBA sounders emit a temporal 3-3-3 tone pattern when in alarm and will emit a steady tone when the input power is reversed. All wiring terminates in clamp-type screw terminals. The detectors mount to a standard single-gang electrical box, a four-inch octagonal, four-inch square electrical box, or WIREMOLD No. 5739 fixture box.

Features and Specifications

- Self-diagnostic capability continually monitors operation
- Remote maintenance (CleanMe) reporting and built-in drift compensation
- Field-replaceable optical chamber
- Low-profile design blends into the ceiling
- Optional auxiliary functions include:
 - Integral sounder; 85dB @ 10ft.
 - Auxiliary relay
 - Fixed/Rate-of-Rise heats
- White color
- Includes mounting base
- Operating temperature range: 32°F to 100°F (0°C to 37°C)

Ordering Information

Description	Cat. No.	Operating Voltage	Current (Standby)	Current (Alarm)	Aux. Relay Contacts	Photoelectric Sensitivity	Reset Time	Drift Compensation Adj.	Field Wire Size
Photoelectric Smoke	521B	12/24V DC	0.00007 A	0.06 A	—	3.1%, +0.50, -1.00%	1 sec.	1%/ft. max.	18-12 AWG
Smoke with Fixed Temp and ROR Heat	521BXT	12/24V DC	0.00007 A	0.06 A	—	3.1%, +0.50, -1.00%	1 sec.	1%/ft. max.	18-12 AWG
Smoke with Heat and Aux Relay	521NCRXT	12/24V DC	0.00007 A	0.06 A	1 A @ 30V DC Form C	3.1%, +0.50, -1.00%	1 sec.	1%/ft. max.	18-12 AWG
Smoke with Heat and Sounder	521NCSXT	12/24V DC	0.00007 A	0.06 A	—	3.1%, +0.50, -1.00%	1 sec.	1%/ft. max.	18-12 AWG



MEA



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Accessories

Description	Cat. No.
Replacement optical Chambers (pkg. of 10)	211-10PKG

Weights and Dimensions

Cat. No.	Approx. Shipping Weight (lb.)
521B	0.5
521BXT	0.5
521NCRXT	0.5
521NCSXT	0.5
211-10PKG	0.5

