

Photoelectric Smoke Detector

FW2511



Overview

The Series 2 FW2511 Photoelectric Smoke Detector is an intelligent device that communicates status with a Maple Armor control panel and occupies one address on the Signaling Line Circuit (SLC). It is a UL listed device according to UL 268 and ULC-S529 Fire Protective Signaling Systems for indoor use.

The detector features a sleek and compact design that offers both visual appeal and exceptional reliability. It is made of high-impact plastic.

The detector features an integrated Microcontroller Unit (MCU), it conducts comprehensive self-diagnostics and analyzes results for consistent performance. It provides rapid and reliable response to a wide variety of fires.

Features

- Attractive compact design
- Durable material and solid parts
- Visible status LED indicators for alarm and trouble
- Three selectable sensitivity levels
- Easy installation
- Listed for Ceiling or wall mount installation
- Mounts to standard electrical boxes
- For dry indoor installation
- Wide range of detector bases sold separately
- Up to 252 addressable devices per loop
- Address programmed via handheld programmer

Compatibility

- The FW2511 detector is only compatible with Maple Armor Series 2 FW2105 and FW2107 Fire Alarm Control Panels.

Note: refer to each panel data sheet for more information.

Operation

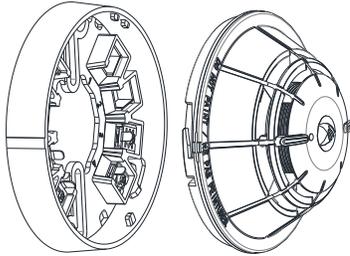
The FW2511 detector is equipped with an advanced Microcontroller Unit (MCU) that performs comprehensive self-diagnostic tests and analyzes results to ensure optimal functionality and quick response making it a versatile solution for effective fire detection. It detects particles from a wide range of combustion sources, it triggers an alarm when smoke density in the chamber reaches a preset sensitivity setting.

Diagnostic LED

The detector features dual status LED indicators for alarm and trouble, which provide 360° visibility. The LED flashes in normal condition and turns steady on in alarm conditions.

Installation

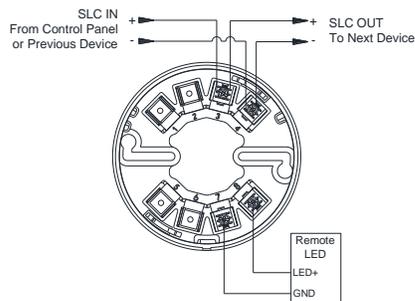
The FW2511 smoke detector mounts to a standard North American 1-gang boxes, 3-1/2 inch or 4-inch octagon boxes, via compatible detector bases.



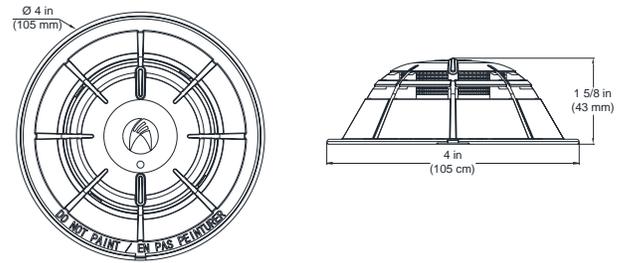
Note: See detector base installation and wiring instructions for more information.

Wiring

Field wiring is to be completed using the screw terminals on the compatible detector base. Acceptable wire size 18 to 12 AWG (0.82 mm² to 3.31 mm²).



Dimensions



Accessories

Detector Bases sold separately - come in wide variety for different applications, the bases mount to a standard North American 1-gang boxes, 3-1/2 inch or 4-inch octagon boxes.

- FW2501 - 4-inch Standard Detector Base
- FW2502 - 6-inch Standard Detector Base with Flange
- FW2509 - Sounder Base for Detectors



Remote LED Indicator FW2561-RI connects to the detector bases, it features a red alarm LED and a white finish plate that mounts to a standard North American 1-gang box. Supported by all detector bases.

Testing & Maintenance

Notify the authorities that the system will be temporarily out of service before testing. Disable the system to prevent unwanted alarms. Ensure the indicator LED is flashing; if not, check the wiring and remount the device. Activate a fire alarm signal and verify the LED turns steady.

Specifications

Nominal Voltage	24 VDC
Operating Voltage Range	15.3 to 28 VDC
Standby Current	0.16 mA
Alarm Current	0.65 mA
Smoke Alarm Set-point Range	1.34%/ft to 2.45%/ft (UL) 1.63%/ft to 3.11%/ft (ULC)
Operating Temperature	0° C to 49° C (32° F to 120° F)
Operating Humidity	0 to 93% RH Non-condensing
Installation Environment	Dry indoor use only
Material	High impact plastic
Dimension	4 in. Diameter, 1 5/8 in Height 105 mm Diameter, 43 mm Height
Mounting	Ceiling, Wall
Compatible Bases	FW2501, FW2502, FW2509
Compatible FACP	FW2105, FW2107
Regulatory Compliance	UL/ULC, FCC

Ordering Information

Model	Description	Ship Wt. Kg (lbs)
FW2511	Addressable Photoelectric Smoke Detector	0.141 (0.31)
Accessories		
FW2501	4-inch Standard Detector Base	0.055 (0.12)
FW2502	6-inch Standard Detector Base with Flange	0.082 (0.18)
FW2509	Sounder Base for Detectors	-
FW2561-RI	Remote LED Indicator	-

**Detector bases and accessories are ordered separately.*



This document is for marketing and informational purposes only. It is not intended to be used for installation, operation, or maintenance of the device.

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For complete and accurate installation instructions, wiring details, and operational guidelines, refer to the official Device Installation Sheet provided with the product. The manufacturer reserves the right to make changes to product specifications without prior notice.