

RF280THS Series Wireless Photoelectric Smoke Detectors



The RF280THS and RF280ETHS Wireless Photoelectric Smoke Detectors are open-area wireless smoke detectors designed for use with commercial fire protective signaling and household fire warning systems. With its frequency of blinking, the LED on these detectors indicates alarm, readiness and testing. The patented chamber design provides superior immunity to false alarms caused by dust. These detectors have an integral 135°F (57°C) heat sensor designed for use with commercial and household fire warning systems.

The RF280THS transmits at a frequency of 304.00 MHz while the RF280ETHS transmits at 433.42 MHz.

■ Series Features

- 135°F (57°C) heat sensor
- Internal 85 dB sounder
- Superior dust immunity
- Exclusive Chamber Check self diagnostics
- Factory programmed transmitter ID for quick and simple transmitter enrollment
- Field replaceable smoke chamber

■ Series Basic Functions

ChamberCheck self diagnostics

The ChamberCheck automatic sensitivity test feature provides an indication if the detector is outside the factory calibrated specifications. This feature reduces service costs because the installer can easily determine which detectors require attention. This feature also reduces false alarms by alerting the end user that the detector is dirty, long before the possibility of producing a false alarm. A unique chamber check signal is provided.

Patented chamber design

The detector chamber includes computer designed chamber walls and lenses to optimize internal light scattering and dust hiding capabilities. This provides for industry leading dust immunity without sacrificing detection. The detection chamber can be easily removed should it require cleaning.

Sounder

The 85 dB [at 10 ft. (3 m)] sounder activates on detector alarm. The detector and sounder automatically reset when the chamber clears.

Supervision features

A built-in base tamper is included. A supervisory signal, including the detector sensitivity, battery and tamper status, is sent every 65 minutes.

Test features

LED automatically flashes to indicate a calibration trouble condition. A steady LED indicates an alarm condition during testing. Sensitivity can be verified with a push button test.

■ Series Technical Specifications

Alarm Output:	85 dB at 10 ft. (3 m)
Enclosure Design	
Dimensions (H x D):	2 in. x 5.1 in. (5 cm x 12.7 cm)
Material:	High impact, fire retardant ABS plastic enclosure and separate twist-lock mounting plate
Environmental Considerations	
Operating Temperature:	+32°F to +100°F (0°C to +38°C)
Relative Humidity:	0% to 95% (non-condensing)
Integral Heat Sensor:	+135°F (+57°C)
Power Requirements	
Batteries:	Two 3 VDC lithium batteries
Battery Life:	5+ years under normal operating conditions with recommended battery types
Recommended Battery Types:	Duracell® DL123A, Eveready® CR123A, or Panasonic® CR123A
Radio Frequency Interference (RFI) Immunity:	No alarm or setup on critical frequencies in the range of 26 MHz to 950 MHz at 50 v/m.

■ Series Hardware Options

DT1 Test Tool



Mounts to a 0.75 in. (1.9 cm) conduit and allows testing of smoke detectors without a ladder.

RF280THS Wireless Smoke Detector (304.00 MHz)

Prod. ID	RF280THS
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This detector requires an RF3212, RF3222, or RF3224 receiver.

■ Approvals

UL Standards	UL268, Smoke Detectors for Fire Alarm Signaling Systems
Approvals	FCC (ESV-0407-4)

RF280ETHS Wireless Smoke Detector (433.42 MHz)

Prod. ID	RF280ETHS
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This detector requires the use of an RF3212E, RF3222E, or RF3224E receiver. It is compatible with the DS7400XiV4 Control/Communicators (firmware version 4.03 or higher) and with the Bosch Solution Ultima models 844, 862, and 880.

■ Approvals

Approvals	CE
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