

INTELLIGENT BEAM SMOKE DETECTORS

BEAM200 SERIES



Features

- 16 to 328 foot protection range
- Single-ended, reflective design
- · User friendly alignment procedure
- 6 user selectable sensitivity levels
- Optional integral NFPA 72 sensitivity test feature
- Removable plug-in terminal blocks
- Digital display for easy alignment
- Built-in automatic gain control compensates for signal deterioration from dust build-up
- Remote test station optional
- Paintable cover
- Easiest alignment in the industry

Description

The BEAM200 is an intelligent projected beam smoke detector. It is uniquely suited for protecting open areas with high ceilings where other methods of smoke detection are difficult to install and maintain. It is to be used with UL/ULC Listed compatible control panels only.

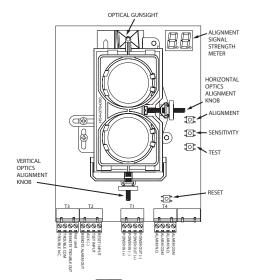
Installation of the single-ended reflective design is much easier than dual ended projected beam detectors. Alignment is quickly accomplished via an optical sight and a 2-digit signal strength meter incorporated into the product.

Listed for operation from –22°F to 131°F, BEAM200 can be used in open area applications to provide early warning in environments where temperature extremes exceed the capability of other types of smoke detection.

The BEAM200 consists of a transmitter/receiver unit and a reflector. When smoke enters the area between the unit and the reflector it causes a reduction in the signal and, when the smoke level reaches the predetermined threshold, an alarm is activated.

The BEAM200 has four standard sensitivity selections along with two Acclimate settings. When either of the two Acclimate settings are selected the detector will automatically adjust its sensitivity using advanced software algorithms to select the optimum sensitivity for the specific environment.

The BEAM200S is equipped with an integral sensitivity test feature that consists of a test filter attached to a servo motor inside the detector optics. Using the remote test station RTS451, the motor is activated and moves the filter in the pathway of the light beam, thereby testing detector sensitivity. This integral sensitivity test feature allows the user to quickly and easily meet the annual maintenance and test requirements of ULC and NFPA 72.









MEA MSFM approved approved



CATALOG NUMBER

Operational Specifications

Protection Range

16 ft. to 328 ft. (5m to 100m)

Adjustment Angle

+/- 10 Degrees horizontal & vertical (The optics move independent of the unit)

Sensitivity Levels

Level 1 - 25% Level 2 - 30% Level 3 - 40% Level 4 - 50%

Acclimate Level 1 - 30-50% Acclimate Level 2 - 40-50%

Fault Condition (Trouble)

96% or more obscuration blockage In alignment mode Improper initial alignment Self-compensation limit reached

Alianment Aid

Optical gunsight

Integral signal strength indication 2-digit display

Alarm Indicator

Local red LED and remote alarm

Trouble Indicator

Local yellow LED

Normal Indicator

Local flashing green LED

Environmental Specifications

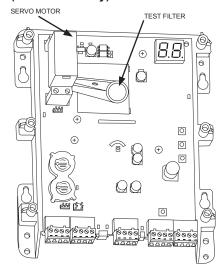
Temperature

-22°F to 131°F (-30°C to 55°C)

Humidity

10-93% RH Noncondensing

Advanced Test Feature (BEAM200S only)



Test/Reset Features

Integral Sensitivity Test Filter (BEAM200S only) Sensitivity filter

(Incremental scale on reflector)

Local test switch

Local reset switch

Remote test and reset switch (Compatible with RTS451 and RTS451KEY test station)

Smoke Detector Spacing

On smooth ceilings, 30-60 feet between projected beams and not more than one-half that spacing between a projected beam and a sidewall. Other spacing may be used depending on ceiling height, airflow characteristics, and response requirements. See NFPA 72 and CAN/ULC S524.

Electrical Specifications

Voltage

15 to 32 VDC

AVG. Standby Current (24 VDC)

AVG. Current During Testing 500mA Max

Alarm Current (24 VDC)

8.5mA Max

Fault Current (24 VDC)

4.5mA Max

Alignment Mode Current (24 VDC) 20mA Max

Mechanical Specifications

Detector Dimensions

10"H × 7.5"W × 3.3"D

(254mmH × 191mmW × 84mmD)

Reflector Dimensions (16' to 230')

 $7.9" \times 9.1" (200 \times 230 \text{mm})$

Reflector Dimensions for (beyond 230')

15.7" × 18.1" (400 × 460mm)



(detector and surface mount kit not included)

Ordering Information

Model Description

Intelligent beam smoke detector with 8" reflector BEAM200

BEAM200S Intelligent beam smoke detector with 8" reflector and integral sensitivity test

Add suffix "A" for Canadian models.

Accessories

BEAMLRK Long range accessory kit. Includes 3 additional reflectors. (Required for applications in excess of 230 ft. [70m])

Multi-mount kit. (Provides ceiling or wall mount capability with increased angular adjustment for either **BEAMMMK**

the beam or the reflector)

REAMSMK Surface mount kit

Remote test station used to initiate the NFPA sensitivity test function RTS451 RTS451KEY Remote test station with key lock (Add suffix "A" for Canadian model.)

NOT TO BE USED FOR INSTALLATION PURPOSES.



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