



Addressable Beam Smoke Detector

IDP-Beam & IDP-Beam-T

The IDP-Beam and IDP-Beam-T are addressable beam smoke detectors for use with Silent Knight IFP-series fire alarm control panels (FACPs). They are uniquely suited for protecting open areas with high ceilings where other methods of smoke detection are difficult to install and maintain. The IDP-Beam-T also includes an integrated sensitivity test feature.

Installation of the single-ended reflective design is much easier than dual ended projected beam detectors. Alignment is quickly accomplished using an optical sight and a two-digit signal strength meter incorporated into the IDP-Beam and IDP-Beam-T.

Listed for operation from -22°F to 131°F (-30°C to 55°C), the IDP-Beam and IDP-Beam-T can be used in applications to provide early warning in environments where temperature extremes exceed the capability of other types of smoke detectors.

The IDP-Beam and IDP-Beam-T consist 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. When the smoke level reaches the predetermined threshold, an alarm is activated.

These beam smoke detectors have four 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 IDP-Beam-T 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, (System Sensor® PN RTS451), the motor is activated and moves the filter in the pathway of the light beam, which tests the detector sensitivity. This integral sensitivity test feature allows the user to quickly and easily meet the annual maintenance and test requirements of NFPA 72.

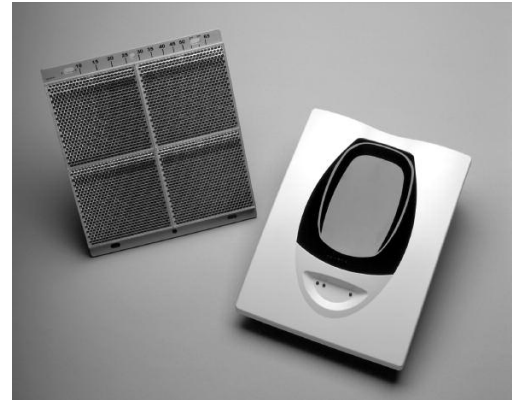
Features

- 16 to 328 foot protection range
- Single-ended, reflective design
- User friendly alignment procedure
- Six 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
- Optional remote test station
- Rotary address switches for fast installation
- Paintable cover

Agency Listings



MEA
95-04-E Vol. II



IDP-Beam

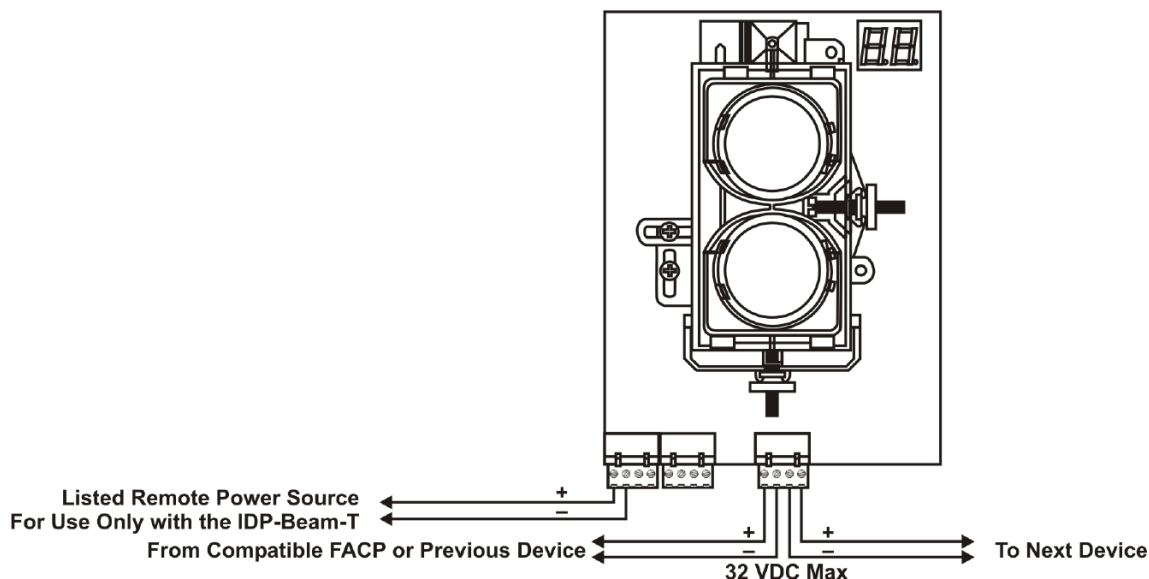
Installation

The IDP-Beam and IDP-Beam-T transceiver/receiver can be mounted over a recessed junction box or surface mounted using the Silent Knight surface mounting kit (System Sensor PN BEAMSMK). The reflector is surface mounted. For applications in which the reflector cannot be placed at the necessary angle, the multi-mounting kit is required (System Sensor PN BEAMMMK).

Compatibility

The IDP-Beam and IDP-Beam-T are compatible with the following FACPs:

- IFP-2000 / RPS-2000 Intelligent Fire Panel
- IFP-2000ECS Emergency Communication System with Fire Panel
- IFP-1000 / ECS Intelligent Fire Panel
- IFP-100 / ECS Intelligent Fire Panel
- IFP-50 Intelligent Fire Panel



Wiring the IDP-Beam and IDP-Beam-T

Specifications

Operating

Protection Range: 16' – 328' (5 – 100 m)

Adjustment Angle: +/-10° horizontal & vertical (optics move independent of the unit)

Sensitivity Levels: Level 1–25%; Level 2–30%; Level 3–40%; Level 4–50%; Acclimate Level 1–30 to 50%; Acclimate Level 2–40 to 50%

Fault Condition (Trouble): 96% or more obscuration blockage in alignment mode; improper alignment; self-compensation limit reached

Alignment Aid: Optical gunsight; integral signal strength indication; 2-digit display

LEDs: Normal–flashing green; Yellow–trouble; Red–alarm

Test/Rest Feature: Integral sensitivity test filter (IDP-Beam-T only); sensitivity filter (incremental scale on reflector); local test switch; local reset switch; remote test and reset switch (compatible with RTS151 and RTS151KEY test station)

Physical

Detector: 10" H (25.4 cm) x 7.5" W (19.1 cm) x 3.3" D (8.4 cm)

Reflector for 16' – 230': 7.9" H (20 cm) x 9.1" W (23 cm)

Reflector for Beyond 230': 15.7" H (40 cm) x 18.1" W (46 cm)

Shipping Weight: 3.9 lbs (1.8 kg)

Environmental

Operating Temperature: -22°F – 131°F (-30°C – 55°C)

Humidity: 10% – 93% non-condensing

Electrical

Operating Voltage: 15 – 32 VDC

SLC current draw: Standby & Alarm: 2mA Max.

Accessory current draw: Standby: 2mA Max.;
Alarm: 8.5mA Max.

Current During Testing (Average): 500 mA max

BEAMHKR Electrical Specifications

Operating Voltage: 15 – 32V

Current: 450 mA max @ 34V (per reflector)

Power Consumption: 7.7W @ 24V; 15W @ 32V (per reflector)

BEAMHK Electrical Specifications

Operating Voltage: 15 – 32V

Current: 92 mA @ 32V

Power Consumption: 1.6W @ 24V; 3W @ 32V

Ordering Information

IDP-Beam

Beam Smoke Detector

IDP-Beam-T

Beam Smoke Detector with Test Feature

Accessories*

BEAMLRK

Long Range Accessory Kit. Required for applications in excess of 230 ft (70m).

BEAMMMK

Multi-Mount Kit. Provides ceiling or wall mount capability with increased angular adjustment for either the beam or the reflector. When installed with the transmitter/receiver unit, BEAMSMK must also be used.

BEAMSMK

Surface Mount Kit

RTS151

Remote Test Station. Used to initiate the NFPA sensitivity test function.

RTS151KEY

Remote Test Station with Key Lock

BEAMHK

Heater Kit for Transmitter/Receiver Unit. See electrical requirements in the *Specifications*.

BEAMHKR

Heater Kit for Reflector. See electrical requirements in the *Specifications* section.



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by Honeywell

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 12 Clintonville Road, Northford, CT 06472-1610 Phone: (800) 328-0103, Fax: (203) 484-7118. For Technical Support, Please call 800-446-6444. www.farenhyt.com