

# MODEL 455B

## OUTDOOR ACTIVE INFRARED INTRUSION SENSOR



### ADVANCED, STAND-ALONE QUAD-BEAM SENSOR DESIGNED FOR OUTDOOR GATE OR WALL TOP INTRUSION DETECTION APPLICATIONS

**Model 455B** is a cost-effective, flexible outdoor active infrared detection sensor designed for short range applications. This solidly-constructed unit consists of a transmitter, which is the source of invisible pulsed active infrared emissions, and a receiver, which receives the beam signals, analyzes them, and detects walking or climbing intruders passing between the two columns.

Equipped with four infrared beams, the Model 455B creates an undetectable protection zone of up to 50 m (165 ft), and cannot be covered, masked or blocked without causing an alarm. Multiple beam paths must be interrupted simultaneously for an alarm to be generated, reducing nuisance alarms caused by small animals, birds or blowing debris.

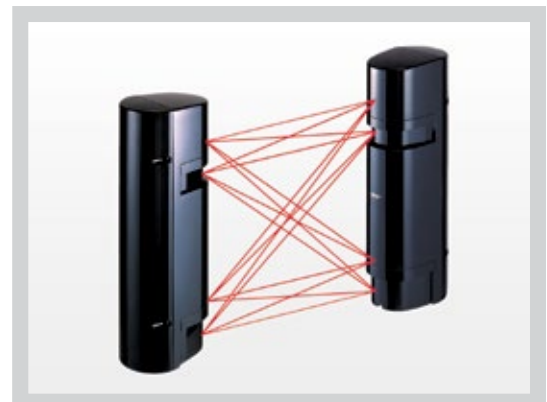
The unit's rugged modular construction allows beam sensors to be adjusted independently into any configuration. The unit is equipped with four field-selectable channels to prevent interference between adjacent or stacked sensors.

The Model 455B utilizes high power transmission beams for detection of walking or climbing intruders\*. A hood shielding the sensor cover prevents interruption of beam reception in the presence of frost or dew. Supplied heaters may be installed for added protection against weather and temperature extremes. An integrated alignment system allows quick, easy set-up and alignment by a single installer.

\* Model 455B is not recommended for the detection of running targets

#### KEY FEATURES

- DETECTION TO 50 M (165 FT)
- QUAD BEAM SENSOR
- FOUR FIELD-SELECTABLE CHANNELS
- EASY INSTALLATION AND ALIGNMENT
- ENVIRONMENTAL ALARM OUTPUT
- AUTO-GAIN LOCK



# MODEL 455B SPECIFICATIONS



## OPERATION

The transmitter column transmits luminous infrared impulses of 940nm to the receiver unit. The receiver analyzes the infrared signal from each beam and generates alarms when the following conditions are met:

- Simultaneous blocking of 4 beams
- Progressive drop in IR signal
- DC power failure

## SPECIFICATIONS

**Equipment Supplied:** Model 455B transmitter (Tx), receiver (Rx), four (4) 102 mm (4 in) OD mounting brackets

**Number of Beams:** 4

**Detection Mode:** Simultaneous interruption of beams

**Range:** 50 m (165 ft)

**Detection Pattern Height:** 457 mm (18 in)

**Target Response Time:** 50 to 700 ms

**Horizontal Adjustment:** +/- 90 degrees

**Vertical Adjustment:** +/- 10 degrees

**DC Input:** 12 to 30 VDC, 40 mA (Tx), 45 mA (Rx) (no heater)  
12 to 30 VDC, 390 mA (Tx), 395 mA (Rx) (with heater)

**Alarm Output:** SPDT-Form C, 30 VDC @ 100 mA

**Tamper Switch:** SPST-Form B N/C, 30 VDC @ 100 mA

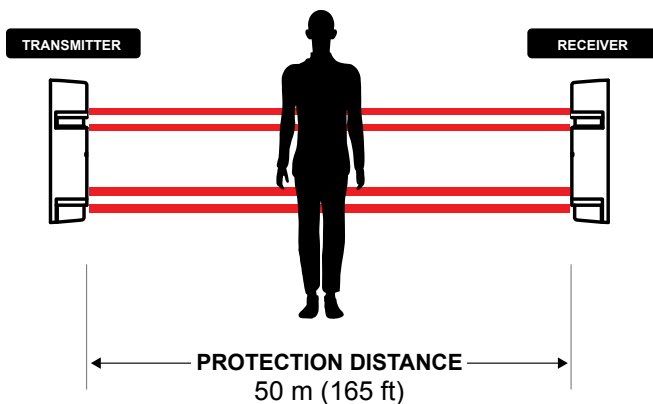
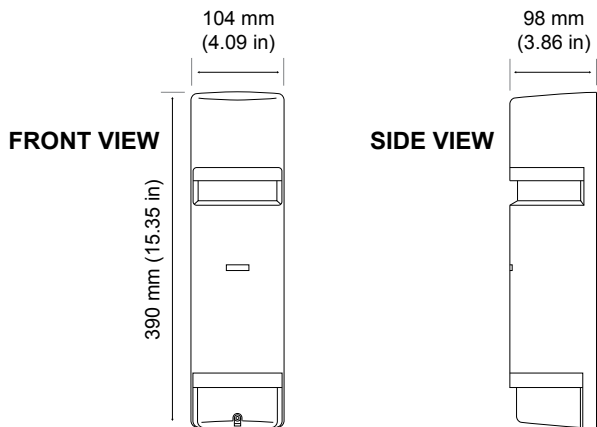
**Temperature Range:** -35°C to +66°C (-31°F to +151°F)

**Dimensions:** 390 mm x 104 mm x 98 mm (15.4 in x 4.1 in x 3.9 in)

**Weight:** 1.4 kg (3 lbs) each unit

**Shipping Weight:** 4.5 kg (10 lbs)

## DIMENSIONS AND COVERAGE



Specifications subject to change without notice.



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