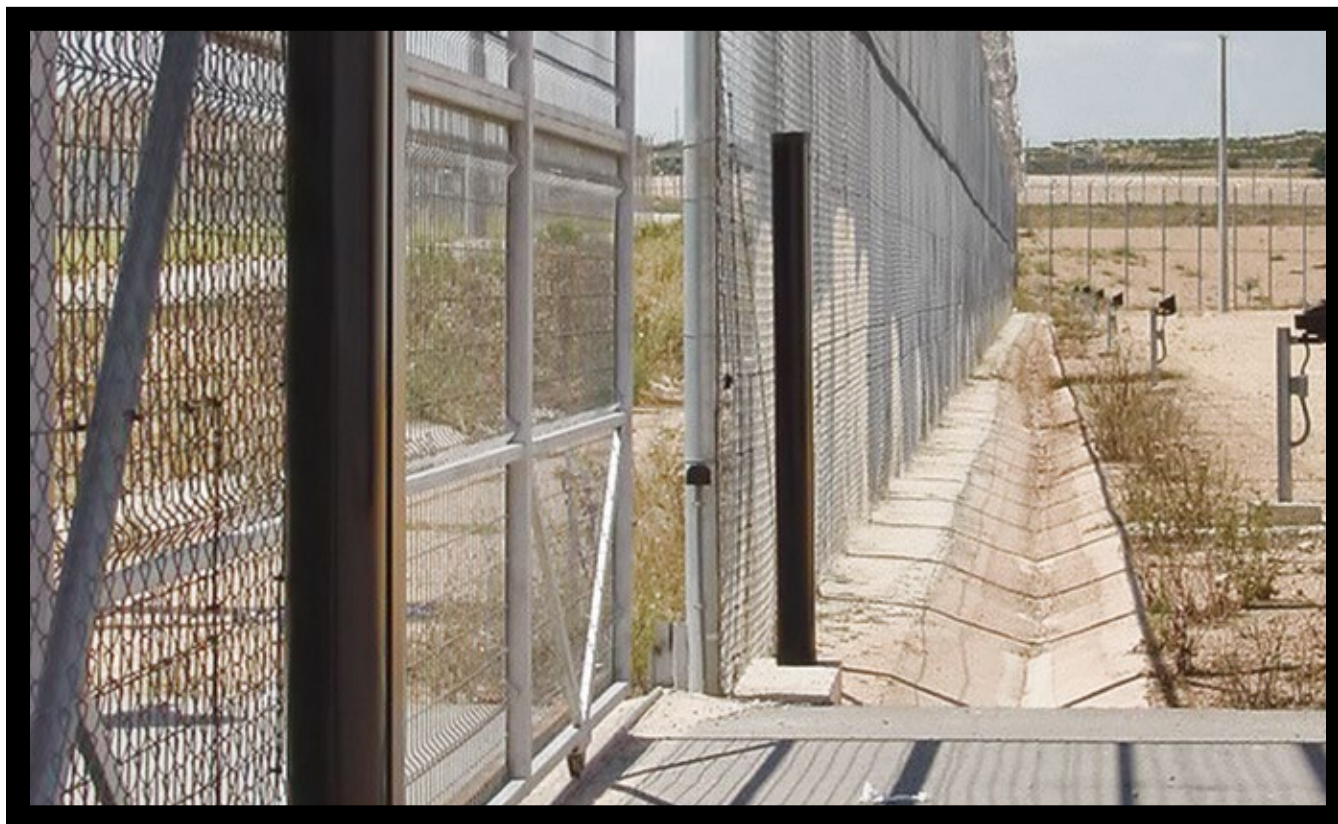


# MODEL 460B

## OUTDOOR ACTIVE INFRARED INTRUSION SENSOR



### ADVANCED STAND-ALONE SENSOR DESIGNED FOR OUTDOOR INTRUSION DETECTION APPLICATIONS

**Model 460B** is a long-range high performance, outdoor active infrared sensor for detection of walking, running and crawling intruders. The Model 460B consists of two 2 m (6.7 ft) columns – a transmitter unit, which is the source of invisible, active infrared emissions, and a receiver unit, which receives the signals, analyzes them, and detects intruders passing between the two units. Equipped with six high power infrared transmission beams, the Model 460B creates an undetectable protection zone of up to 100 m (328 ft).

The Model 460B cannot be covered, masked or blocked without causing an alarm, as multiple beams in each column are multiplexed uniquely between transmitter and receiver. Beam frequency channel selection allows multiple beams in a single column to operate without interference.

The rugged module construction of the Model 460B allows beam sensors to be adjusted independently into any configuration. The beams are equipped with an automatic gain control (AGC) to compensate for infrared energy and to self adapt to weather conditions while maintaining a constant detection capability. An optional on-board heater provides operation in all weather extremes.

The Model 460B utilizes high power transmission beams for high probability of detection and reliability against nuisance alarms. An integrated alignment system, with available signal and LED indicators, allows a single installer to quickly and easily set up and adjust the sensor.

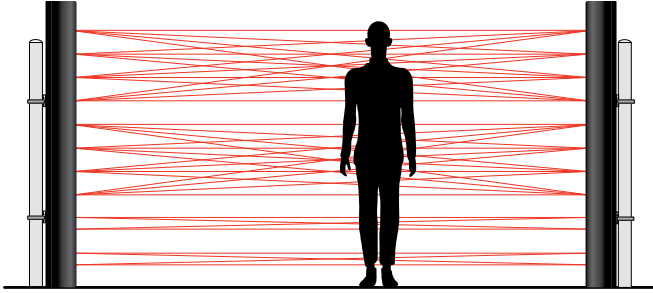
#### KEY FEATURES

- LONG RANGE DETECTION TO 100 M (328 FT)
- INTEGRATED ALIGNMENT SYSTEM
- AUTO-GAIN LOCK
- PROGRAMMED AGC FUNCTION
- DOUBLE PULSE MODULATION BEAM FREQUENCY
- BEAM TRANSMISSION STRENGTH SELECTOR
- DUAL RESPONSE TIME



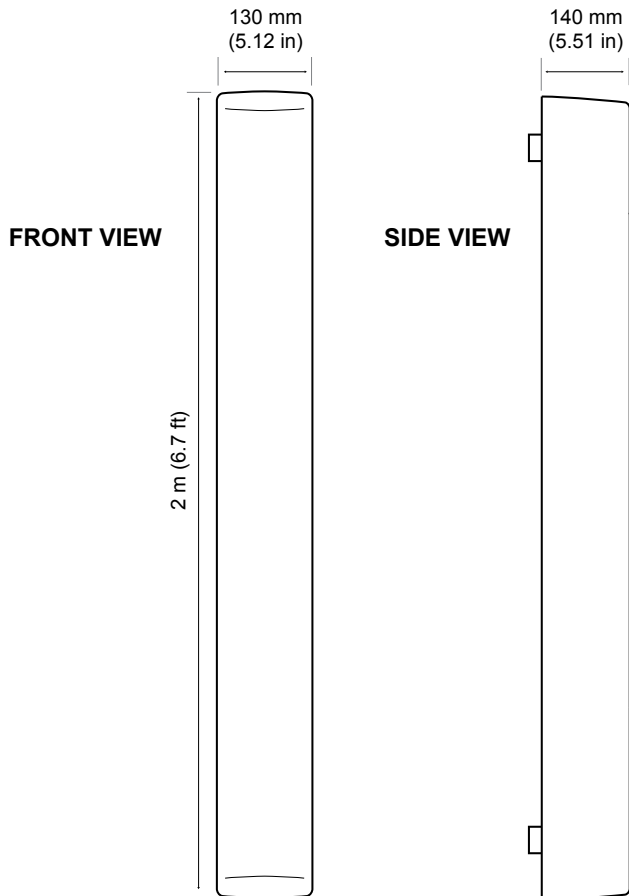
# MODEL 460B SPECIFICATIONS

## DETECTION MODE



Intrusion alarm is triggered when at least one beam set is broken between transmitter and receiver. A time-delay triggered alarm is generated when one beam is broken.

## DIMENSIONS



## OPERATION

The Transmitter (Tx) column transmits luminous infrared impulses of 940 nm to the receiver column. The Receiver (Rx) analyzes the infrared signal from each beam and generates an alarm when the following conditions are met:

- Blocking of at least one beam set
- $\geq 50\%$  drop in IR signal
- DC power failure

## SPECIFICATIONS

**Equipment Supplied:** Model 460B infrared barriers include a Transmitter unit and a Receiver unit with two (2) intelligent quad beams, one (1) anti-crawl beam, six (6) heater kits, two (2) pole mounting brackets, two (2) pedestal mounting brackets and two (2) towers with associated mounting hardware.

**Detection Type:** Pulsed 1000 Hz Infrared 940 nm

**Range:** 100 m (328 ft)

**Detection Pattern Height:** 2 m (6.7 ft)

**Alarm Response Time:** 40 ms to 1 s

**Horizontal Adjustment:** +/- 90°

**Vertical Adjustment:** +/- 10°

**DC Input:** 12 to 30 VDC, 80 mA (Tx), 125 mA (Rx)

**Heater Voltage:** 12 VDC @ 255 mA

**Alarm Output:** SPDT-Form C, 30 VDC @ 1.0 A

**Tamper Switch:** Form B, 30 VDC @ 100 mA

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

**Dimensions:** 2 m x 140 mm x 130 mm  
(6.7 ft x 5.51 in x 5.12 in)

**Shipping Weight:** 38.5 kg (85 lbs)

Specifications subject to change without notice.

**USA (CORPORATE HEADQUARTERS):**  
Southwest Microwave, Inc., Arizona, USA  
Telephone +1 (480) 783-0201

**EUROPEAN OFFICES:**  
Southwest Microwave Ltd., Worcestershire, UK  
Telephone +44 1386 75 15 11

**MIDDLE EAST OFFICES:**  
Southwest Microwave, Inc., Dubai, UAE  
Telephone: +971 4 371 2624