

MOTION SENSOR - K594

DESCRIPTION

The K594 is a passive infrared (PIR) motion detector that adds occupancy sensing capability to INNCOM integrated guestroom control systems.

Available as either a wall or ceiling mount, the K594 is used in conjunction with a door contact device, a room controller, and a communication network to determine occupancy in the guestroom. The determination of occupancy leads to better management of energy usage and security activities, and enhances the overall operating efficiency of the hotel.

There are two models of the K594: the K594W and the K594C, for wall or ceiling mounting, respectively. Both units are low-voltage-wired to an INNCOM Smart Guestroom Controller. Both meet INNCOM system requirements for sensitivity, area coverage, appearance, and dependability.

The benefits to the hotel are many. Energy saving is paramount, but other benefits include the extension of the life of equipment involved in heating, ventilation, and air conditioning. Determination of occupancy also results in improved overall operational efficiency and the enhancement of guest satisfaction.

APPLICATION

The K594 (Figure 1) is a microprocessor-controlled PIR detector, designed for easy installation, free of vertical adjustment. It features a combination of Fresnel and cylindrical lens elements with high-detection sensitivity beginning at 0.5 meter away from the detector up to a distance of 12 meters (40 ft.). The advanced True Motion Recognition™ algorithm (patented) allows the K594 to distinguish between the true motion of an occupant and other disturbances that might provoke false readings.

OPERATION

The K594 functions by detecting motion in a guestroom and reporting it to the room controller. The room controller combines this information with other inputs (such as an entry door switch or an electronic door lock) to determine whether there is a person in the guestroom. This information can then be used for energy control decisions. The occupancy information is also provided to Housekeeping by means of a terminal and/or the corridor doorbell display so that the Housekeeping staff can efficiently determine guestroom entry for service provision. Occupancy information can be used for automatic lighting control; when guests enter the room, occupancy is detected and lights are activated. It also provides an audit trail for Security.

FEATURES

- Sensitivity adjustment
- Wide angle dispersion
- Easy installation
- Maintenance free
- Increased energy savings
- Extended HVAC equipment life

SPECIFICATIONS

- Model number: K594C (ceiling mount)
K594W (wall mount)
- Dimensions:
 - Ceiling: 25mm x 85mm (Diameter)
 - Wall 3 1/8" H x 1 15/16" W x 1 7/16" D
- Input voltage: 9 to 16 VDC
- Current drain: Max. 9 mA @ 12 VDC
- Lens data:
 - No. of Fresnel beams: 27
 - No. of curtain beams: 9 + 5
 - Max. coverage: 12 x 12 m (40 x 40 ft.)
90 degrees
- Alarm indication: LED lights for 2-3 seconds.
- Event counter: Selectable, 1 or 2 motion events.
- Tamper contacts: Normally closed, 50 mA resistive/30 VDC.
- Operating temperature: -10 degrees C to 50 degrees C (14 degrees F to 122 degrees F)
- Storage temperature: -20 degrees C to 60 degrees C (-4 degrees F to 140 degrees F)
- RFI protection: Greater than 20 V/m (20MHz to 1000 MHz)

