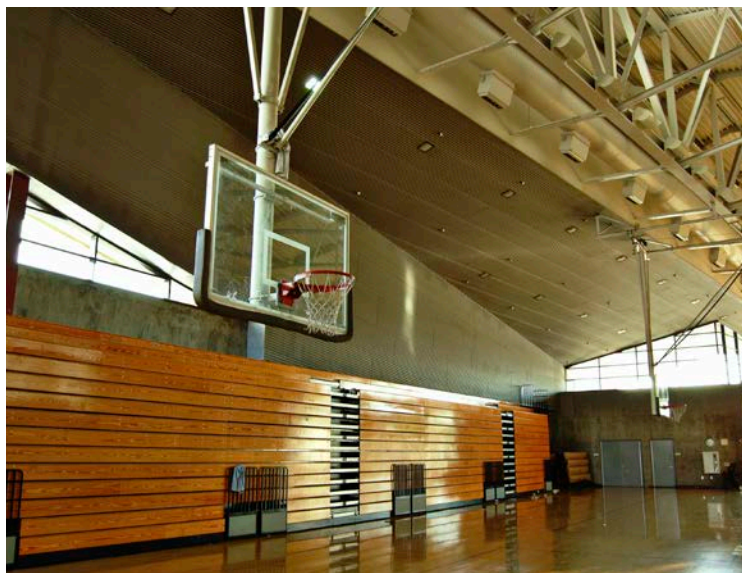


## BDS-702 series

### Low Voltage Dual-Tech Wall Switch Sensor

# WALLSENZR



## OVERVIEW

The BDS-702 is a low voltage dual-tech wall switch sensor in the IR-TEC's WALLSENZR family designed to fit in a NEMA standard wall box. This state-of-the-art wall switch sensor combines digital Passive Infrared (PIR) and High Frequency Doppler (HFD) sensing technologies into an aesthetically pleasing housing to provide superior occupancy or vacancy sensing control for all applications. HFD is an advanced sensing technology which utilizes super high frequency radio waves to detect the object movement, similar to ultrasonic but without grid openings on the front.

The BDS-702 sensor provides an isolated dry contact together with a unique momentary contact output to control the load through the connected Power Pack or BMS with Multi-way Manual Control (MMC) available. The MMC is ideal for large area applications where may require multiple wall switch sensors and wall/ceiling mount sensors to cover the whole area, but with manual on/off control available for specific purpose. To meet compliance of specific energy code, such as CA Title 24, the BDS-702 series can be used as vacancy sensor through specific wiring with PPU-300. Under the vacancy sensing control, the connected load will only be switched on by pressing the push-button manually, and switched off automatically when delay time of the last motion detected sensor elapses.

The sensor comes with an ambient light sensor (ALS) to inhibit its output if ambient light level is higher than required. The Accu-Set digital potentiometers make delay time (TIME) and ambient light level (LUX) settings fast, easy and accurate. Isolated dry contact output allows the BDS-702 series to control the load with IR-TEC Power Packs or integrate with BMS/BAS.

## FEATURES

- Cutting edge PIR + HFD dual technology sensor
- Occupancy or vacancy sensing control available
- Dual or single technology sensing mode selectable
- Front accessible sensor operation configurations
- No grid opening aesthetics pleasing sensor front
- 180° F. O. V. with coverage exceeds 1,200 sq. ft.
- 4 levels of HFD sensitivity setting programmable
- Specialized lens provides vandalism protection
- Accu-Set digital potentiometer sensor settings
- Multi-way Manual Control via button operation
- Screwless wall plate offers high end appearance

## APPLICATIONS

The BDS-702 of IR-TEC's WALLSENZR family can be used for occupancy/vacancy sensing based lighting, or load controls, in a variety of spaces.

**Classroom**

**Conference room**

**Parking garage**

**Grand hall**

**Gymnasium**

**Industrial assembly**

**Laboratory**

**Long corridor**

**Open office**

**Self-storage facility**

**Warehouse**

**Wide open room**



# BDS-702 series

## Low Voltage Dual-Tech Wall Switch Sensor



### OPERATION

The BDS-702 series dual-tech wall switch sensor employs a Passive Infrared (PIR) and High Frequency Doppler (HFD) sensing technologies to monitor the occupancy status through an exclusive lens with 180° field of view. An isolated dry contact output will be engaged to turn on the load through the power pack connected. A unique momentary contact signal can be connected with the power pack to provide multi-way manual on/off control.

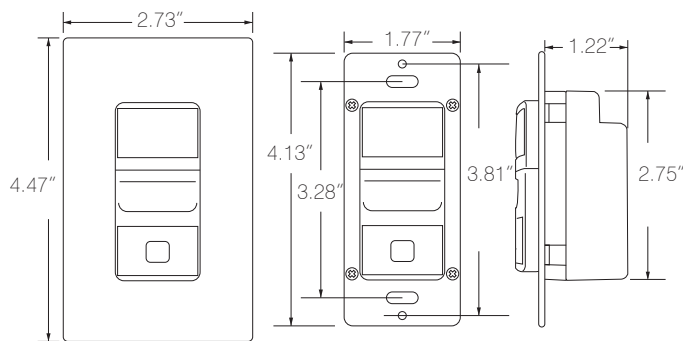
#### 1. Occupancy Sensor (Auto-ON, Auto-OFF)

Occupancy sensing control switches the light ON automatically when it detects the presence of an occupant. The sensor will switch the light OFF automatically if no occupant activity has been detected before the time delay elapses.

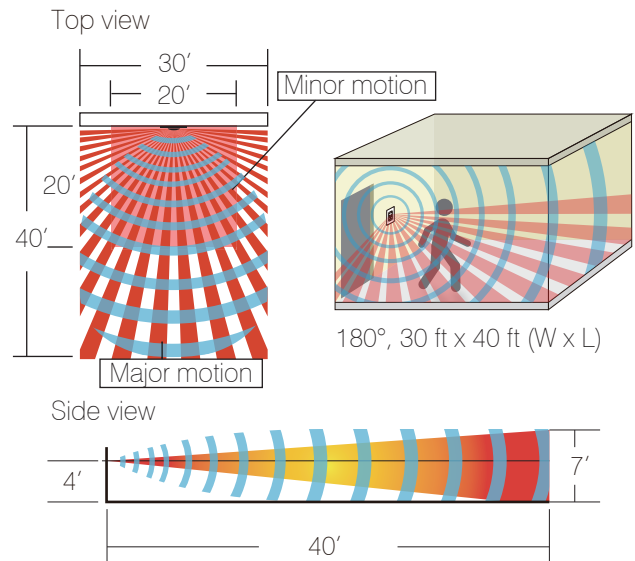
#### 2. Vacancy Sensor (Manual-ON, Auto-OFF)

Vacancy sensing control requires the user to manually press the push-button to turn ON the light. The sensor will switch the light OFF automatically if no occupant activity has been detected before the time delay elapses. The sensor will automatically turn ON the light if it detects occupant activity within 30 seconds after time delay elapsed.

### DIMENSIONS



### DETECTION COVERAGE



### SPECIFICATIONS

Power input	12~24VDC
Current drain	10/30 mA, 24VDC @vacant/occupied
Sensing technology	Digital PIR & High Frequency Doppler
Control output	Form A dry contact & Active low
Contact rating	Max. 2A @30VDC
Detectable speed	1~10 ft./sec. (0.3~3 m/sec)
Mounting height	3 ~ 5 ft. (90~150 cm) above the floor
Detection coverage	Major motion - 30 ft x 40 ft (W x L) @4 ft high Minor motion - 20 ft x 20 ft (W x L) @4 ft high
Ambient light level	7 levels, from dark to 24 Hr.
Delay time setting	T/1'/3'/5'/10'/20'/30', T=10 sec. for testing
Op. humidity	Max. 95% RH, non-condensate
Op. temperature	-40°F ~ 131°F (-40°C ~ 55°C)
Dimensions	4.13"H x 1.77"W x 1.65"D (w/mounting plate)

### ORDERING INFORMATION

**BDS-702SW**– Low Voltage Dual-Tech Wall Switch Sensor, 12-24VDC, White

**BDS-702SI** – Low Voltage Dual-Tech Wall Switch Sensor, 12-24VDC, Ivory