

BBT-702 series

Low Voltage Wall Switch Sensor

WALLSENZR



OVERVIEW

The BBT-702 series is a member of IR-TEC's WALLSENZR family of 2-pole low voltage wall switch sensor designed to fit in a standard NEMA wall box. The sensor combines state-of-the-art passive infrared sensing technology with décor aesthetics to provide optimal energy-saving for the applications.

The BBT-702 contains two isolated dry contact outputs, and two push button signals, for controlling two lighting loads or circuits independently through the connected Power Packs or BMS. The sensor provides two independent momentary contact signals for Multi-way Manual Control (MMC) of the respective loads. 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 BBT-702 series can be used as vacancy sensor through specific wiring with PPU-300.

The model BBT-702S 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. Two isolated dry contact outputs allow the BBT-702 series to control the separate loads with IR-TEC Power Packs or BMS/BAS.

FEATURES

- Occupancy and vacancy sensing control available
- Low profile, optimal décor sensor aesthetics
- 180° F. O. V. with coverage exceeds 1,200 sq. ft.
- Specialized lens provides vandalism protection
- 2 isolated dry contact relay outputs available
- Sensor operation LED indicator can be disabled
- Multi-way Manual Control via button operation
- Accu-Set digital potentiometer sensor settings
- Screwless wall plate offers high end appearance

APPLICATIONS

The BBT-702S 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

BBT-702 series

Low Voltage Wall Switch Sensor

WALLSENZR

OPERATION

The BBT-702 series wall switch sensor employs passive infrared (PIR) sensing technology to monitor the occupancy status through an exclusive lens with 180° field of view. Two isolated dry contact outputs will be engaged to control the loads separately through the power pack connected. Two independent momentary contact signals can be connected with the respective power pack to provide multi-way manual on/off control. The sensor can be programmed to control pole 1 as occupancy or vacancy sensor, and pole 2 with extended delay as pole 1 or automatic ambient light sensing control.

WIRING DIAGRAM

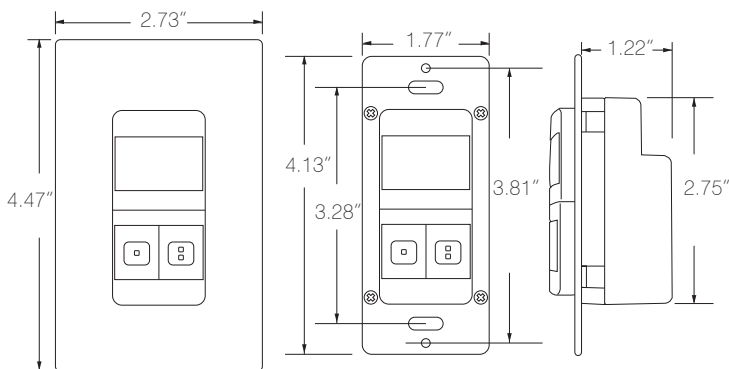
1. Occupancy Sensor (Auto-ON, Auto-OFF)

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.

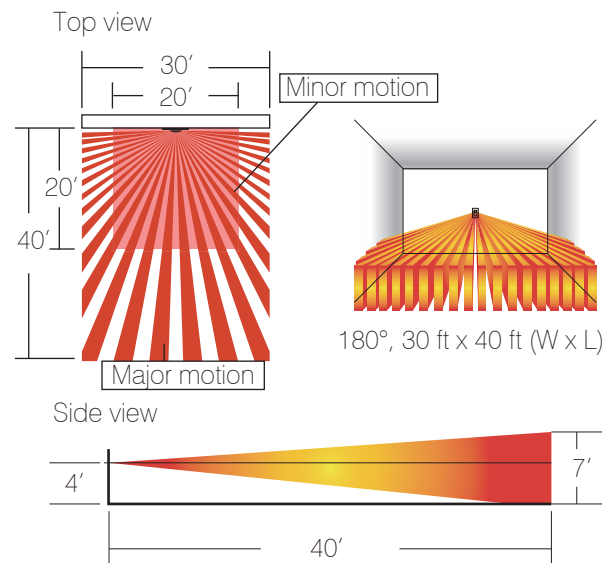
2. Vacancy Sensor (Manual-ON, Auto-OFF)

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	12~24 VDC $\pm$ 5%
Current drain	5/30 mA, 24VDC @vacant/occupied
Infrared sensor	Dual element pyroelectric
Control output	2 x Form A dry contact & active low
Contact rating	Max. 2A @30VDC, isolated
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 H Minor motion - 20 ft x 20 ft (W x L) @4 ft H
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

BBT-702SW – Low Voltage Wall Switch Sensor,
12-24VDC, w/ALS, White

BBT-7002SI – Low Voltage Wall Switch Sensor,
12-24VDC, w/ALS, Ivory