



### WIDE VIEW SENSOR CORNER MOUNT • LOW VOLTAGE • PASSIVE INFRARED (PIR)

#### SPECIFICATIONS

##### FEATURES

- 100% Digital PIR Detection, Excellent RF Immunity
- 120° by 40 ft (12.19 m) Coverage for Small Motion
- Push-Button Programmable Adjustable Time Delays
- Convenient Test Mode
- No Field Calibration or Sensitivity Adjustments Required
- 100 hr Lamp Burn-in Timer
- Green LED Indicator

##### LAMPMAXIMIZER® TECHNOLOGY

- Protects Lamp Life while Maximizing Energy Savings
- Minimum On Timer (15 min default)
- Occ. Time Delay (10 min default)
- LampMaximizer+ Mode - Optimizes Lamp Life & Energy Savings (disabled by default)
- Switch Counter (in 1000's)
- Total Lamp On Time (in khrs)

##### PHYSICAL SPECS

SIZE 3.0" H x 3.6" W x 1.75" D  
(7.62 cm x 9.14 cm x 4.45 cm)  
WEIGHT 5 oz  
MOUNTING Directly to corner or to ceiling using WV BR bracket  
COLOR White

##### ELECTRICAL SPECS

OPERATING VOLTAGE  
12-24 VAC/VDC  
CURRENT DRAW  
Standard, 4 mA  
w/ R option, 16 mA  
RECOMMENDED POWER PACK  
PP20

##### ENVIRONMENTAL SPECS

OPERATING TEMP  
14° to 160° F (-10° to 71° C)  
STORAGE TEMP  
-14° to 160° F (-26° to 71° C)  
RELATIVE HUMIDITY  
20 to 90% non-condensing  
SILICONE FREE  
ROHS COMPLIANT

##### OVERVIEW

The WV 16 Series Wide View occupancy sensor is designed to mount in a corner and detect small motions up to 40 ft (12.19 m) away, and larger motions up to 70 ft (21.34 m) away. This makes it ideal for 30 ft x 30 ft (9.14 m x 9.14 m) classrooms or corridors up to 70 ft (21.34 m) long (for specific long narrow hallway applications, see HW13 product data sheet). The enclosure's convenient tilting feature enables the sensor to be mounted at any height from 8 to 10 ft (2.44 to 3.05 m). When corner or wall mounting is not possible, the WV BR bracket accessory can be used to mount the WV 16 to the ceiling. Additionally, the WV 16 may be used in combination with other sensors to customize coverage for very large or irregularly shaped spaces. For rooms with obstructions, use the WV PDT 16 Series sensor which adds Microphonics™ detection.

##### SENSOR OPERATION

The sensor detects changes in the infrared energy given off by occupants as they move within the field-of-view. When occupancy is detected, a DC output goes high and can drive up to 200 mA of connected load. The sensor is powered with 12-24 VAC/VDC and typically operates with a PP20 or MP20 power pack, enabling complete 20 Amp circuits to be controlled. This innovative sensor requires no field calibration or sensitivity adjustments.

##### LAMPMAXIMIZER®

This sensor also contains patented LampMaximizer technology that allows users to aggressively target energy savings while still protecting lamp life. A minimum on timer, factory set at 15 minutes, helps preserve lamp life by eliminating all lamp cycles shorter than lamp manufacturers' recommendations.

A standard occupancy time delay is also present that ensures lights turn off (assuming minimum on timer has elapsed) if no occupancy is detected. This timer is factory set at 10 minutes to promote energy savings, but is adjustable between 30 seconds and 20 minutes. These adjustments can be done manually, through the unit's push-button, or automatically every two weeks through an advanced mode, called LampMaximizer+, that determines the optimum time delay in order to maximize both lamp life and energy savings. Additionally, this sensor maintains statistics on total lamp on time and number of cycles.

#### OPTIONS

##### LOW VOLTAGE RELAY (R)

- Enables sensors to interface with other systems (e.g., BMS, lighting panels)
- Provides dry contact closure via a SPDT, 1 Amp, 40 Volt relay
- Only one relay needed per zone
- Changes state when all connected sensors register unoccupied
- Relay requires sensor power to function

##### PHOTOCELL (P)

- Auto set-point calibration
- Two selectable modes of operation
- On/Off mode: Photocell has full control during periods of occupancy
- Inhibit mode: Photocell can prevent lights from turning on if adequate daylight is available, but cannot turn lights off

##### LOW TEMP/HIGH HUMIDITY (LT)

- Sensor is corrosion resistant to moisture
- Operates down to -40° F/C

##### BRACKET KIT (KIT)

- WV BR ceiling mount bracket included



TITLE 24  
ASSEMBLED in U.S.A.  
5 YEAR WARRANTY

#### ORDERING INFO WV 16 [RELAY] [PHOTOCELL] [TEMP/HUMIDITY] [BRACKET KIT]

##### RELAY

Blank = None  
R = Low Voltage Relay

##### PHOTOCELL

Blank = None  
P = Photocell

##### TEMP/HUMIDITY

Blank = Standard  
LT = Low Temp

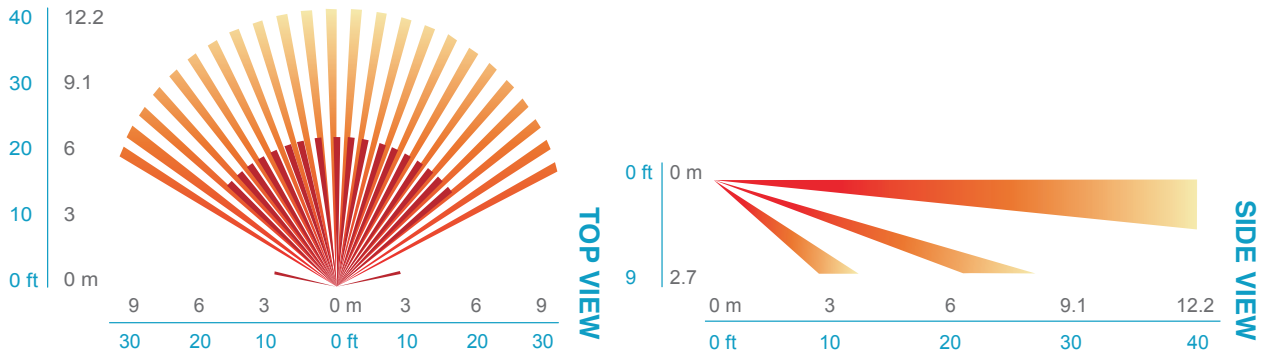
##### BRACKET KIT

Blank = Sensor only  
KIT = Sensor & WV BR Bracket

## COVERAGE PATTERN

### WIDE VIEW LENS

- Small motion (e.g. **hand movements**) detection up to 40 ft (12.19 m).
- Large motion (e.g. **walking**) detection up to 70 ft (21.34 m).
- Designed for 8 to 10 ft (2.44 to 3.05 m) high mounting in room corner.



## WIRING (DO NOT WIRE HOT)

### STANDARD WIRING

**RED** - Power Input (12-24 VAC/VDC)

**BLACK** - Common

**WHITE** - Occupancy State (high VDC for occupied)

### PHOTOCELL/DIMMING OPTIONS (P)

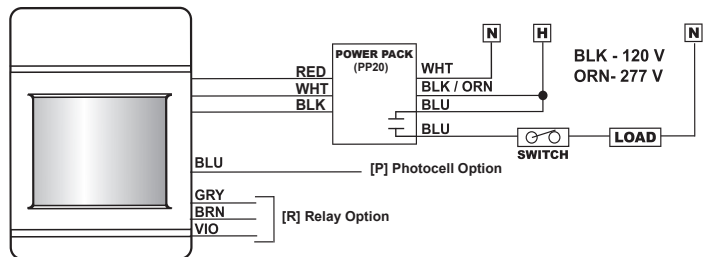
**BLUE** - Direct output to power pack for providing photocell control. Output is high VDC with occupancy & low light. For multi-level control, use two power packs and connect White wire to primary load and Blue to daylight load.

### RELAY OPTION (R)

**GRAY / BROWN** - Connected during occupied state

**VIOLET / BROWN** - Connected during unoccupied state

**Note:** Relay is energized during unoccupied state



## INSTALLATION

- Sensor has rear enclosure, which is beveled so as to be corner mounted at 8-10 ft (2.44-3.05 m); see tilt settings below.
- Mount in corner above entrance door or in a corner along the same wall as the entrance. .
- For mounting heights above 10 ft (3.05 m), use the **WV BR** and mount sensor to angled side to provide an initial 30° look down.

### TILT ADJUSTMENT Mounting Height Position

7' - 8'	Vertical
8' - 9'	Center
9' - 10'	Forward
Above 10'	Use <b>WV BR</b>



### CEILING MOUNT BRACKET (WV BR)

The **WV BR** Ceiling Mount Bracket allows the **WV PDT 16** to be mounted in the corner of the area from the ceiling for conditions where mounting to the wall is not possible.

SIZE 4.7" Dia (11.94 cm)  
3.3" Deep (8.38 cm)

### MOUNTING

Ceiling Tile Surface  
3.5" Octagon Box  
Single Gang Handy Box

COLOR White



### PROGRAMMING

Refer to instruction card IC7.002 for default settings and directions on programming the sensor via the push-button.

**sensorswitch**

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**WARRANTY:** Sensor Switch warrants these products to be free of defects in manufacture and workmanship for a period of 60 months. Sensor Switch, upon prompt notice of such defect, will, at its option, provide a Returned Material Authorization number and repair or replace returned product.

**LIMITATIONS AND EXCLUSIONS:** This Warranty is in full lieu of all other representation and expressed and implied warranties (including the implied warranties of merchantability and fitness for use) and under no circumstances shall Sensor Switch be liable for any incidental or consequential property damages or losses.

**TS-WV-001A**