

OS-361DT

Low Voltage Dual-Tech Occupancy Sensor



Specializing in Building Sensors



PIR



HFD

FEATURES

- Cutting edge quad element PIR sensor
- X-band High Frequency Doppler sensor
- 24V low voltage DC power operation
- NO Form A relay dry contact output
- 8 different OFF-delay times selectable
- 4 levels of HFD sensitivity adjustable
- Two sensor operation LED indicators
- Superior EMI and RFI immunity design
- Pigtail wires for easy wiring connection

OVERVIEW

The OS-361DT is a ceiling mount low voltage dual technology occupancy sensor designed for area lighting, or HVAC control, for energy efficient building management. The sensor combines an omni-directional quad element Passive Infrared (PIR) sensor, a state-of-the-art High Frequency Doppler (HFD) sensor and advanced signal processing firmware to perform superior occupancy sensing capability.

The OS-361DT is ideal for the areas where motion may not be easily detectable by a single technology sensor. The sensor will activate its relay output and delay timer when both PIR and HFD sensors detect the presence of occupant. The delay timer will be reset if either PIR or HFD sensor detects motion before the delay time has elapsed.

The sensor is operated by 24VDC low voltage power supplied from an IR-TEC power pack, or building management system. The sensor comes with pigtail wires for connection with an IR-TEC power pack to provide occupancy sensing control of the connected lighting and/or HVAC system.

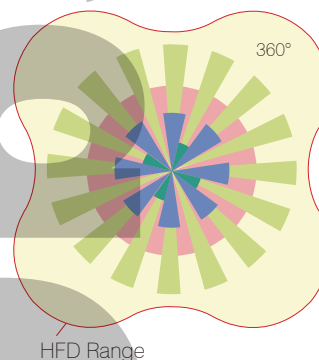
APPLICATION

- Light Control
- HVAC Control
- Building Management

The OS-361DT can be used to control area lighting, or HVAC systems, with an IR-TEC power pack or in conjunction with building management systems.

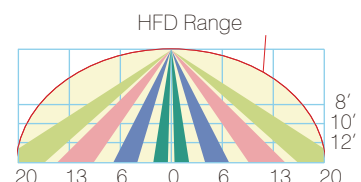
DETECTION PATTERN

Top View



Mounting Height	8'	10'	12'
Coverage (dia.)	20'	24'	30'

Side View



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SENSOR OPERATION

The OS-361DT is an occupancy sensor which combines two different sensing technologies, PIR and HFD, in one housing for ceiling mount installation. The sensor is operated by 24 VDC low voltage power.

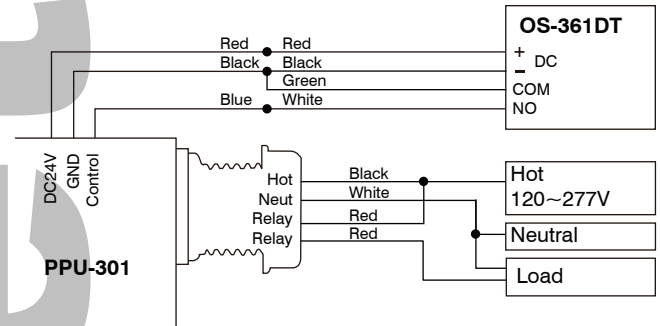
When both PIR and HFD sensors detect the presence of occupant, the dry contact relay output of the OS-361DT will be engaged for the delay time programmed. The delay timer will be reset if any motion is detected by either PIR or HFD sensor before delay time elapses.

8 different delay times and 4 different HFD sensitivity levels can be programmed via specific DIP switch combinations. 2 LED's are available to indicate the operation of PIR and HFD sensors respectively. The sensor operation LED can be disabled by specific DIP switch, if necessary.

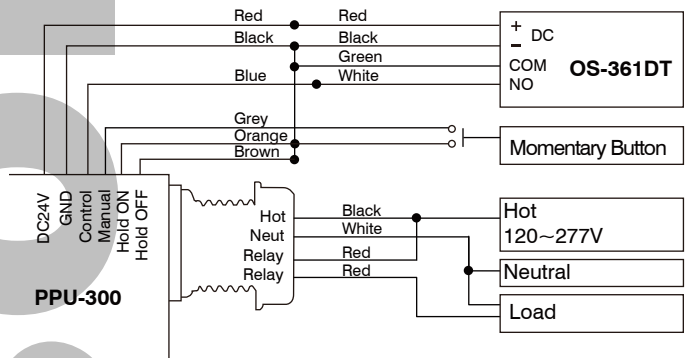
Various control modes may be achieved by different wiring connections. Basic wiring diagrams are included for reference. Consult with an IR-TEC team member if a more complex wiring diagram is required.

WIRING DIAGRAM

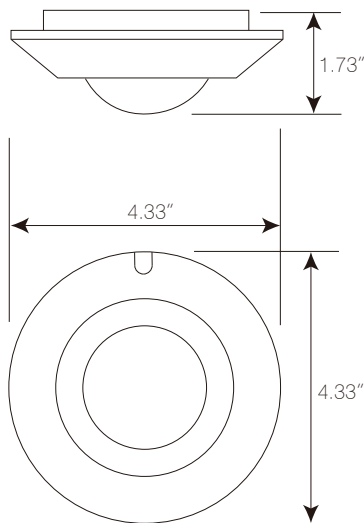
A. Auto-ON/Auto-OFF with PPU-301



B. Manual-ON/Auto-OFF with PPU-300



DIMENSIONS



SPECIFICATIONS

Power supply	24±2 VDC
Current drain	20 mA @24V, standby mode
Signal output	Form A, 30VDC, 0.2A max.
Infrared sensor	Quad element pyroelectric infrared sensor
HFD sensor	X-band DRO type with patch antenna
HFD sensitivity	60/80/100/120% selectable
Detectable speed	0.33 ~ 10 ft/sec. (0.1 ~ 3 m/sec.)
Mounting height	8 ~ 12 ft. (2.4 ~ 3.6 m)
Detection range	2.5 X mounting height in diameter
OFF delay setting	0/1'/3'/5'/10'/15'/20'/30' selectable
Op. humidity	Max. 95% RH
Op. temperature	-4°F ~ 122°F (-20°C ~ 50°C)
Dimensions	4.4" dia. x 1.7" depth