

UT-300 Series Ultrasonic Ceiling Sensors

Architecturally appealing
low-profile appearance • • • •

Auto set automatically
selects optimal time
delay and sensitivity

Ultrasonic diffusers give more
comprehensive coverage



Accepts low-voltage switch
input for manual-on operation

Plug terminal wiring for
quick and easy installation

Walk-through mode
increases savings potential

Automatic or manual-on operation
when used with a BZ-150 Power Pack

PROJECT

LOCATION/TYPE

Product Overview

Description

WattStopper's UT-300 Ultrasonic Ceiling Sensors automatically turn lighting on and off based on occupancy. The sensors mount on the ceiling with a flat, unobtrusive appearance and provides 360° coverage.

Operation

UT-300 Series Sensors operate on 24 VDC, VAC or halfwave rectified. They use 40 KHz high frequency ultrasound to sense occupancy and automatically turn lighting on. When no occupancy is detected for the length of the time delay, lighting automatically turns off. For manual-on operation, the units work with a low-voltage momentary switch.

Auto set

The UT-300 requires no adjustment at installation. Auto set continuously monitors the controlled space to identify usage patterns. Based on these patterns, UT sensors automatically adjust time delay and sensitivity settings for optimal performance and energy efficiency. The sensors assign short delays (as low as five minutes) for times when the space is usually vacant, and longer delays (up to 30 minutes) for busier times.

Application

UT-300 Series Sensors offer excellent control of lighting for many spaces, including restrooms, large offices, open office areas and hallways. They can control large partitioned office spaces when configured in zone patterns. Unit performance combined with ease of installation will provide fast payback and many years of energy savings.

Features

- Advanced control logic based on RISC microcontroller provides:
 - Advanced Signal Processing eliminates false triggers and provides immunity to RFI and EMI
 - Walk-through mode turns lights off three minutes after the area is initially occupied – ideal for brief visits such as mail delivery
- LED indicates occupancy detection
- Coverage 500-2,000 square feet
- Available with isolated relay for integration with BAS or HVAC
- DIP switch simplifies sensor adjustments
- Patented ultrasonic diffusion technology spreads coverage to a wider area
- UT-300 Series Sensors work with low-voltage momentary switches for manual control
- Clip mounting system makes ceiling tile installation simple
- Uses plug terminal wiring system for quick and easy installation
- Qualifies for ARRA-funded public works projects

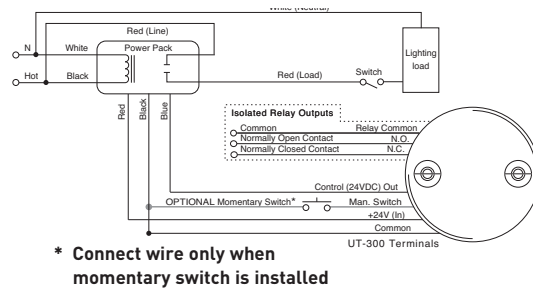


Specifications

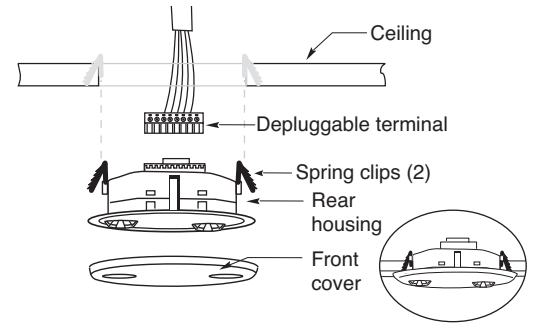
- 24 VDC/VAC
- Time delays: Auto set, fixed [5, 10, 15, 20 or 30 minutes], Walk-through/Test Modes
- Ultrasonic frequency: 40 kHz
- UT-300 contains isolated relay with N/O and N/C outputs; rated for 1 Amp at 30 VDC/VAC
- Mounting options: ceiling tile; 4" square junction box with double-gang mud ring
- Max. UT-300s per power pack: B=2, BZ=3
- Max. UT-305s per power pack: B=3, BZ=4
- Dimensions: 4.5" x 1" (114.3mm x 25.9mm) diameter x depth
- UL and cUL listed
- Five year warranty

Wiring & Mounting

Wiring Diagram

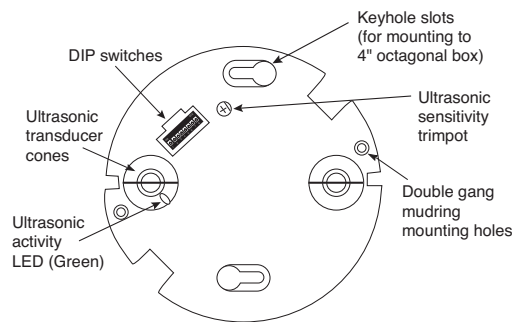


Ceiling Mounting



Controls & Settings

Product Controls



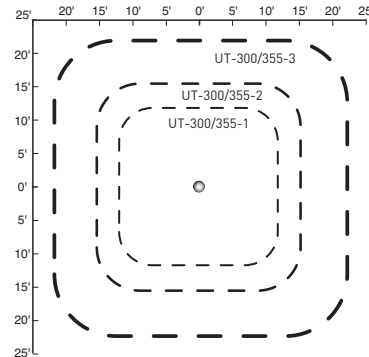
DIP Switch Settings

On Mode	1	LED	6
Auto On	-	Disabled	-
Manual On	•	Enabled	•
◀ = Factory Setting • = ON - = OFF			
Override	2		
Normal	-		
Override	•		
Time Delay	3	4	5
5 sec/SmartSet	•	-	-
5 minutes	-	•	-
10 minutes	•	-	-
10 minutes	-	•	-
15 minutes	•	-	-
15 minutes	-	•	-
20 minutes	•	-	-
30 minutes	-	•	-

⬆ = walk-through mode

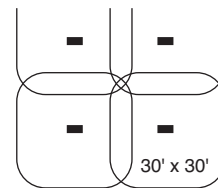
Coverage & Placement

Coverage Patterns



Coverages shown represent half-step walking motion when sensor is mounted 8'-10' high. Actual coverage can vary for each application depending on the shape and use of space and the obstacles present.

Placement



Typical layout for open office space would be to place UT-300-3 sensors so they control zones that overlap. For partitioned spaces, a typical zone is about 25' x 25' with an overlap on the coverage up to 30' x 30'.

Ordering Information

Catalog No.	Voltage	Current	Coverage	Feature
☐ UT-300-1	24 VDC	40 mA	500 ft ² (46.5 m ²)	Isolated relay
☐ UT-300-1-U				
☐ UT-300-2	24 VDC	40 mA	1000 ft ² (92.9 m ²)	Isolated relay
☐ UT-300-2-U				
☐ UT-300-3	24 VDC	45 mA	2000 ft ² (185.8 m ²)	Isolated relay
☐ UT-300-3-U				
☐ UT-305-1	24 VDC	30 mA	500 ft ² (46.5 m ²)	
☐ UT-305-2	24 VDC	30 mA	1000 ft ² (92.9 m ²)	
☐ UT-305-3	24 VDC	35 mA	2000 ft ² (185.8 m ²)	