



OMNI® LOW VOLTAGE ULTRASONIC AND PIR CEILING SENSOR

CEILING MOUNT OCCUPANCY SENSORS

FEATURES

- IntelliDAPT® self-adaptive technology - no manual adjustment required
- All-digital dual technology ultrasonic (US) and passive infrared (PIR) sensor
- Non-volatile memory for sensor settings
- Low voltage device: 24VDC
- 500–2,000 square-foot coverage area (depending on model)
- Optional relay and photocell control
- 5 year warranty



RELATED PRODUCTS

- Ø [Occupancy Sensor Accessories](#)
- Ø [Universal Voltage Power Packs](#)
- Ø [Heavy Duty Universal Voltage Power Packs](#)
- Ø [MPSHD Pack](#)
- Ø [MP347A Power Pack](#)

SPECIFICATIONS

CONSTRUCTION

- 5.0 oz. (142g)
- Off-white
- Ø4.0" x1.5" H (Ø 114.3mm x 38.1mm H)
- Casing- rugged, high-impact, injection-molded plastic KJB ABS
- Cicolac (UL-945VA) flame class rating, UV inhibitors
- Color-coded leads are 6" long (152.4 mm)
- Dual-element pyrometer and 12-element cylindrical segmented Fresnel lens, integral filter excludes excess PIR energy from sunlight
- Red LED Lamp - infrared motion
- Green LED Lamp - ultrasonic detection

MOUNTING

- Mounting base provided
- Recommended mounting height: 8ft (2.44m) with a max mounting height of 12ft (3.66m)

ELECTRICAL

- 24VDC, 33mA (uses UVPP and MP- Series power pack- not included)
- 24VDC active high-logic control signal with short circuit protection and optional dry contact (see RP options)
- OMNIDT500: 40kHz output
- OMNIDT1000 and OMNIDT2000: 32kHz

OPERATION

- IntelliDAPT Technology
 - Auto reset from test setting
 - Self-adjusting timer
 - Self-adjusting passive infrared thresholds
 - Automatic false-on/false-off corrections
- Coverage
 - Coverage: 500 - 2,000 square feet (152.4 - 609.6 square meters)
- Timer Settings
 - Automatic mode: 8–30 min. (self-adjusts based on occupancy)
 - Test mode: 8 seconds (for an easy check at installation)
- RP Option
 - Relay and photocell included
 - Relay: N/O + N/C contacts; SPDT; 500 mA rated @ 24VDC; three-wire isolated relay
 - Photocell: adjustable natural-light override ranges from 0 to 100 foot-candles (0 to 1,000 lux)

OPERATING ENVIRONMENT

- Indoor use only
- Operating temperature: 32° to 104°F (0° to 40°C)
- Relative humidity (non-condensing): 0% to 95%

CERTIFICATIONS

- UL and cUL listed
- California Title 24 compliant
- This product qualifies as both (i) a “domestic construction material” per FAR §52.225-9 Buy American-Construction Materials and a “(COTS) item” per FAR §2.101 and (ii) a “designated country construction material” per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 5/27/2020. See [Buy American Solutions](#).
- This product qualifies as “designated country construction material” per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 5/27/2020. See [Buy American Solutions](#).

WARRANTY

- 5 year limited
- See [HCS Standard Warranty](#) for additional information

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ORDERING GUIDE

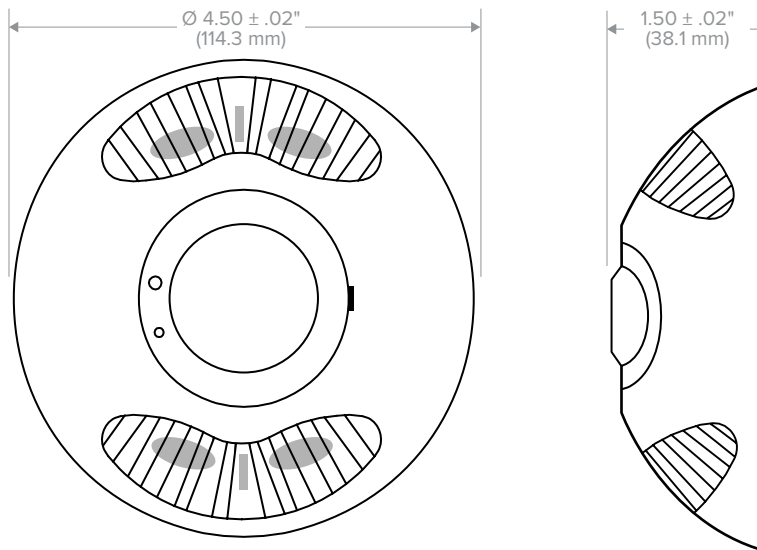
Example: OMNIDT2000RP-U

CATALOG #

Model	Technology	Coverage	Relay/PhotoCell Option	BAA/TAA*
OMNI Ceiling sensor	DT Dual Technology	500 500 sq ft 1000 1,000 sq ft 2000 2,000 sq ft	RP Relay and Photocell Blank No Option	Blank Standard Product U BAA T TAA

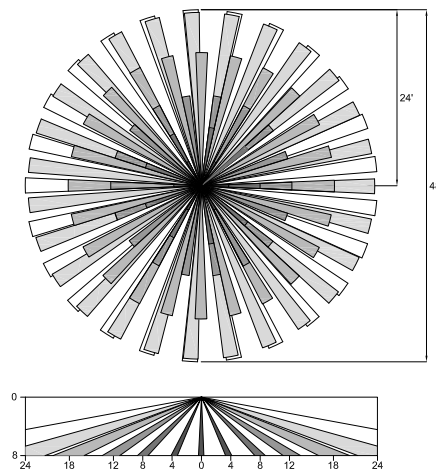
*Buy American Solutions	
BAA FAR §52.225-9	TAA FAR §52.225-11
	OMNIDT500
OMNIDT2000RP	OMNIDT2000
	OMNIDT2000RP

DIMENSIONS



ADDITIONAL INFORMATION

Coverage Patterns



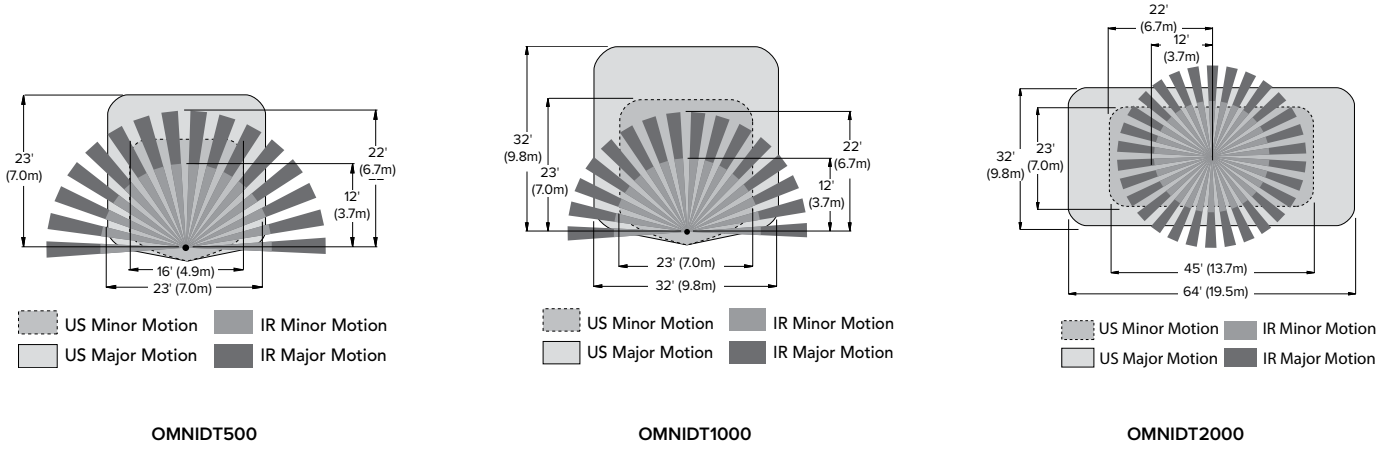
Sensor Lens Coverage and Detection Patterns
When Mounted at 8ft with Low Mount Lens

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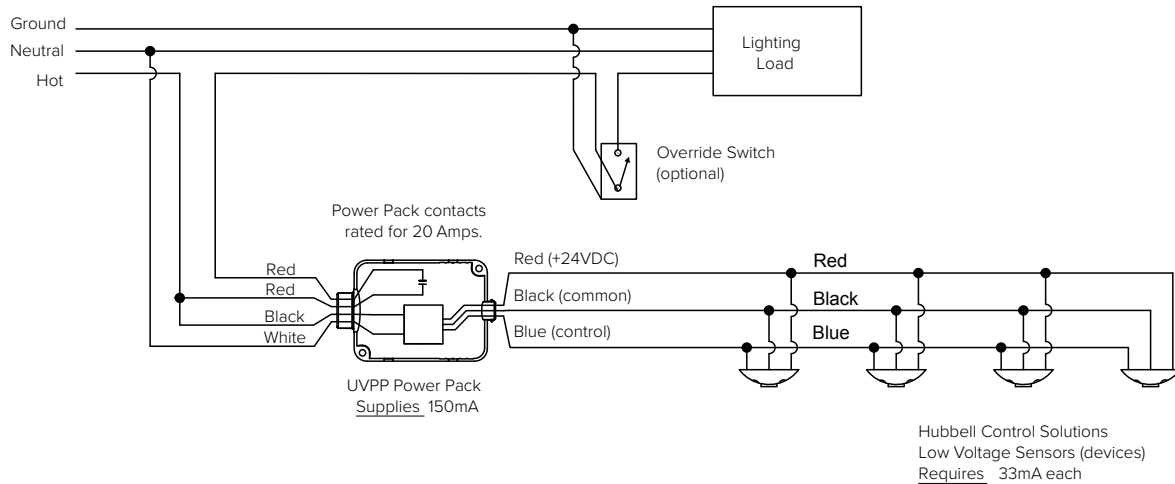
CEILING MOUNT OCCUPANCY SENSORS

ADDITIONAL INFORMATION (CONTINUED)

Coverage Patterns (Continued)



Wiring Diagrams



NOTE:

- DO NOT attempt to power more than 4 devices, be it sensors or slave packs, from a single power pack.

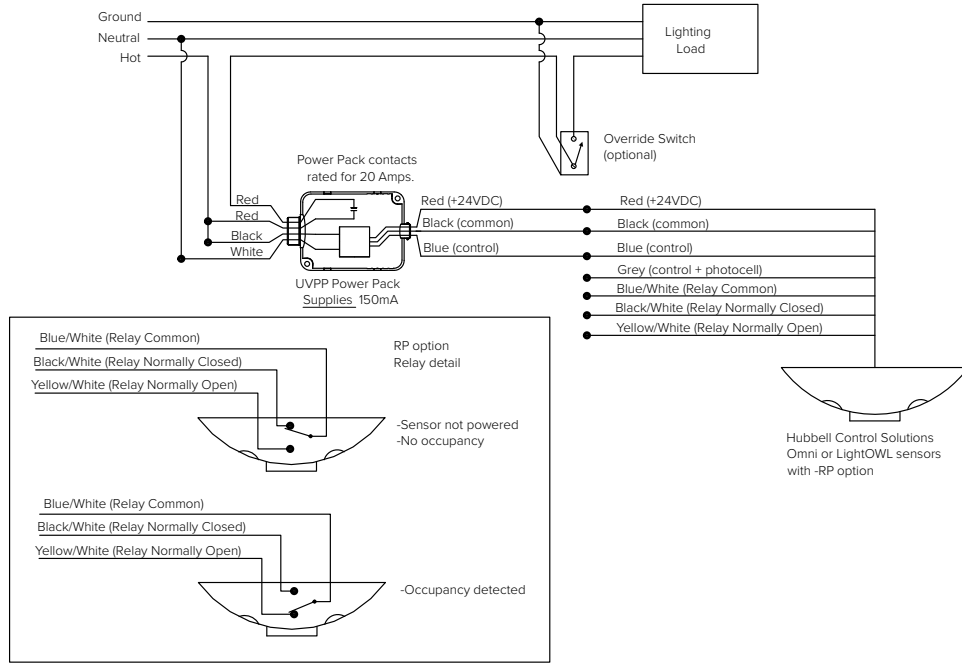
1 Circuit with up to 4 Sensors and UVPP

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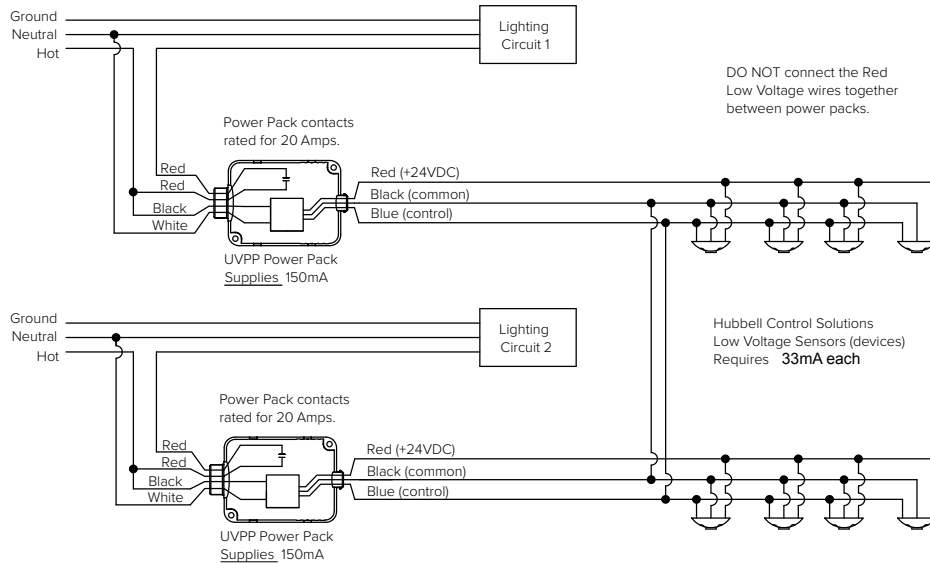
CEILING MOUNT OCCUPANCY SENSORS

ADDITIONAL INFORMATION (CONTINUED)

Wiring Diagrams (Continued)



1 Circuit with RP Option Wiring



NOTES:

1. Lighting load turns on when at least one sensor detects motion
2. DO NOT attempt to power more than 4 devices, be it sensors or slave packs, from a single power pack
3. No more than 4 power packs should be connected in this way

2 Circuits with 5 to 8 Sensors