

Dual-Tech Pet Immune Motion Detector unum™



The DT-PI Motion Detectors UNUM are professional state-of-the-art motion sensors engineered with the world's best components and materials. Every aspect of these sensors provides the most reliable motion sensing with freedom from false alarms. Additionally the UNUM series introduces in the market the only detectors with trendy invisible lens, i.e. the lens integrated into the front cover thanks to E.L.T.™ (Embedded Lens Technology) which takes advantage from decades of experience in designing professional lens by adopting its own material to design the entire cover too. DT-PI Motion Detectors UNUM include two motion sensing systems: microwave Doppler motion sensing and PIR motion sensing. Together, the two systems' signals are evaluated by proprietary signal processing algorithms, which reject false alarm conditions while detecting intruders.

The DT-PI Motion Detector UNUM microwave system includes a modern, compact, DRO-based micro-strip Doppler transceiver, with PCB "patch" antennas. The Doppler signal is digitally processed to detect intruders and reject distractions. Constant-motion signals (such as fans) are de-emphasized, and fluorescent light frequencies are digitally removed. The PIR side starts with a EvenEye™ lens and a top-quality infrared detector. Next, a modern DSP ASIC (patent-pending) converts the infrared detector signal into digital form, for best reliability and stability. Finally, the signal is evaluated by the ASIC's HighBar™ processor, for "best-in-class" false alarm rejection with excellent intruder detection.

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PET IMMUNITY

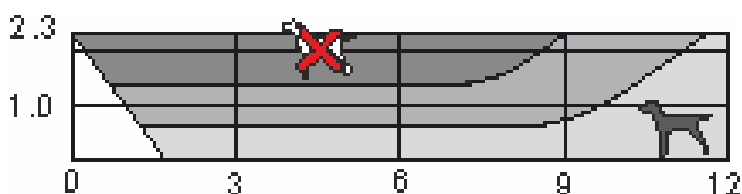
The DT-PI Motion Detector UNUM is designed to allow the presence of pets (10kg or lighter) without signaling an alarm. It includes a special micro-element lens array that produces much stronger optical signals for humans than for pets of 10kg or lighter.

Furthermore, the optical sensitivity of each DT-PI Motion Detector UNUM is factory-calibrated to ensure accurate discrimination between humans and pets.

NOTE: Pets come in many varieties. Some pets (especially larger ones with very short hair), even if lighter than 10kg, may produce enough infrared radiation to cause alarms. DT-PI Motion Detector UNUM users are strongly advised to test the sensor with their own pets, in order to verify that the DT-PI Motion Detector UNUM will not signal an alarm when their pets are moving within its fields of view.

The diagram below shows the DT-PI Motion Detector UNUM's zones of greatest human/pet discrimination. The DT-PI Motion Detector UNUM should be mounted so that pets will occupy only the lighter-colored spaces.

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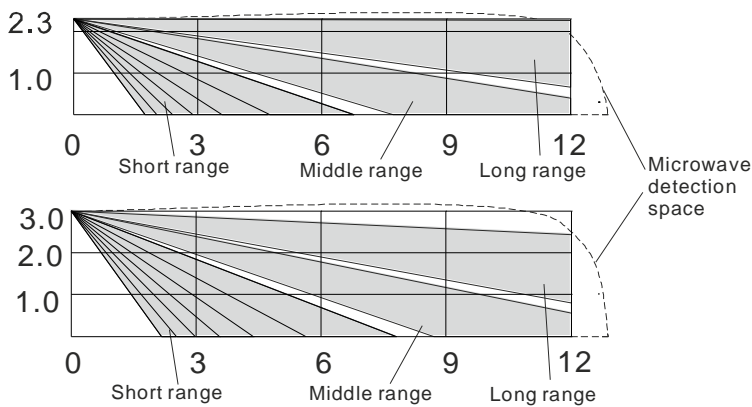
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MAIN FUNCTIONS DESCRIPTION:

Range: 12 meters

Sensor Optical View Pattern (side view, in meters)

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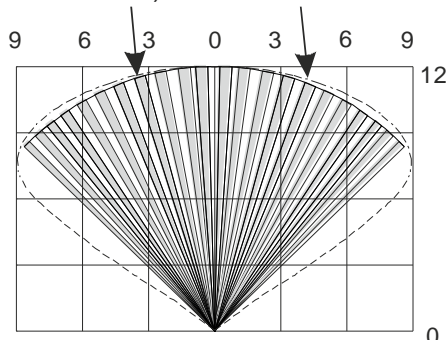


Optical Fields-of-View:

Long-range	Mid-range	Short-range
44	36	18

Sensor Optical View Pattern (top view, in meters)

One FOV (field of view) Microwave detection area



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CERTIFICATIONS:

Country	Certifications	DT-PI motion detector unum™
Europe	RoHS, CE, EN 300 440, EN50131-2-4 Grade2	

TECHNICAL DATA:

- ✓ **IR Sensor:** Dual elements
- ✓ **Power Supply:** 8-16 Vdc; 38 mA at 12 Vdc
- ✓ **Alarm Relay:** Solid state, 60V, 50 mA, 1500 Vrms isolation
- ✓ **Tamper Switch:** FormA (NC). 50 mA at 30 Vdc
- ✓ **Microwave Operating Freq.:** around 10GHz. See unit label
- ✓ **Events Detection:** Sure Spot™ processing engine
- ✓ **RF Immunity:** 20 V/m, 10-1000 MHz; 10 V/m, 1-2 GHz
- ✓ **White Light immunity:** 6500 lux
- ✓ **Sensitivity:** Selectable: 2-events or 3-events
- ✓ **Range :** Microwave 20%-100% adjustable
- ✓ **Lighting rejection:** selectable 50 or 60 Hz.
- ✓ **Operating Temperature Range:** from -10°C to +55° C (+14°F to 131°F)
- ✓ **Storage :** from -40°C to +60° C (-40°F to 140°F)
- ✓ **Housing Material:** Base: ABS Front: HDPE
- ✓ **Dimensions:** 113 x 60 x 45 mm (H x W x D)

p/n

description

KSI5900000.000

Mounting bracket

KSI5102100.300

DATA SHEET



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HOW TO ORDER:

Ksenia P/N

KSI5102100.300



unum™ has been designed for the environment as follows:

- Absence of PVC
- PCB laminates without Brome and Lead
- Packaging realized mainly with recycled fibers and materials

