

# unum

## PIR PET-Immune Motion Detector KSI5101100.300



### INTRODUCTION

The PIR 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.<sup>™</sup> (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 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.

### MAIN FUNCTIONS

#### ALARM PROCESSING

Dual-element detector fields-of-view alternate between (+) and (-) polarity. HighBar<sup>™</sup>-qualified signal events are counted as "pulses" exclusively when polarity alternates. Depending on sensitivity setting, (+,-), (-,+), (+,-,+) or (-,+,-) will cause an alarm.

#### 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 10kg or lighter.

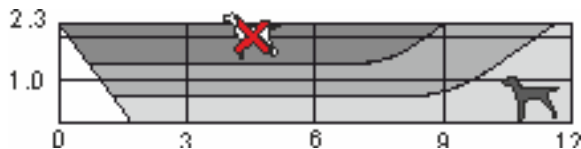
Furthermore, the optical sensitivity of each DT-PI Motion Detector UNUM is factory-calibrated to ensure accurate discrimination between humans and pets.

*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.

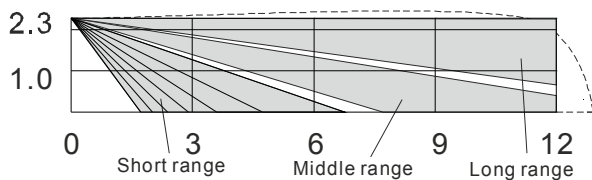
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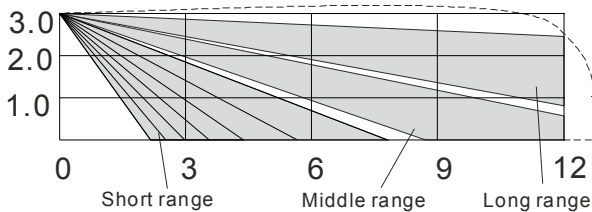


**Range:** 12 meters

**Sensor Optical Pattern** (side view, in meters)



Microwave  
detection  
area

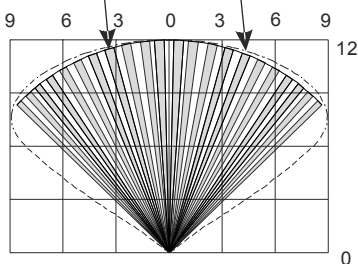


**Optical fields of view:**

Long Range	Mid-range	Short-range
<b>44</b>	<b>36</b>	<b>18</b>

**Sensor Optical View Pattern** (top view, in meters)

One FOV ( field of view) Microwave detection area



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### TECHNICAL DATA

- **IR Sensor:** Dual-element Pyroelectric
- **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
- **Events Detection:** HighBar™ false alarm rejection processor
- **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
- **Operating Temperature Range:** from -10°C to +55° C (+14°F to 131°F)
- **Housing Material:** Base: ABS Front: HDPE
- **Dimensions:** 113 x 60 x 45 mm ( H x W x D )
- **Weight:** 95 gr.

### HOW TO ORDER

Ksenia P/N

**KSI5101100.300**

### PARTS INCLUDED

PRODUCT CODE	NUMBER	DESCRIPTION
<b>KSI5101100.300</b>	1	Motion Detector
	1	Installation manual in IT / EN / FR

### ACCESSORIES

PRODUCT CODE	NUMBER	DESCRIPTION
<b>KSI5900000.000</b>	1	Mounting Bracket

### CERTIFICATIONS

COUNTRY	CERTIFICATION
Europe	RoHS CE EN 300 440 EN50131-2-4 Grade 2

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## ENVIRONMENTAL CARE

**unum PIR PI** has been specifically designed and manufactured for the environmental respect as follows:

- No PVC
- Halogen free laminates and lead-free PCBA
- Low consumption
- Packaging realized mainly with recycled fibers and materials



we care