## INTRODUCTION

**For security and safety it is important to detect motion of the intruders and Alarm the owner of the property.**

**The important things are to detect abnormal intrusion both Outside and Inside the premises. Ksenia technology enables high resolution detection and at the same time avoid false alarms of inmates like pets. It can be programmed and activated on daily basis / regular intervals.**

**It has often been seen that in some cases intrusion takes place under balcony through windows. Ksenia velum –C DT AM is tailor made for this application**

## unum DT

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.

The DT Motion Detector unum microwave system includes a modern, compact, DRO-based micro-strip Doppler transceiver, with PCB "patch" antennas.
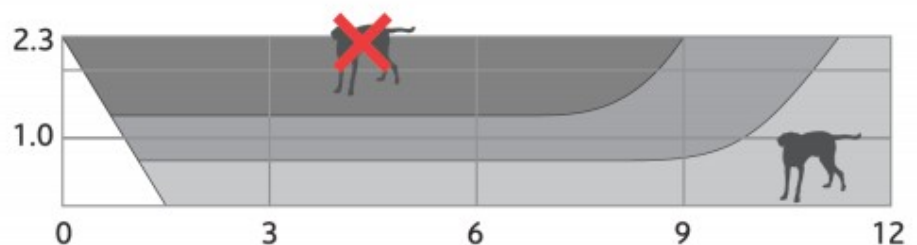
The Doppler signal is digitally processed to detect intruders and reject distractions. Constant-motion signals (such as fans) are deemphasized, and fluorescent light frequencies are digitally removed.

The PIR side starts with a Even Eye 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 High Bar processor, for "bestin-class" false alarm rejection with excellent intruder detection.

 The DT-PI unum series join the advantages of the Dual-Technology described above and Pet Immunity. The best Technology to server the customer. The DT-PI detectors should be mounted so that pets will occupy only the lighter-colored spaces.
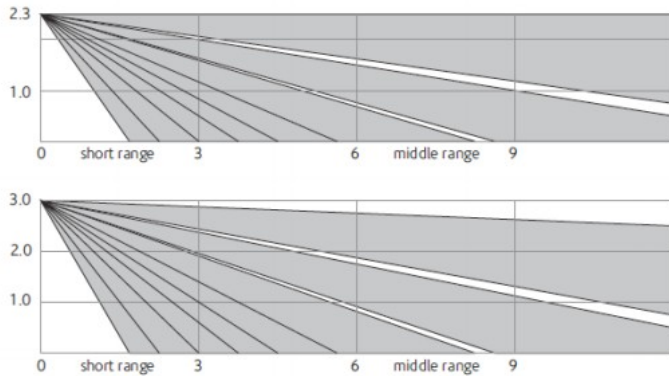


Figure : 1

# SPECIFICATIONS

| PARAMETERS | SPECIFICATIONS |
|---|---|
| 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 | Form A (NC); 50 mA at 30 Vdc |
| Microwave Operating Frequency | 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 |
| Pet immunity | Up to 10 Kg |
| Sensitivity | Selectable: 2-events or 3-events |
| Range | Microwave 20%-100% adjustable |
| Lighting rejection | Selectable 50 or 60 Hz. |
| Operating Temperature | +5°C to +40°C |
| Housing Material | Base: ABS / Front: HDPE |
| Dimensions | 113 x 60 x 45 mm |
| Weight | 95 g |

**Range**
12 meters in sensor-facing direction
12 meters at 45°angle from sensor-facing direction



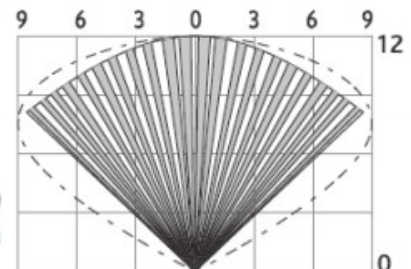Sensor Optical View Pattern: side view, in meters

**Optical Fields-of-View**
Long-range: 44
Mid-range: 36
Short-range: 18

One FOV (field on view)
Microwave detection area



Sensor Optical View Pattern (top view, in meters)

# velum wls DT AM

Outdoor curtain **velum wls** detector is the ideal solution to protect situations such as canopies, porches, below balcony, windows etc.

The sensor **velum wls** is synonymous with reliability and high safety, not only from the qualitative point of view, but also against sabotage attempts, given that integrates a station with accelerometer for wall tamper, flexible and functional even in installations with the bracket and a micro switch for front opening.

The wireless technology used is of the latest generation, fully bi-directional (each device acts as transceiver allowing every transmission to receive a confirmation message, obtaining optimization of consumption and improved reliability compared to traditional mono-directional systems), at 868 MHz frequency band (with FSK modulation).
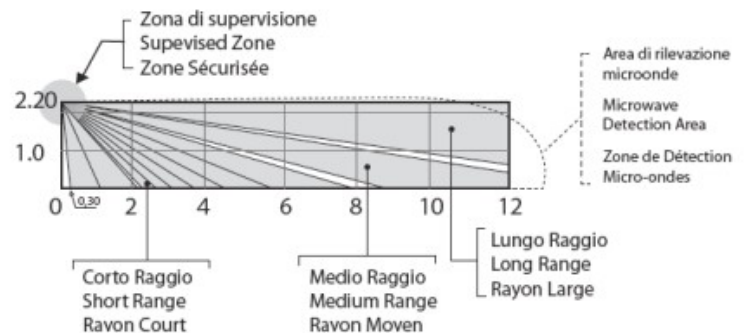
A sophisticated proprietary control of power transmission (DPMS - Dynamic Power Management System) allows to reduce interference, maximize battery life and optimize the transmission power depending on the distance between the devices and the type of installation.

Maximum protection of the entire system is ensured via encryption of each packet communication, using proprietary algorithm. All wireless devices have a unique serial number that is automatically acquired by the system during installation; both on the programming software and on the keyboard of the ergo series are indicated in real time the signal level of each device and the communication path if there are more BUS receivers or any repeaters.
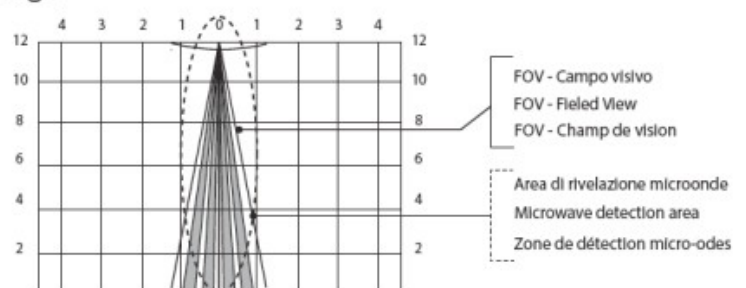


Figure : 2

# SPECIFICATIONS

| PARAMETERS | SPECIFICATIONS |
|---|---|
| Power Supply | 1 Lithium battery LS14250 / 3.6 V (½ AA-size) included for a maximum duration of at least 2 years |
| IR Sensor | Dual Element |
| IR Range | 12 m (Room Temperature 25 ° C) |
| Warm-up time | 60 sec |
| Operating Frequency MW | 24.125 GHz |
| Range MW | 0.30 m to 12 m |
| Antimasking Analysis | Iinfrared LED |
| Thornproof | Mems Platform (Accelerometer) |
| Sabotage | Front Micro switch |
| Operating Temperature Range | -20°C to +55°C |
| Immunity RFI/EMI | 20 V/m, 10-1000 MHz;10 V/m, 1-2 GHz |
| White Light Immunity | 6500 lux |
| Operating Wireless Frequency | 868 MHz band |
| Sight Range | Up to 300 m |
| Detection Area | Only a tent (Angle 7.5 °) |
| Horizontal Coverage | IR 90 °, 80 ° MW |
| Vertical Coverage | IR 7.5 °, 32 ° MW |
| Amplitude Tent | a 2 m 25 cm, 130 cm at 10 m |
| Installation Height | 2.10 m from 2.30 max on the wall |
| Weigh | 90 g |
| Protection | IP54 |
| Color | Grey |

# velum-C DT AM

The Sensor **velum-C** is synonymous with reliability and high safety, not only from the qualitative point of view, but also against sabotage attempts, given that integrates a station with accelerometer for wall tamper, flexible and functional.

It can be installed on the ceiling with a 6m vertical flow. In this way, positioned at the center of the frame, it ensures its complete coverage, creating an insurmountable barrier to any intruder.

The wireless technology used is of the latest generation, fully bi-directional (each device acts as transceiver allowing every transmission to receive a confirmation message, obtaining optimization of consumption and improved reliability compared to traditional mono-directional systems), at 868 MHz frequency band (with FSK modulation).

A sophisticated proprietary control of power transmission (DPMS - Dynamic Power Management System) allows reducing interference, maximizing battery life and optimizing the transmission power depending on the distance between the devices and the type of installation.

Maximum protection of the entire system is ensured via encryption of each packet communication, using proprietary algorithm. All wireless devices have a unique serial number that is automatically acquired by the system during installation; both on the programming software and on the keyboard of the ergo series are indicated in real time the signal level of each device and the communication path if there are more BUS receivers or any repeaters.
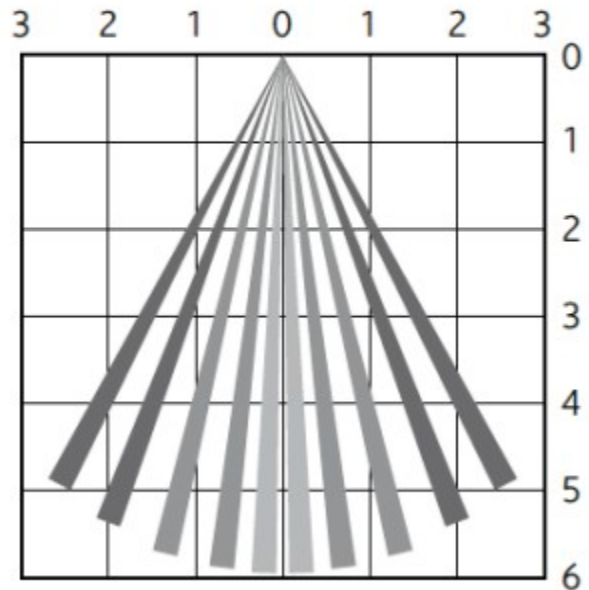


Figure : 3

# SPECIFICATIONS

| PARAMETERS | SPECIFICATIONS |
|---|---|
| Power Supply | 1 Lithium battery LS14250 / 3.6 V (½ AA-size) Included for a maximum duration of at least 2 years |
| IR Sensor | Dual Element |
| IR Range | 12 m (Room Temperature 25 ° C) |
| Warm-up time | 60 sec |
| Operating Frequency MW | 24.125 GHz |
| Range MW | 0.30m to 12m |
| ANTIMASKING Analysis | Infrared LED |
| Thornproof | Mems platform (Accelerometer) |
| Sabotage | Front Micro switch |
| Operating Temperature Range | -20°C to +55°C |
| Immunity RFI/EMI | 20 V/m, 10-1000 MHz;10 V/m, 1-2 GHz |
| White light immunity | 6500 lux |
| Operating wireless frequency | 868 MHz band |
| Sight range | up to 300m |
| Detection area | Only a tent (Angle 7.5°) |
| Horizontal coverage | IR 90°, 80° MW |
| Vertical coverage | IR 7.5°, 32° MW |
| Amplitude tent | a 2m 25cm, 130cm at 10m |
| Installation height | 2.10m from 2.30 max on the wall |
| Weigh | 90 g |
| Protection | IP54 |
| Color | grey |

# SMART HOME MANAGING APP

**lares 4.0** is an APP which permits the users to always safely monitor homes, offices or industries. A single APP allows users to monitor and control all the Security aspects (Intrusion, Video Surveillance, Access Control) and simultaneously manage Home Automation or BMS (Building Management System).
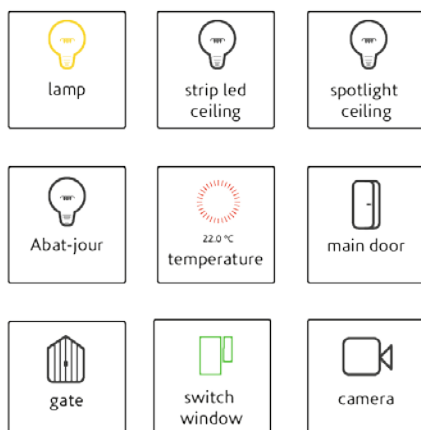
# MAXIMUM FREEDOM AND CREATIVITY

For the first time the user can choose and handle the desired domotic scenario, manage the push notifications, set-up his favorate elements and theme, avoiding the intervention of the installer !
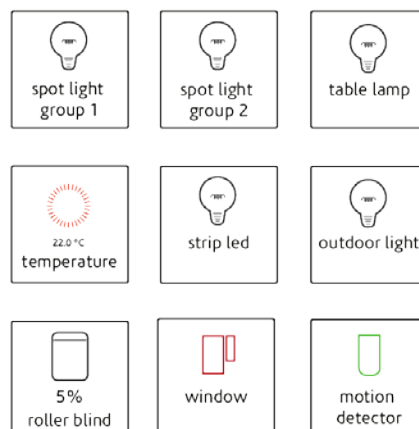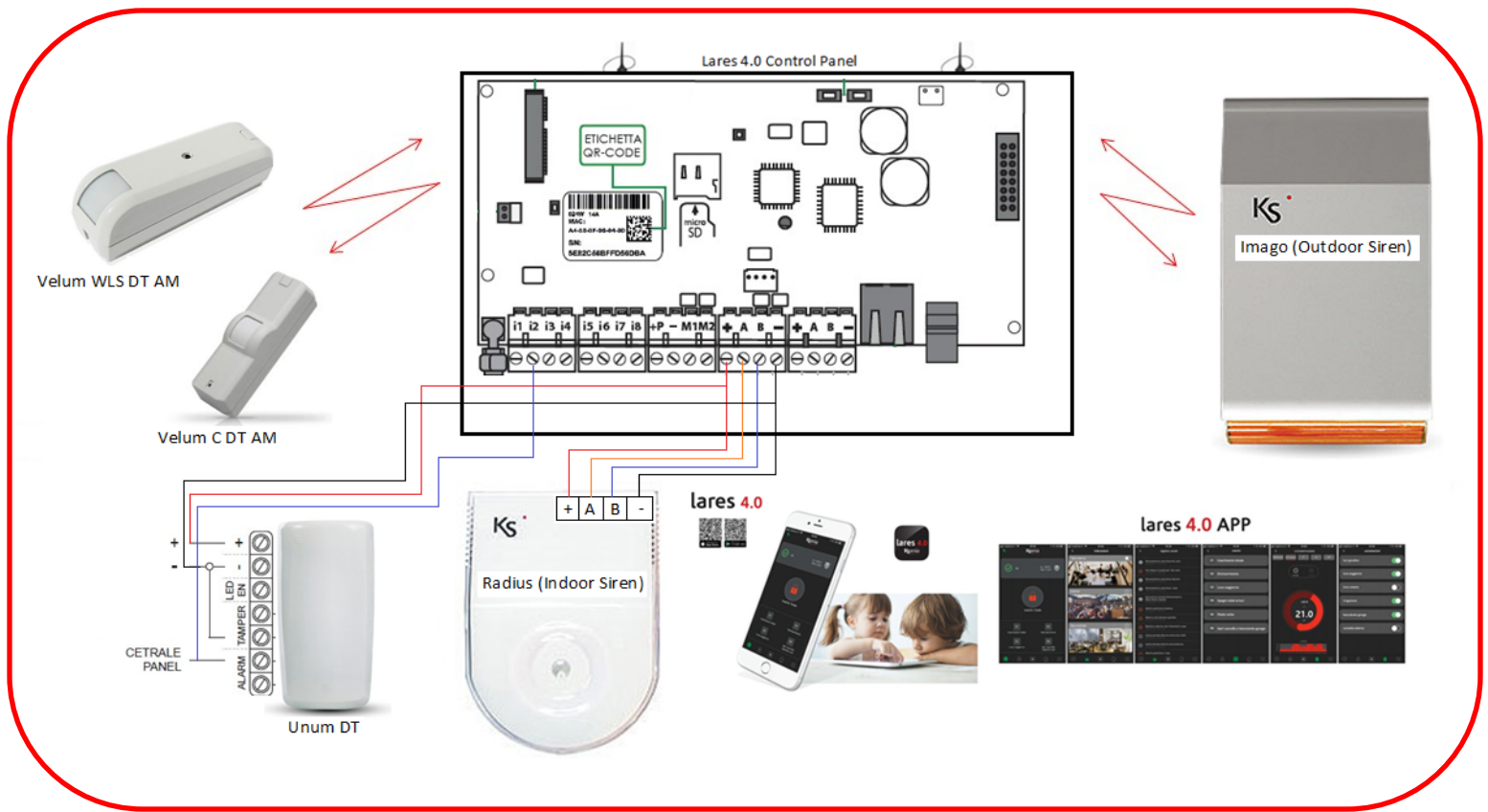


# COHERENT VISUALIZATION OF THE PHYSICAL INSTALLATION

For each device installed at home corresponds a virtual card in the APP. Each group of devices is associated with their virtual room. Thanks to the organization of the "room" menu, associate the card with the referred device is extremely intuitive!

**Application Layout**

# ENVIRONMENTAL CARE

unum DT/ velum wls DT AM / velum-C DT AM has been designed and manufactured with the following features to reduce environmental impact:

• PVC-free
• Halogen-free laminates and printed circuits unleaded
• Low absorption
• Recycled fibers and materials for packaging

# unum DT

## ORDERING CODE
KSI5102000.300 - Unum DT
KSI5102100.300 - Unum DT Pet Immune

## PARTS INCLUDED
1 Motion detector unum
1 Installation Guide in ITA/EN/FR

## ACCESSORIES
KSI5900000.000 - Wall-Mounting Bracket

## COMPLIANCE
EN50131 Gade 2 - Class II

# velum wls DT AM

## ORDERING CODE
KSI5402010.303

## PARTS INCLUDED
1 Motion detector velum
1 lithium Battery 3.6V
1 Wall Bracket
1 Angled bracket
1 Mounting kit
1 Installation Guide in ITA/EN/FR

# velum-C DT AM
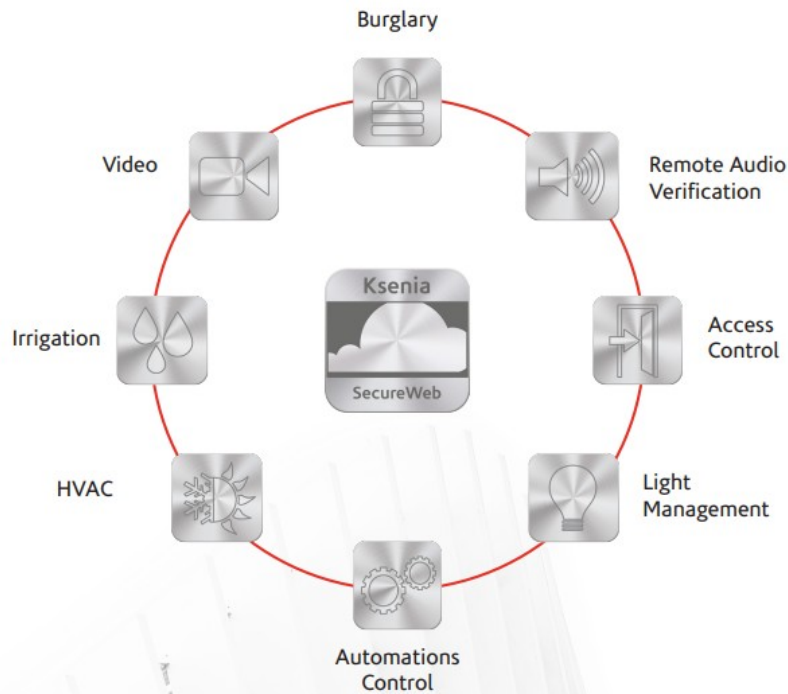
## ORDERING CODE
KSI5402011.303

## PARTS INCLUDED
1 Motion detector velum-C
1 lithium Battery 3.6V
1 Mounting kit
1 Installation Guide in ITA/EN/FR

Burglary
Remote Audio Verification
Access Control
Light Management
Automations Control
HVAC
Irrigation
Video

Ksenia
SecureWeb

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