



**UTC Fire & Security**

A United Technologies Company

newborn

# Intrusion Outdoor Protection Perimeter



**Airports**



**Warehouses**



**Military bases**



**Commercial industrial**



**VIP Estates/Residences**



**Communications**

Quicker and earlier responses to intrusion events help avoid damages to your property.



**Borders**

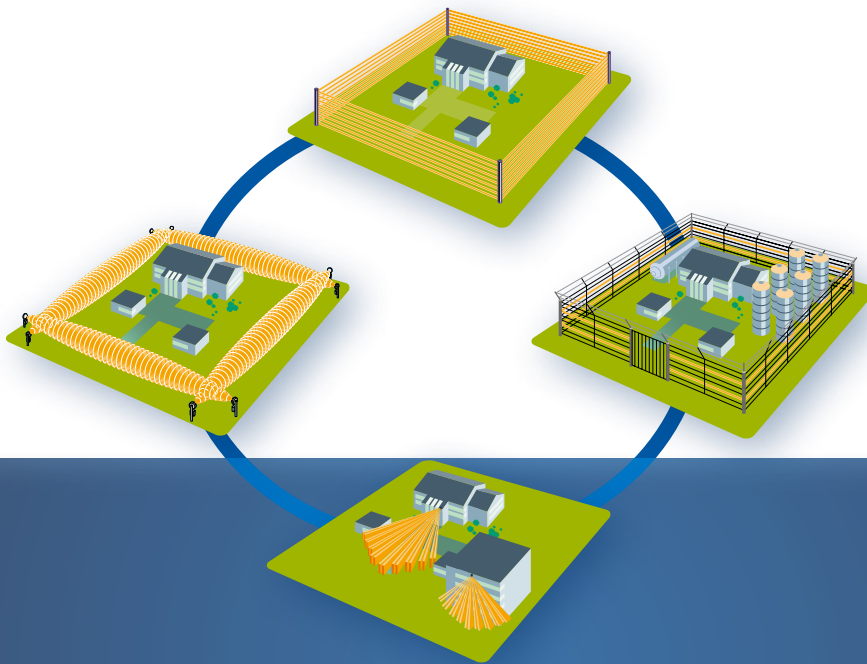


**Correctional institutions**

# Perimeter Sensors: the ideal solution for all your outdoor security needs

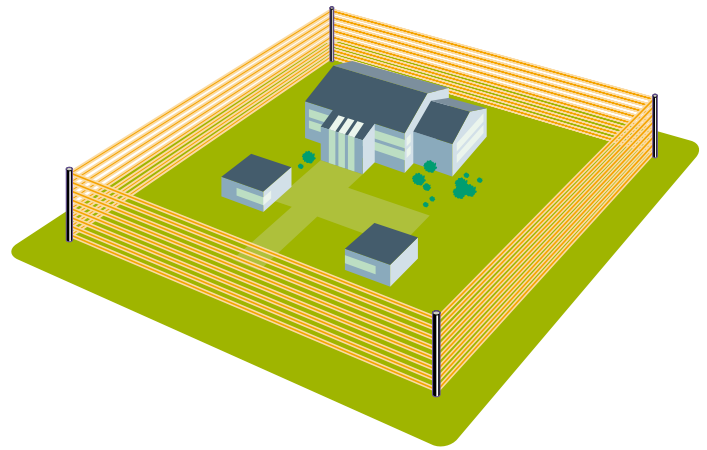
As part of UTCFS' comprehensive portfolio of fire and security products, our perimeter sensors help you to protect the outside of your premises.

Outdoor environments can be unstable and easily affected by changes in the weather and unpredictable moving objects. Our perimeter systems allow you to have advanced warning and quicker response to events, subsequently reducing any risks of potential damage.



We can find the most suitable solution to meet your needs, be it for a large or small application.

Depending on the outdoor environment and its size, we can find the most suitable solution to meet your needs.



## PB series

The PB series of active infrared beams detect intruders as soon as they enter a protected area and before they can reach people or gain access to valuable assets. Active infrared beams provide a high level of security for all applications. The installation time is reduced by providing beams which are easily aligned. Additional complementary accessories help create the ideal solution for your needs.

Crossing the active infrared beams that surround the designated protected area triggers an alarm.

## Advantages

- Protection of a specifically designated field while maintaining freedom of movement for those inside
- Unaffected by electromagnetic waves and signals
- Modular system for both beams and pillars

# Active infrared beams



## PB series

### Beams

#### Features

- 2/4 beam active infrared (AIR)
- Outdoor range up to 200 m
- 4 selectable channels
- Disqualification
- Even range of beams without the cover allowing direct fit in a beam tower

#### Order Code

<b>PB501</b>	Twin AIR beam 20m outdoor/40m indoor
<b>PB511</b>	Twin AIR beam 40m outdoor/80m indoor
<b>PB521</b>	Twin AIR beam 60m outdoor/120m indoor
<b>PB601</b>	Outdoor Quad AIR beam 50m
<b>PB611</b>	Outdoor Quad AIR beam 100m
<b>PB621</b>	Outdoor Quad AIR beam 200m
<b>PB611M</b>	Outdoor AIR Quad Beam (4 Lines), 100 m, without cover for pillar mount
<b>PB621M</b>	Outdoor AIR Quad Beam (4 Lines), 200 m, without cover for pillar mount



180°



360°



### Pillars

#### Features

- 180° and 360° versions
- Ranging from 1m to 3m in height
- Comprehensive range of accessories allowing you to build your ideal solution

#### Order Code

<b>PB10</b>	1m – 180° AIR Beam Tower
<b>PB15</b>	1.5m – 180° AIR Beam Tower
<b>PB20</b>	2m – 180° AIR Beam Tower
<b>PB30</b>	3m – 180° AIR Beam Tower
<b>PB11</b>	1m – 360° AIR Beam Tower
<b>PB16</b>	1.5m – 360° AIR Beam Tower
<b>PB21</b>	2m – 360° AIR Beam Tower
<b>PB31</b>	3m – 360° AIR Beam Tower

## Accessories



#### **PB50-H**

12V non polarity heater  
250mA for beam tower



#### **PB50-T**

Thermostat for  
beam tower



#### **PB50-AC180** **PB50-AC360**

Anti climb top tamper  
for 180°/360° beam  
towers



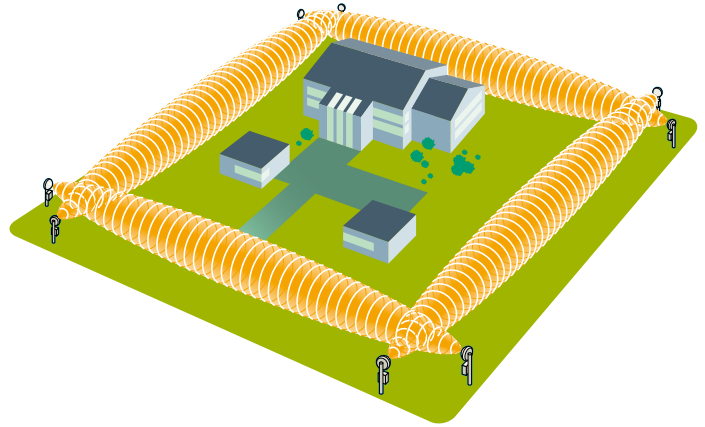
#### **SB52**

Power Supply 230VAC  
to 12VAC & 12VDC



#### **BS121N**

Sealed Lead-Acid  
Battery 12V 1.2Ah  
VdS approved



## MRW Series

The MRW series microwave barriers are X-band microwave outdoor motion sensors used in high risk applications where the presence of the intruder absolutely needs to be reported, such as in prisons, military compounds and correctional institutions. Our dependable microwave technology products are unaffected by fog and heavy rain.

The microwave field created between transmitter and receiver surrounding the designated area detects intruders and can distinguish between their size and speed.

## Advantages

- Unaffected by fog and heavy rain
- Covers large detection zone
- Use for high security applications

# Outdoor microwave sensors



## MRW Series

### Features

- Range: 50, 100 & 200 m
- Easy to align with optional alignment tool
- Delivered with post-clamps and cable-conduit
- Battery back up

### Order Code

The Netherlands, Belgium, UK, Denmark, Italy, Sweden, Ireland, Poland, Norway, Finland

---

**MRW50-F1** Outdoor Microwave Motion Sensors, 10.5 GHz, 50m

---

**MRW100-F1** Outdoor Microwave Motion Sensors, 10.5 GHz, 100m

---

**MRW200-F1** Outdoor Microwave Motion Sensors, 10.5 GHz, 200m

France, Austria, Portugal, Czech Republic

---

**MRW50-F2** Outdoor Microwave Motion Sensors, 9.9 GHz, 50m

---

**MRW100-F2** Outdoor Microwave Motion Sensors, 9.9 GHz, 100m

---

**MRW200-F2** Outdoor Microwave Motion Sensors, 9.9 GHz, 200m

Spain, Luxembourg

---

**MRW50-F4** Outdoor Microwave Motion Sensors, 10.525 GHz, 50m

---

**MRW100-F4** Outdoor Microwave Motion Sensors, 10.525 GHz, 100m

---

**MRW200-F4** Outdoor Microwave Motion Sensors, 10.525 GHz, 200m

## Accessories



### MRW01

Alignment tool



### MRW02-N

Power supply  
230 VAC/19 VAC  
with IP66 enclosure



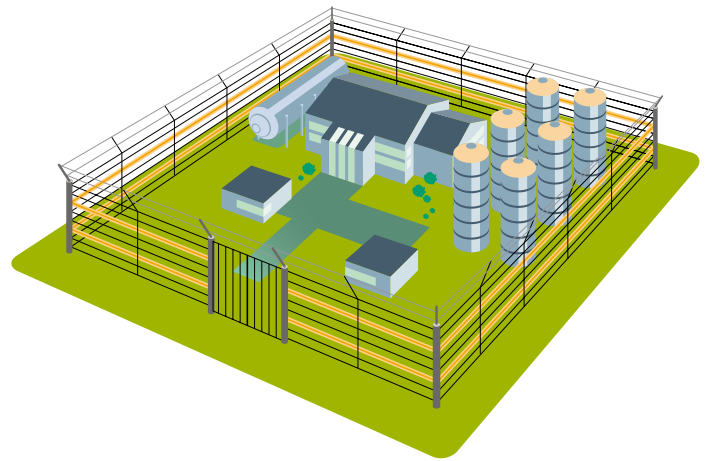
### MRW03

Pair of inox poles  
120cm



### BS122N

Sealed Lead-Acid  
Battery 12V 2.2Ah



## DF series

Our DF series is a unique strain-sensitive intrusion detection system for outdoor perimeter security applications where a fence is already in place. Using signals generated by the minute flexing of a coaxial sensor cable, specific characteristic intrusion signatures are detected and analysed by a powerful microcomputer-based signal processor. In applications where the coaxial sensor cable is installed on a chain link or mesh fence, an intruder attempting to cut, climb over or lift the fence will be immediately detected.

By using a microphonic cable in the security application, an intruder attempting to climb over, cut or lift a fence, will immediately generate an alarm signal.

## Advantages

- Ideal solution where there is a fence in place
- Cost effective
- Use for indoor and outdoor applications
- Unaffected by weather conditions (rain, fog and ice)
- Network option available for outdoor applications

# Fence & roof protection sensors

## Fence protection



### DF951

#### Features

- Sensor processing capability for two independent zones, each with up to 300 m (984 ft.) of active sensor cable
- Adaptive Algorithms virtually eliminate environmental nuisance alarms
- Configurable with laptop PC via direct USB connection or over the sensor network
- Built in audio module
- Compatible with existing Itelli-Flex® installations
- Detection parameters can be set and optimized independently for each zone
- Built in relays; optional network communication cards
- IP66/NEMA 4 Enclosure

## Network Option

#### Features

- Allows remote diagnostic facility and alarm collection
- Includes several management tools (Plot tool, Event Log tool, etc.) for centralized system monitoring and configuration
- Provides the choice of USB, Ethernet, or EIA-232 for connecting to the PC
- Redundant configuration option for critical applications available

#### Order Code

<b>DF955-C1</b>	Multi-mode fiber (MMFO) comm card
<b>DF955-C2</b>	EIA-422 copper comm card
<b>DF955-U</b>	Fence protection Network Interface Unit
<b>DF955-SW</b>	Network Manager SW CD
<b>KTP-12DCU-UK</b>	Switching Power Supply, 1A, 12VDC



### DF851

- Microphonic technology
- Uniform sensitivity over the entire length
- Easy to repair
- No special tools required for connections
- Can be used in conjunction with non-sensing coax
- No special handling or preparation are required
- Range of accessories available
- Can be run directly to a FlexPS/FlexPI processor

## Roof / Wall protection



### DF450\*

- Detects shock, impact and sustained attack
- Used on walls, roofs, ceilings, stock cages, floors and pipes
- Microphonic technology
- Selectable frequency response
- Up to 1,115 m<sup>2</sup> coverage per zone
- Built-in calibration indicator
- Can be configured using DIP switches or UCM software via USB
- Low power consumption
- Built in audio "listen-in" capability

\*DF450 indoor processor shares same accessories and microphonic cable as DF951

## Accessories



### DF950-CM

Universal Configuration Module (UCM) Software kit with interface cable



### DF863

Splice and Terminator Kit for microphonic cable



### DF852

Non-sensitive lead-in cable for microphonic sensor cable, 30m roll



### DF962

Quick disconnect gate assembly kit



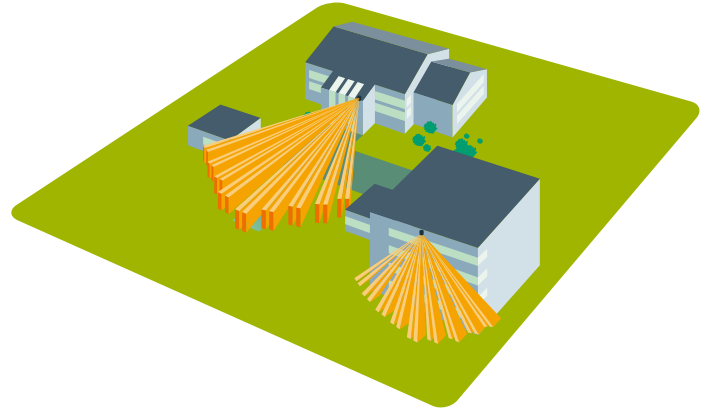
### DF963

Gate Bypass Module, Locally Activated by Keyswitch



### DF964

Gate Bypass Module, remotely activated by computer control



## DI601 & DDI602 series

The DI601 Outdoor PIR Detector is an outdoor motion detector and alarm trigger that uses two independent passive infrared detectors.

The DI601 uses quad pyro technology to deliver precise, reliable presence detection.

The DDI602 Outdoor Dual Technology Detector is an outdoor motion detector and alarm trigger that uses two independent passive infrared detectors plus a microwave sensor module. All three of these sensors must be triggered in order for the detector to signal an alarm.

Both products deliver precise, reliable presence detection and are designed for use in CCTV and pre-alarm systems.

Use PIR or Dual Technology  
to detect on the outside in order  
to protect what is on the inside.

## Advantages

- Reliable solution for commercial and residential applications to generate a pre-alarm
- Automatically switches the CCTV system on, when required
- Extremely flexible mounting characteristics
- Easy to install technology

# Outdoor motion sensors



## DI601 and DDI602-series

### Features

- Electronic range setting: 10/20/30m
- Attractive shape
- 10 to 70° detection angle
- 180° pan & 90° tilt for flexible installation
- Sensor module is hidden
- Built in EOL resistors
- High dust and humidity resistance (IP65)
- 5 year warranty

### Order code:

<b>DI601</b>	Outdoor PIR 10/20/30m - 33/66/98ft selectable
<b>DI601-WT</b>	Walk tester for DI601 and DDI602 series
<b>DDI602-F1</b>	Outdoor Dual Technology detector 10.525 GHz 10/20/30m - 33/66/98ft selectable
<b>DDI602-F2</b>	Outdoor Dual Technology detector 10.587 GHz 10/20/30m - 33/66/98ft selectable
<b>DDI602-F3</b>	Outdoor Dual Technology detector 9.9 GHz 10/20/30m - 33/66/98ft selectable

### Technical Data

	DI601	DDI602
<b>Fresnel lens</b>	28 zones for each detection element, which can be masked with the curtain sliders	
<b>Customised optics</b>	Double silicon shielded quad element eliminates 50,000 lux of white light	
<b>Outputs</b>	Silent, solid state, magnetically immune. N/O: Volt free relay, signal contact 24 VAC/DC at 50 mA with an integral 25 Ω series resistor. Alarm time 5 sec. N/C: Volt free relay, signal contact 24 VAC/DC at 50 mA with an integral 25 Ω series resistor. Alarm time 5 sec.	Silent, solid state, magnetically immune. Triggering by microwave AND PIR
<b>Power input</b>	9 to 15 VDC	
<b>Current</b>	7 mA (12 V nominal)	
<b>Pulse count</b>	1 or 2	
<b>Control</b>	Digital microprocessor with non-volatile memory	
<b>Temperature compensation</b>	Analogue (thermistor) and digital sensitivity adjustment	
<b>Operating/storage temperature</b>	-30 to +65°C	
<b>EOL resistor values built-in</b>	1, 2.2, 3.3, 4.7, 5.6, and 6.8 kΩ	
<b>Mounting height</b>	Variable up to 6m – Optimum height 3m for full range	
<b>Approvals</b>	EN 50130-5, Grade 2, Class IV Incert	

## Accessory



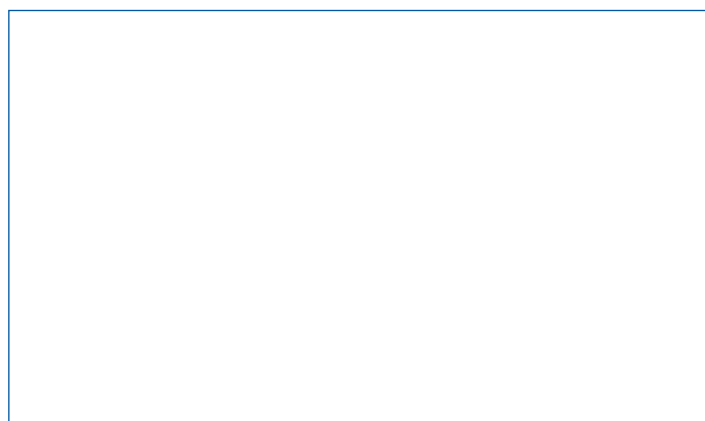
### DI601-WT

Walk tester for DI601 and DDI602 series



**UTC Fire & Security**

A United Technologies Company



[www.utcfssecurityproducts.eu](http://www.utcfssecurityproducts.eu)

© 2012 UTC Fire & Security. All rights reserved.

Ref. 0743 EN

**Get trained!**  
[www.utcfsuniversity.eu](http://www.utcfsuniversity.eu)

