

# KX15DT

Digital Combined PIR and Microwave Detector

# KX15DTAM

Digital Combined PIR, Microwave and Anti Mask Detector

# Detectors

## Dual Tech / Anti Mask

- Dual element pyro-electric sensor
- X-band DRO based microwave
- 15m detection range (KX15DTAM: optional lenses 18m and 30m)
- Anti-masking detection (KX15DTAM)
- 0-1m Adjustable mask detection
- Selectable EOL (End of Line) resistors
- AND/OR technology
- Patented Independent Floating Thresholds (IFT)
- Blue wave technology
- Auto sensitivity feature
- Digital temperature compensation
- Triple LED indication
- Frequency options
- Sealed optics
- Tamper proof brackets included
- ABS plastics



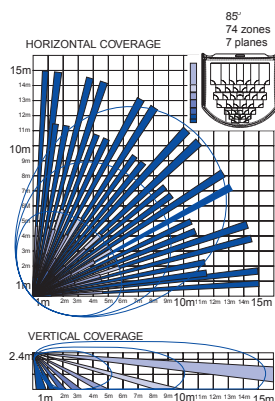
INDUSTRIAL / COMMERCIAL / RESIDENTIAL

### Product Features

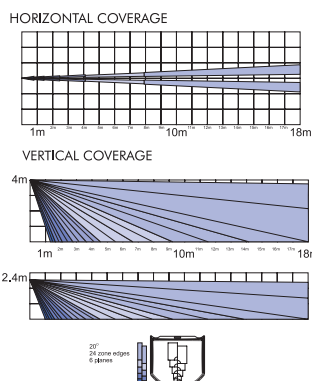
Features	Description	KX15DT	KX15DTAM
15 Volumetric detector	15m Volumetric detection coverage. Ideal for protection of rooms, offices etc.	✓	✓
18m Vertical curtain detector	18m Vertical curtain detection coverage. Ideal for protection of large windows areas	✗	✓
30m Long range detector	30m long range detection coverage. Ideal for long narrow areas or corridors	✗	✓
Anti-masking detection	Ideal in high security environments where there may be a significant risk of masking. An area immediately in front of the KX15DTAM is monitored continuously and separately from its normal mode. Any intrusion into this quiet area activates the anti-masking process. It also has separate mask and trouble output.	✗	✓
Independent mask relay	In the event of one of the technologies being masked, the KX15DTAM will go into a mask fault condition. The mask relay will open. This can be connected to the 24hr zone of a control panel	✗	✓
Selectable EOL resistors	The detectors incorporates selectable alarm resistor values of 6K8, 5K6, 4K7 & 1K & tamper values of 5K6, 4K7, 2K2 and 1K catering for most control panels on the market	✓	✓
AND/OR technology	AND' mode operates as a standard dual technology detector. 'OR' mode will switch to microwave detection in environments where there is a risk of PIR detection being blocked,	✓	✓
Blue Wave Technology (BWT)	This technology further enhances the detector's immunity to infra-red noise in the environment. BWT comprises of 2 key components: 1. The new 3D optics system enables perfect focusing of the infra-red signal onto the pyro-electric sensor. This allows BWT to clearly identify the positive and negative signal edges. 2. Powerful software embedded into a microprocessor is used to process the received information from the pyro-electric sensor. The result of this combination is lower infra-red signal noise amplification and therefore better immunity.	✓	✓
Auto sensitivity feature	Depending on the environment condition, the detector will automatically adjust the sensitivity	✓	✓
Digital temperature compensation	The detector will digitally adjust itself in hot environments where the background room temperature is almost equal to the external body temperature of 32°C	✓	✓
Active self test	If there is no activation after a 5 hour period it will actually self test both the PIR and microwave	✗	✓
Triple LED indication	Microwave - orange, PIR - green, alarm - blue. (KX15DTAM - Blue flashing = mask)	✓	✓
Microwave frequencies	3 different frequency bands to avoid interference between detectors are installed in the same room	✓	✓

### Lens Coverage

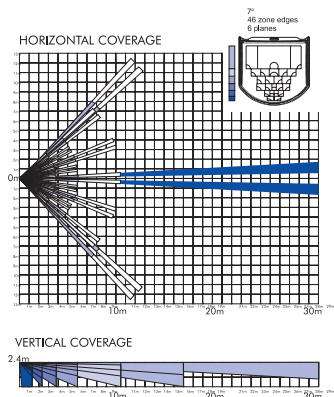
**15m Volumetric Lens**  
(KX15DT/KX15DTAM)



**18m Vertical Curtain Lens**  
(KX15DTAM)



**30m Long Range Lens**  
(KX15DTAM)



## Technical Specification

ELECTRICAL	
Operating voltage	9-16VDC (12V nominal)
Current consumption - no alarm	23mA
Current consumption - alarm	30mA
Relay	Solid state
Relay output	60VDC, 50mA Protected
Tamper switch	12V max, 50mA max
RFI immunity to continuous wave (CW) 80-2000MHz	75 V/m
RFI immunity to amplitude modulation (AM) 80-2000MHz	25 V/m
RFI immunity to pulse modulation (PM) 80-2000MHz	25 V/m
DTI approved frequencies	10.680, 10.687, 10.695GHz
FCC approved frequencies	10.515, 10.525, 10.535GHz
PIT approved frequencies	9.87, 9.90, 9.91GHz

PHYSICAL	
Weight	105g
Dimensions	117 x 69 x 50mm

OPERATING FEATURES	
Alarm period of	2.5 seconds
Detection speed	0.3 - 3m/s
Operating temperature	-30°C to +70°C
Storage temperature	-40°C to +80°C

OPTICAL	
White light filter	6500 Lux
Optics	Sealed
Lens	3 Dimensional
Protection	Ultraviolet Light Filter

MOUNTING	
Optimum coverage height (dual Tech)	1.8-2.4m
Optimum coverage height (vertical curtain)	1.8-4.0m
Optimum coverage height (long range)	1.8-2.4m



**KX15DT**  
For use in EN50131-1 Systems  
Security Grade 2  
Environmental Class 2

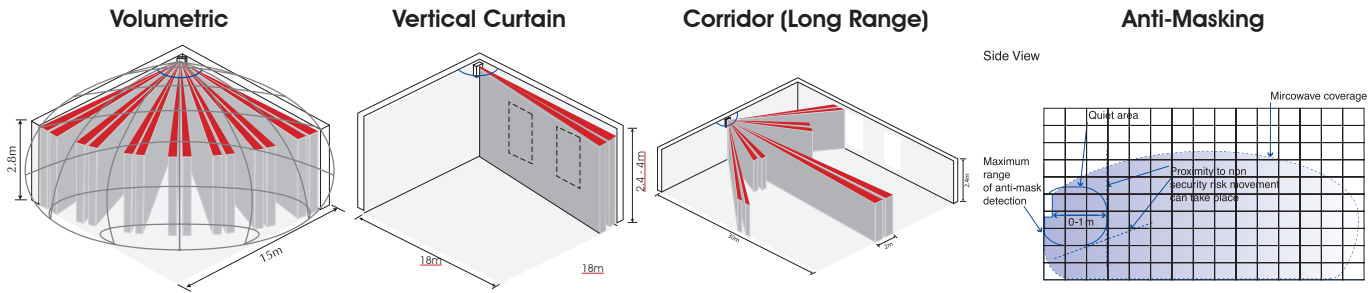


**KX15DTAM**  
For use in EN50131-1 Systems  
Security Grade 3  
Environmental Class 2

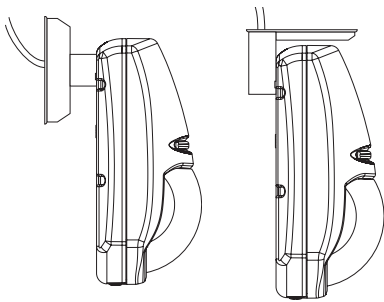
## Lens Coverage and Printed Circuit Board

### 3 in 1 Detector:

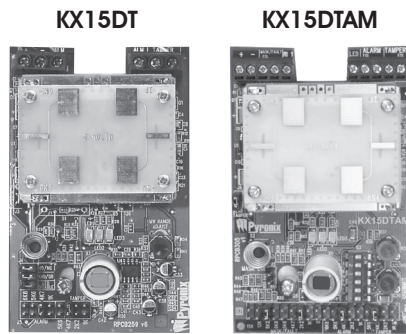
Supplied with 3 lenses as detailed below, the KX15DTAM is suitable for a range of high security applications.



### Brackets (Wall and Ceiling)



### Printed Circuit Boards



### Weights and Dimensions



The KX detectors have a pyro-electric sensor containing two sensing elements and when projected through a lens, form zones as illustrated to the left. In order for an alarm to be triggered one of more of these zones would need to be crossed.

## Information

Compliance	Europe	CE
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Min Pack:	10
Weight:	1.7kg
Warranty:	5 years
Designed	UK