

# Detectors

dual technology detectors

## Eclipse EP

### COMMERCIAL / INDUSTRIAL

#### Digital Combined Dual Element PIR and Microwave Detector



#### Main Features

- Dual Element Pyro-electric Sensor
- 15m Detection Range
- AND / OR Technology
- Patented Independent Floating Thresholds (IFT)
- Adjustable Sensitivity Settings
- Digital Temperature Compensation
- Mirror Creep Zone
- Triple LED Indication
- Frequency Options
- X-band DRO Based Microwave
- Sealed Optics
- ABS Plastics

#### Product Features

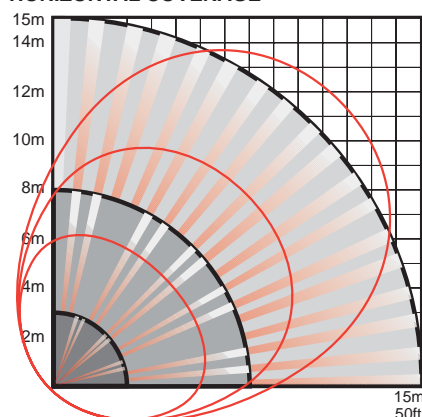
Features	Description	Benefits
AND / OR Technology	'AND' mode operates as a standard dual technology detector. 'OR' mode can switch to microwave detection only to overcome cloaking attempts and the traditional vulnerability of PIR detection in environments where the ambient temperature is equal to body temperature.	Overcomes cloaking attempts and therefore is ideal in high security environments
Patented Independent Floating Thresholds (IFT)	This technology patented by Pyronix allows the detector to respond to the environmental changes by automatically adjusting its levels of immunity to background disturbances.	Greater stability, reduces risk of false alarm activations
Adjustable Sensitivity Settings	High sensitivity for use in areas where fast detection is required Adjustable sensitivity settings for installations in a more hostile environment	Ensures suitability for most environments
Digital Temperature Compensation	When the product is used in a hot environment this technology digitally adjusts the detector's sensitivity allowing it to regain its range even when the external temperature equals the external body temperature of 32°C	Guarantees optimum performance at all times
Triple LED indication	Microwave- orange, PIR - green, alarm - red	The technology activated can be easily identified
Frequency options	The Eclipse EP is available in 3 different frequencies	Eliminates the risk of 'cross talk' between detectors located within the same room / environment
X-band DRO based microwave	Metallised microwave housing	Eliminates back lobe radiation

#### Lens Options

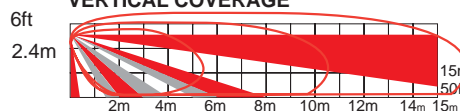
#### Supplied

15m Volumetric

#### HORIZONTAL COVERAGE

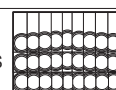


#### VERTICAL COVERAGE



Maximum Range  
Minimum Range

**VOLUMETRIC**  
90°  
54 ZONE EDGES  
3 PLANES



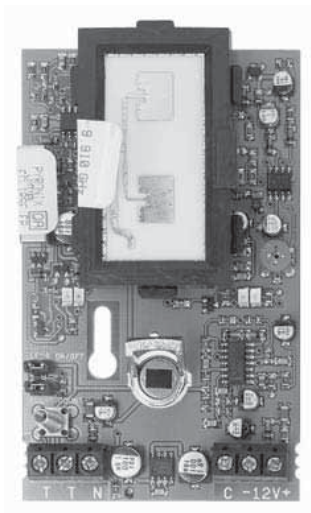
Pyronix Dual Element

The Eclipse EP has a pyro-electric sensor containing two sensing elements and when projected through a lens form zones as illustrated on the right. In order for an alarm to be triggered two or more of these zones would need to be crossed.

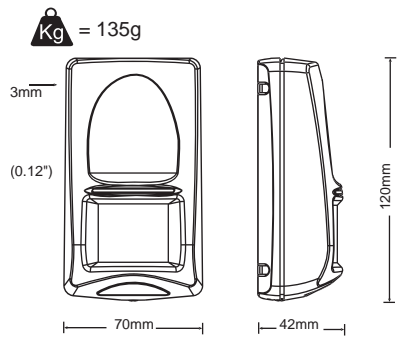


Technical Specifications

ELECTRICAL	
Operating Voltage	9 - 16VDC (12V nominal)
Current Consumption - No Alarm State	33mA (12V nominal)
Current Consumption - Alarm State	49mA (12V nominal)
Relay	Solid State
Relay Output	60VDC, 50mA, Protected 3.3 Om
Tamper Switch	12V max, 50mA max
RFI Immunity to Continuous Wave (CW) 10-1000MHz	50 V/m
RFI Immunity to Amplitude Modulation (AM) 10-1000MHz	20 V/m
RFI Immunity to Pulse Modulation (PM) 10-1000MHz	20 V/m
DTI approved frequencies	10.680, 10.687, 10.695GHz
FCC approved frequencies	10.515, 10.525, 10.535GHz
PTT approved frequencies	9.87, 9.90, 9.91GHz
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 compensated	Fresnel array, 'Grooves in' infrared
Protection	Ultraviolet Light Filter
Tilt Adjustment	0° - 12°
MOUNTING	
Optimum Coverage Height	1.8-2.4m

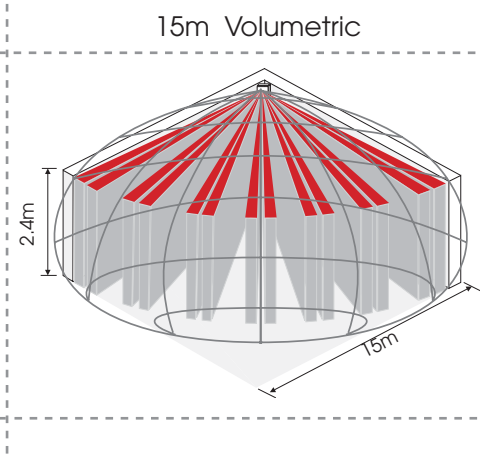


Weights & Dimensions



Applications

Features	Applications
AND / OR technology	In high security environments where there is a risk of PIR detection being blocked, the Eclipse EP's in-built intelligence enables it to switch to microwave detection only. The Eclipse EP will overcome any cloaking attempts masking IR radiation and software algorithms add MW stability to detect genuine intruder movement.



COMPLIANCE		PYRONIX PRODUCT CODE		PACKING INFORMATION		ACCESSORIES		PYRONIX PRODUCT CODE	
Europe	CE	FP06412		Min Pack:	10	K-Tamper		FP16310	
China	CCC	FP06412CN		Pack Weight:	1.68kg				
				Warranty:	2 Years				
				Manufactured:	UK				

As part of the continued development programme  
specifications may change.

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