Detectors
passive infrared receiver

KX18EC

COMMERCIAL / RESIDENTIAL

18m Economy Curtain PIR Detector

Main Features

- Solid Vertical Curtain Detector
- Dual Element Pyro-electric Sensor
- Selectable EOL (End Of Line) Resistors
- Vertical Curtain Coverage up to 18m
- Long Range Coverage up to 30m
- Patented Independent Floating Thresholds (IFT)
- Adjustable sensitivity settings
- Automatic Temperature Compensation
- Multi-Angular LED Indication
- Sealed Optics
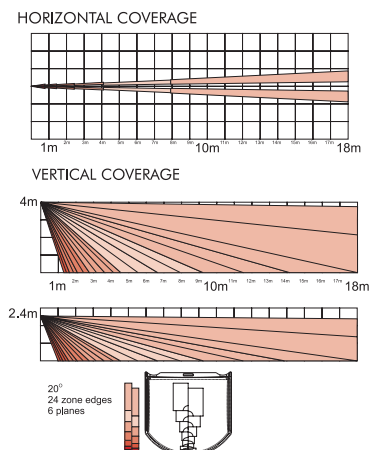- Tamper Proof Brackets Included
- ABS Plastics

Product Features

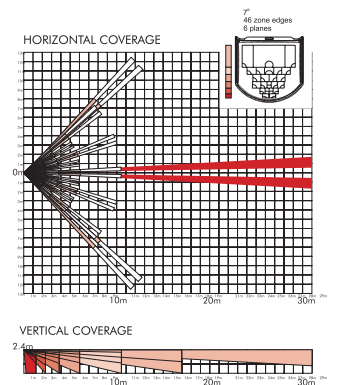| Features	Description	Benefits
Solid Vertical Curtain Detection	Ensures solid vertical curtain coverage	Ideal for protecting areas such as windows, doors or ceilings
Selectable EOL Resistors	The KX18EC incorporates selectable alarm resistor values of 6K8, 5K6, 4K7 &1K & tamper values of 5K6, 4K7, 2K2 and 1K catering for most control panels on the market	Completely eliminates the need for separate resistors , therefore reducing installation time
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	Higher 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
Automatic Temperature Compensation	When the product is used in a hot environment this technology automatically adjusts the detector's sensitivity allowing it to maintain its range even when the background room temperature is almost equal to the external body temperature of 32ºC (Internal body Temperature = 37ºC)	Guarantees optimum performance at all times
Tamper Proof Brackets	Supplied with both wall & ceiling mount brackets which provides access for up to two 8 core cables (Tamper kit optional)	Allows ease of installation whilst enhancing tamper protection
Multi-angular LED Indication	A clear plastic pipe channels the light from the LED to the face of the detector making the LED indication highly visible from a multitude of angles.	Enables walk testing to be undertaken with ease and accuracy ensuring the detector
Sealed Optics	Protects from possible infestation from insects, shields air movement in front of the pyro electric sensor and protects against adverse reflections from inside the detector housing	covers the desired area Enhances the focus of the pyro-electric sensor
ABS Plastics	3mm polished finish, reduces electrostatic interference on the PIR sensor	Easy to clean, retains white finish

Detectors

Lens Coverage

Supplied

18m Vertical Curtain

HORIZONTAL COVERAGE

1m · 10m · 18m

VERTICAL COVERAGE

4m
1m · 10m · 18m

2.4m

20°
24 zone edges
6 planes

30m Long Range

7°
46 zone edges
6 planes

HORIZONTAL COVERAGE

0m
10m · 20m · 30m

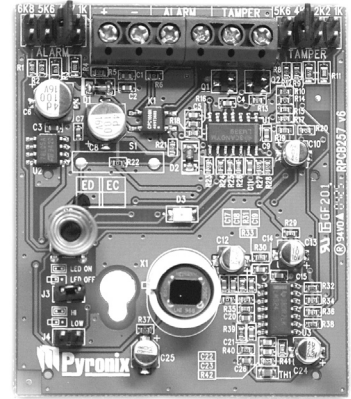VERTICAL COVERAGE

2.4m
10m · 20m · 30m

NOTE: Maximum mounting height for long range lens is 2.4m

Pyronix Dual Element

The KX18EC 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 one or more of these zones would need to be crossed.
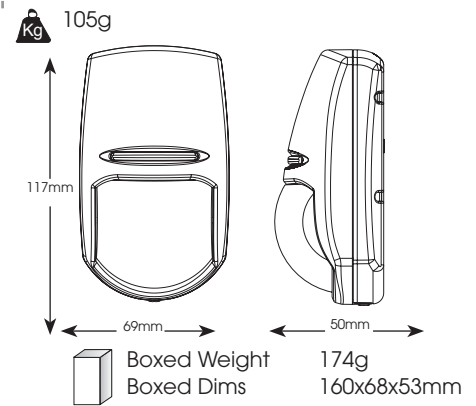
Technical Specification

ELECTRICAL

Operating Voltage	9 - 16VDC (12V nominal)
Current Consumption - No Alarm State	12mA (12V nominal)
Current Consumption - Alarm State	11mA (12V nominal)
Relay	Solid State
Relay Output	60VDC, 50mA, Protected
Tamper Switch	12V max, 50mA max
RFI Immunity to Continuous Wave (CW) 80-2000MHz	75V/m
RFI Immunity to Amplitude Modulation (AM) 80-2000MHz	25 V/m
RFI Immunity to Pulse Modulation (PM) 80-2000MHz	25 V/m

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	Fresnel array, 'Grooves in' infrared compensated
Protection	Ultraviolet Light Filter

MOUNTING

Optimum Coverage Height	1.8-4m

Weights & Dimensions

Kg 105g
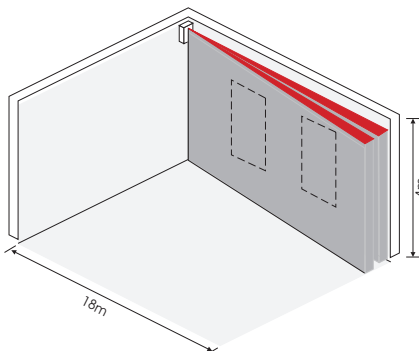
117mm
69mm
50mm

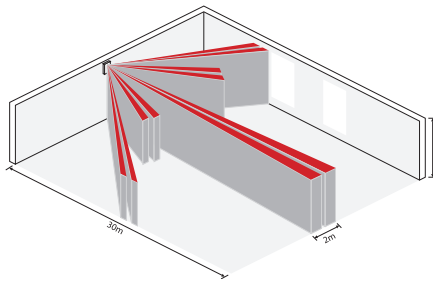Boxed Weight 174g
Boxed Dims 160x68x53mm

Applications

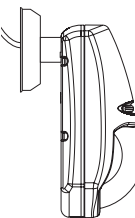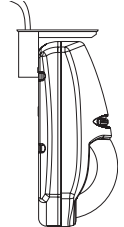| Feature	Applications
Vertical Curtain	This detector can be mounted to provide vertical curtain coverage to protect doors or windows and offers excellent perimeter protection. It is ideal for use in environments where a window needs to be protected, but the remainder of the room may be in use

Vertical Curtain

4m
18m

Corridor (Long Range)

2.4m
30m
2m

Brackets

Wall Bracket

Ceiling Bracket

COMPLIANCE		PYRONIX PRODUCT CODE
Europe	CE	FPKX18EC

PACKING INFORMATION		ACCESSORIES	PYRONIX PRODUCT CODE
Min Pack:	10	K-TAMPER	FP16310
Pack Weight:	1.74kg		
Warranty:	5 Years		
Manufactured:	UK		

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