DATA SHEET

Tri Technology Microwave & PIR Movement Detector with Anti-Masking

Commercial Grade, High Security Tri Technology, Microwave & PIR movement detector with 15m detection range that incorporates Anti-masking technology. The perfect choice for High Security environments where obscuration of the detectors field of view is a risk that needs to be actioned.

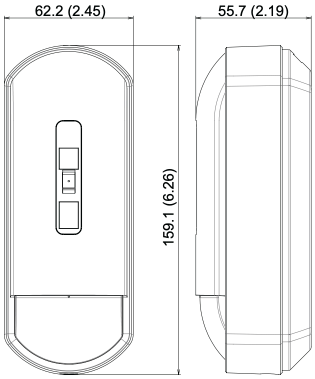
IR Ready, these detectors are factory fitted with an End-of-line (EOL) resistor module that is specific to Inner Range security controllers which dramatically speeds up installation time by reducing the complexity of the installation. This module is easily removed so these high quality detectors are compatible with any brand of security alarm system.
High quality, highly reliable, IR Ready and easy to install, these Commercial Grade Intrusion Detectors will suit any indoor application from residential to highly sensitive commercial applications.



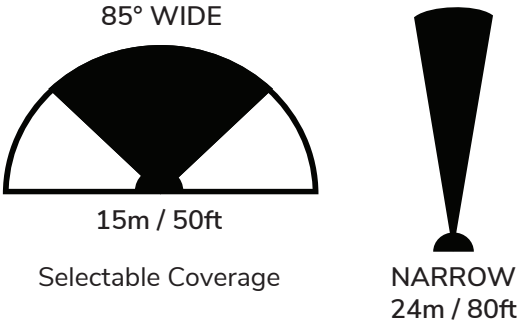
Features

- Anti-masking Technology - Rest assured, our security system swiftly detects and alerts you to sensor tampering or obstruction.
- Customisable field of view – select a wide or narrow detection area by rotating the lens within the case.
- Easily Viewable LED Color - LED color is green and viewable from distance.
- Human-Catch Element - designed to create proper detection areas and optimize detection sensitivity.
- Refined Spherical Lens -provides a precise focal length to each of the multiple lens segments which enables precise detection without distortion.
- SMDA - By analysing detection patterns and environmental information, SMDA improves immunity against various noise factors such as climate changes.
- 180 Degree Cover Lock The front cover can be opened and closed by turning the captive screw lock 180 degrees with a flat head screwdriver.

Dimensions - mm (inch)



Detection Area



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Basic Features

HIGH DETECTION PERFORMANCE



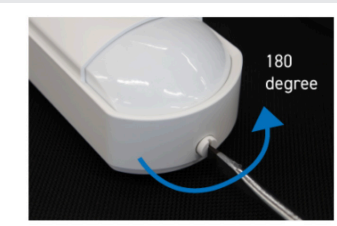
A new bespoke pyroelectric infrared sensor has been specifically designed to create human-size detection areas and optimise detection sensitivity. For industry leading performance.

SMDA LOGIC



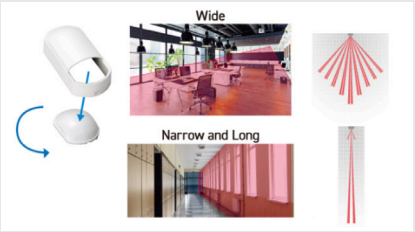
Professional sensors have a unique algorithm(SMDA) which can learn from the environment. The SMDA algorithm can differentiate between common causes of nuisance alarms, such as shadows and bright lights, to focus the detection on genuine intrusions.

180 DEGREE COVER LOCK



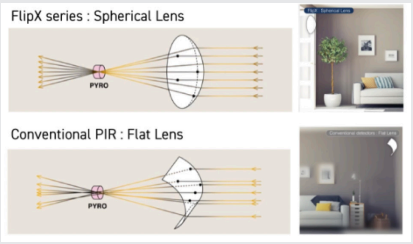
The front cover can be opened and closed by turning the captive screw lock 180 degrees with a flat head screwdriver.

CONFIGURABLE LENS



Select a wide or narrow area with one lens, simply by turning the lens upside down.

REFINED SPHERICAL LENS



Provides a precise focal length to each of the multiple lens segments which enables precise detection without distortion.

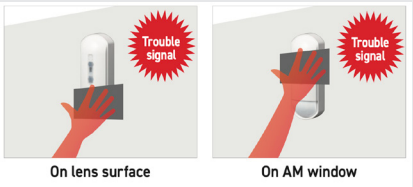
EASILY VIEWABLE



LED colour is green and easily viewable from a distance.

Specific Features

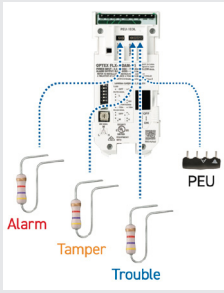
ANTI-MASKING



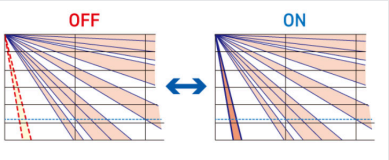
IR Anti-masking function generating a trouble signal when detector is masked.

FITTED EOL RESISTORS

The IR Ready End-Of-Line resistor module is factory fitted and configured with the EOL's to suit the Inner Range security controllers saving significant time and money onsite.

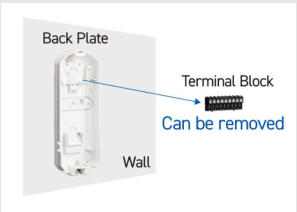


DOWN ZONE SWITCH



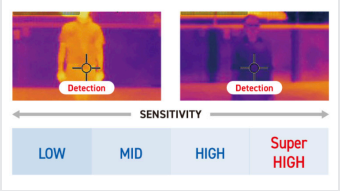
Downzone detection area is selectable "ON" or "OFF".

REMOVABLE TERMINAL BLOCK



Terminal block can be removed from Back Plate for easy wiring, easy replacement of the item with no access to key parts on Main Unit.

SUPER HIGH SENSITIVITY



Even if temperature between human and background becomes close, Super High PIR Sensitivity can be selectable to provide far greater catch performance for the site where mis-alarm is unacceptable.

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Specifications

Part Number		IR-D-P1E	IR-D-P2E	IR-D-P3E
Model Name		COMMERCIAL PIR	COMMERCIAL DUAL-TECH	COMMERCIAL TRI-TECH
Mounting Height		2.0 to 3.0 m (6'7" to 9'8")		
Detection Method		Passive infrared	Passive infrared & Microwave	Passive infrared & Microwave
Coverage		Wide: 15 m (50') 85° Narrow: 24 m (80') 5° (MW will be stopped in "Narrow" setting)		Wide: 15 m (50 ft.) 85° Narrow: 24 m (80 ft.) 5° (No MW detection at "Narrow" setting)
Alarm Period		2.0 ± 0.5 s		
Warm-up Period		Approx. 60 s (LED blinks)		
LED Indicator		Green: [1] Warm-up [2] Alarm		Multiple: Warm-up / Green:Alarm and Masking detection Yellow: Self test error / Red:Low voltage
Power Input		9.5 to 16 V DC		
Current Draw		8 mA (normal) 11 mA (max.) at 12 V DC	11 mA (normal) 14 mA (max.) at 12 V DC	16 mA (normal) 21 mA (max.) at 12 V DC
Relay Output	Trouble	-		N.C. 24 V DC 0.1 A max. (Resistive load)
	Alarm	N.C. 24 V DC 0.1 A max. (Resistive load)		
	Tamper	N.C. 24 V DC 0.1 A max. (Resistive load) (Open when the cover is removed)		
Remote LED		✓		
Operation Tempreature		-20˚Cto +50˚C (-4°F to +122°F)	-20˚C to +45˚C (-4°F to +113°F)	-20˚C to +45˚C (-4°F to +113°F)
Temperature Compensation		Digital (SMDA)		
Relative Humidity		95% RH max.		
Dimension		H: 129.2 x W: 61.5 x D: 50.9 mm (H: 5.09" x W: 2.42" x D: 2.00")		H: 159.1 mm x W: 62.2 mm x D: 55.7 mm (H: 5.09" x W: 2.42" x D: 2.00")
Weight		95 g (3.35 oz)	110 g (3.88 oz)	200 g (7.05 oz)

- Specifications and designs are subject to change without prior notice.
- These units are designed to detect an intruder and activate an alarm control panel. Being only a part of a complete system, we cannot accept responsibility for any damages or other consequences resulting from an intrusion.
- Tri models (IR-D-P3E) is certified to NF&A2P when operation temperatures are -10˚C to +55˚C(14°F to +131°F).

Ordering Options



IR-D-P3E
Tri Technology Passive Infrared, Microwave with Anti Mask Detector, 15m Range

Other Models Available



IR-D-P1E
Passive Infrared Detector, 15m Range



IR-D-P2E
Dual Technology Passive Infrared & Microwave Detector, 15m Range

Bracket Available



IR-D-BRK-CW-G2
Wall and Ceiling Mount Bracket

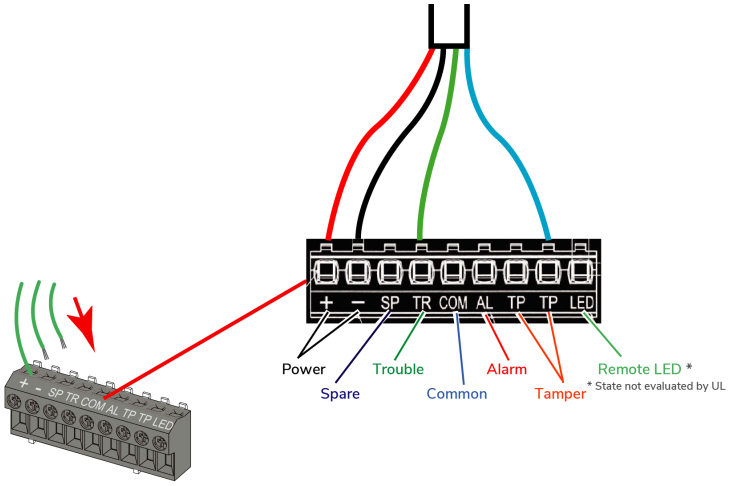
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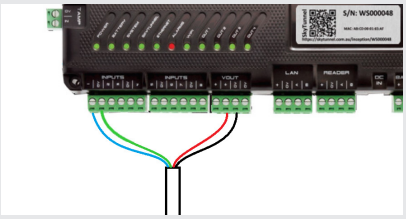
Wiring Diagrams

DETECTOR WIRING GUIDE

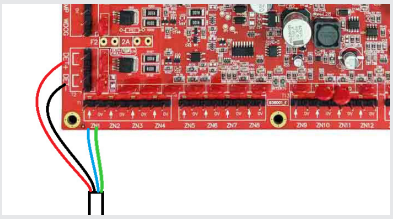


CONTROLLER / ZONE EXPANDER WIRING GUIDE

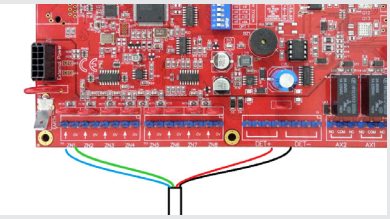
INCEPTION



INTEGRITI SECURITY CONTROLLER



ZONE EXPANSION MODULE



CONTROLLER PROGRAMMING

The Inception Security Controller, the Integriti Security Controller and the Zone Expansion Modules are pre configured to have their default EOL match the IR Ready range of detectors.

NB: The Anti-masking alarm is treated as “Tamper” by the Inner Range controllers and zone expanders under the default settings. For meeting the EN50131 European standard of reporting “Mask/Trouble” by the controllers, the Inception controller needs to be set to EN50131 Compliance Mode. For Integriti, the EOL programming needs to be changed to a EN50131 version which includes the Mask/Trouble state.

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