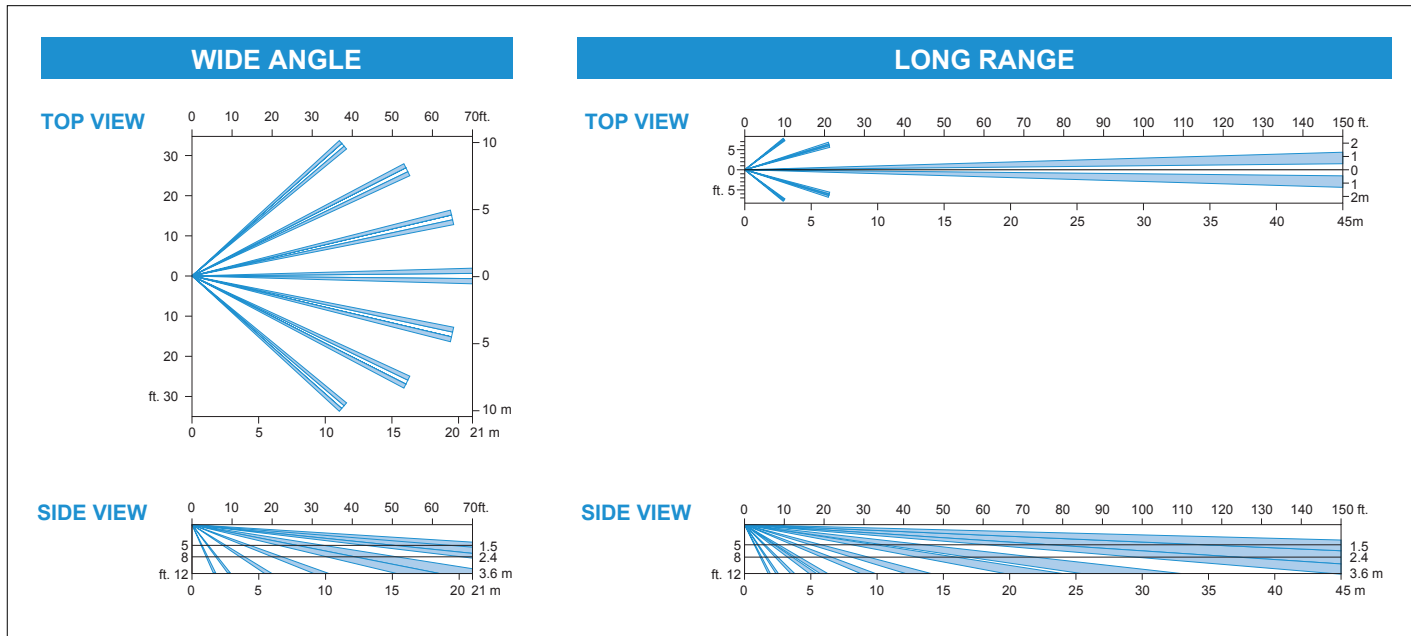


## Detection Patterns



## Specifications

CX-702	
Detection method	Passive infrared
Coverage	Wide angle 85° wide 21m x 21m (70ft. x 70ft.)
	Long range 45m x 2.4m (150ft. x 8ft.)
Detection zones	68 zones
	22 zones
Mounting height	1.5m - 3.6m (5 - 12ft.)
Sensitivity	1.6°C at 0.6m/sec. (2.4m mounting height) 3°F at 2ft./sec. (8ft. mounting height)
Detectable speed	0.3 - 1.5m/sec. (1 - 5ft./sec.)
Power input	9.5 - 16V DC
Current draw	8mA (normal) / 11mA (max.) at 12V DC
Alarm period	Approx. 2.5 sec.
Alarm output	N.C. 28V DC 0.2A max.
Tamper switch	N.C. Opens when cover is removed. 28V DC 0.1A max.
Pulse count	Approx. 20 sec. 2 or 4
Warm-up period	Approx. 60 sec.
LED indicator	Alarm condition
RF interference	No alarm 30V/m
Operating temperature	-20°C - +50°C (-4°F - +122°F)
Environmental humidity	95% max.
Weight	200g (7.0 oz.)

## Other CX Detector

### CX-502 / 502AM (Anti-Masking Model)

15 x 15m (50 x 50ft.) 85° Wide,  
24 x 2.3m (80 x 7.7ft.) Long



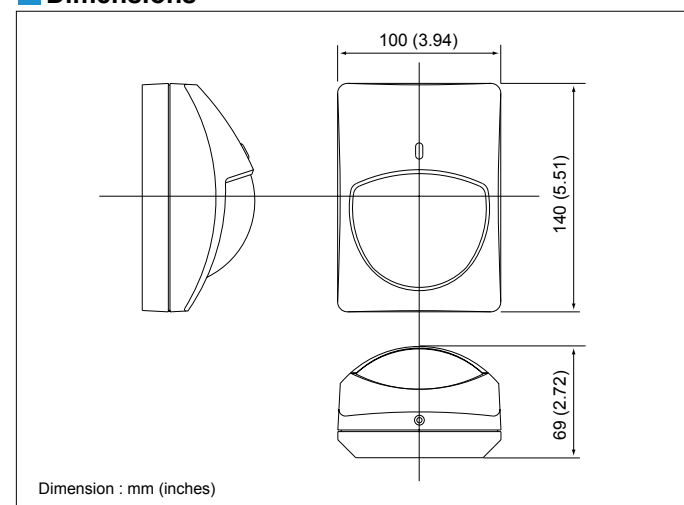
\*Specifications and design are subject to change without prior notice.

NOTE: This unit is designed to detect movement of 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. This product conforms to the EMC Directive 89/336 EEC.

CX-702V (Alarm Memory Version)		
Polarity	Positive	Negative (cut jumper)
Alarm memory	armed: open or +5 - 16V DC	armed: 0 - 1V DC (grounded)
Current draw	8mA (normal) / 16mA (max.) at 12V DC	

CX-702RS (Battery Operated Version)	
Power input	3 - 9V DC alkaline battery or lithium battery
Current draw	5 μA (In standby) 10mA (In walktest, LED on)
Alarm output	Form C 10V DC 0.01A max.
Alarm interval	Succeeding signals are not output even though detection occurs within 2min. after the first alarm.
Tamper switch	Form C 28V DC 0.1A max.
Warm-up period	Approx. 90 sec.
RF interference	No alarm 20V/m
Operating temperature	-10°C - +50°C (-14°F - +122°F)

## Dimensions



Dimension : mm (inches)



PASSIVE INFRARED DETECTOR

# CX-702



## Double the Basic Performance and Easy Installation! Optex Ensures Reliability Even for Protecting Large Indoor Venues.

- 21m (70ft.) Wide-Angle, 45m (150ft.) Long-Range Detection Ideal for Commercial and Industrial Applications
- Completely Sealed Optics with Dual Structure
- Double Conductive Shielding of Pyro Electric Element
- Dual Purpose Lens
- Double Easy Knockout
- Easy-to-View LED
- Sufficient Space for Wiring



"Take Care of the Environment"  
This catalogue uses recycled paper



OPTEX CO., LTD. (ISO 9001 Certified by LRQA)  
4-7-5 Niinohama Otsu, 520-0801 Japan  
TEL (077) 524-6047 FAX (077) 522-9022  
http://www.optex.co.jp/e/sec/index.html

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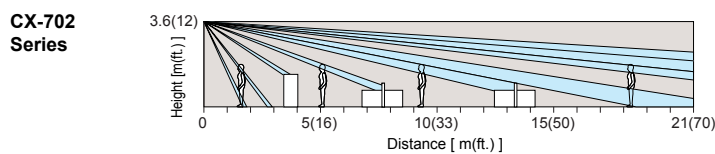
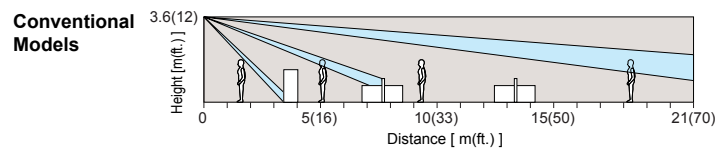
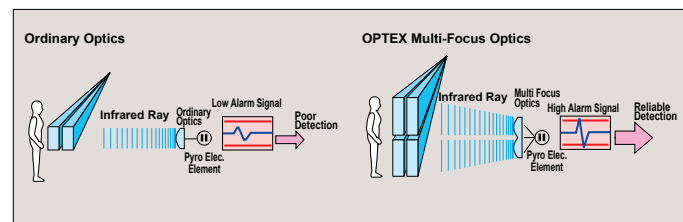
# The Optex CX-702 Delivers Reliable Detection in Large Commercial Buildings

## CX-702

### High Reliability Performance

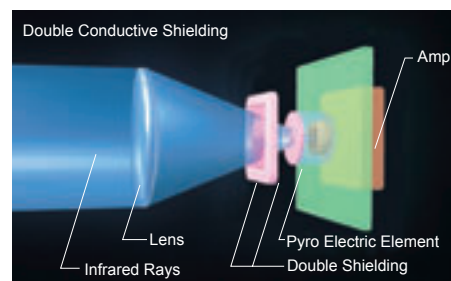
#### Multi-Focus Optics (Patent Listed)

The highly accurate and reliable detection pattern will maintain its sensitivity throughout the entire detection area, even in high temperature or low contrast environments. Multi-Focus Optics create an extremely high vertical zone density, two or three times the size of conventional PIRs. These taller zones capture the entire body mass and enable detection of even the smallest temperature contrast against the temperature of the background. In addition, the vertical detection density has been improved to take into account dead zones created by furniture or partitions.



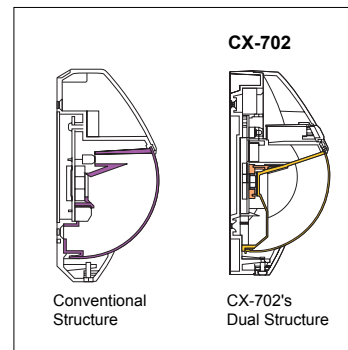
#### Patented Double Conductive Shielding

The Double Shielding lets infrared energy pass through, but blocks out light sources since it features a special conductive filter that covers the element window.



#### Sealed Optics—Complete Shielding with Dual Structure

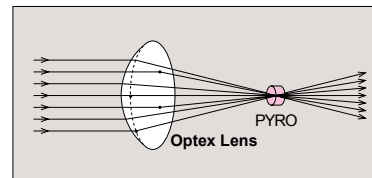
The pyro electric element is completely sealed with the dual-structured internal molding of the housing cover, thus preventing false alarms caused by drafts and small insects from getting inside.



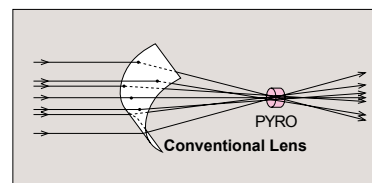
#### Spherical Lens Design

Conventional flat lenses inevitably create sensitivity distortion problems when they are bent to fit a curved housing. OPTEX's spherically designed lens will obtain sharp detection because no bending is required.

The Optex lens is designed to collect IR energy from the detection area, and focus it directly onto the pyro.

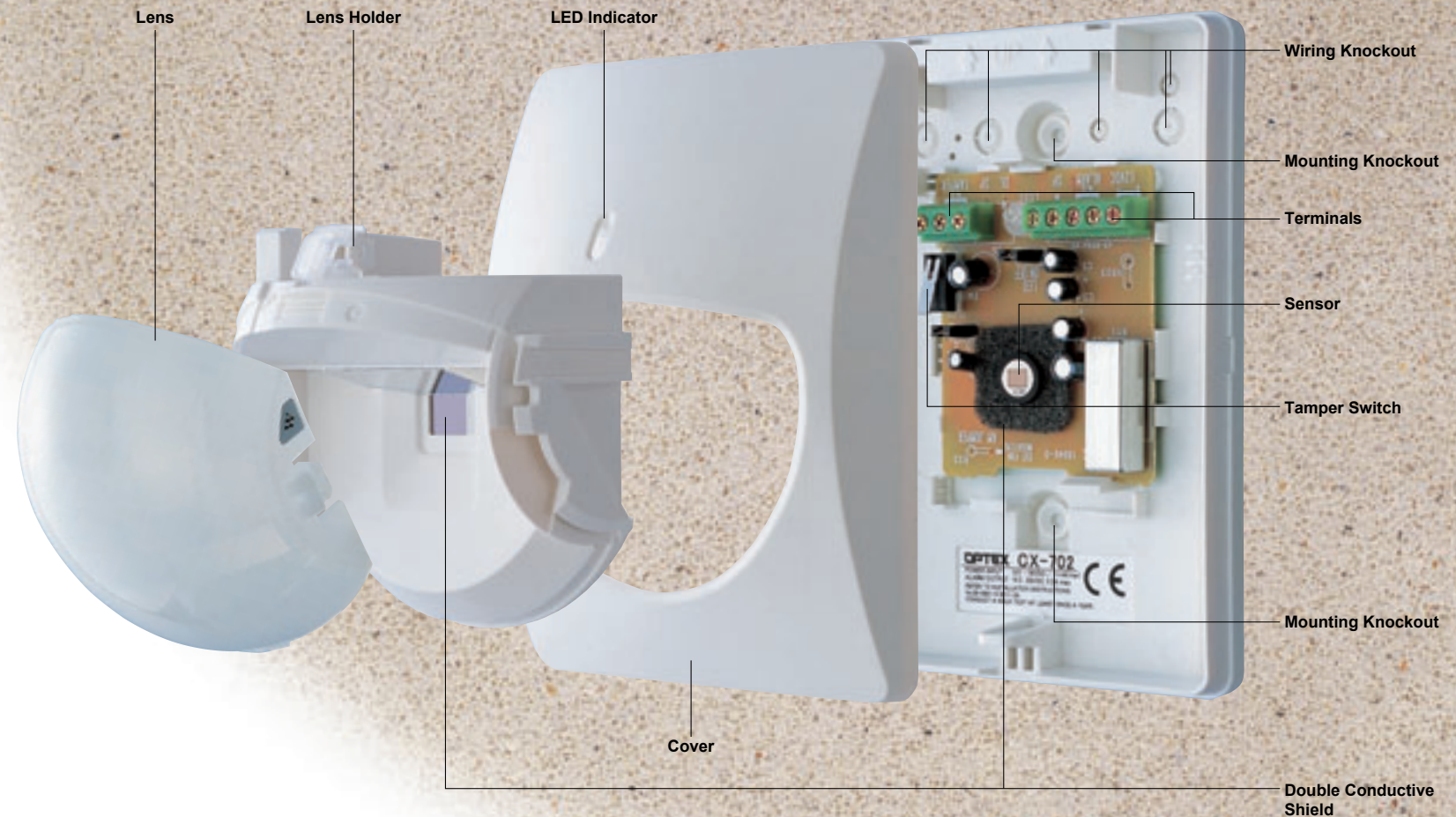
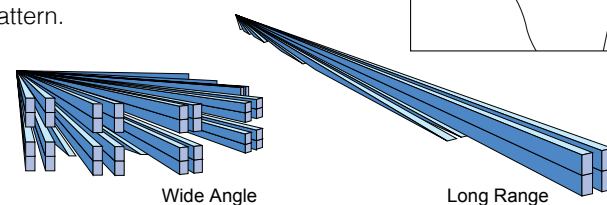


Since a flat lens is "bent," sensitivity distortion occurs at both sides of the lens (the lens surface is not directing IR energy correctly), resulting in poor sensitivity for long distance detection applications.



#### Dual Purpose Lens

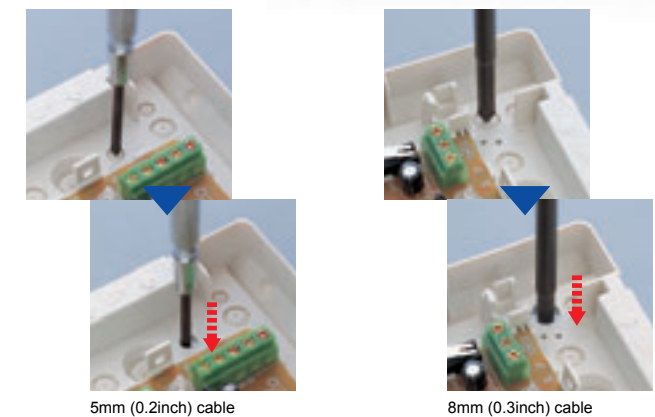
By simply rotating the spherical lens, you can select between Wide Angle and Long Range patterns. The CX-702 will instantly provide reliable and precisely accurate detection for each pattern.



### Installation Reliability

#### Double Easy-Knockout

Compatible with two types of cables: a thick, 8mm (0.3inch) diameter cable and a thin, 5mm (0.2inch) diameter cable.



#### Temperature Compensation Circuit

The Temperature Compensation Circuit will bring stable detection capability under high temperature conditions, where the background temperature is similar to that of the human body. It maintains a high level of false alarm protection while providing accurate detection by automatically adjusting its sensitivity according to the environmental temperature.

#### False Alarm Protection

- **RFI Protection**  
Built-in noise reduction chip blocks out RFI noise with field strength of 30V/m.
- **Temperature Protection (CX-702 and 702V only)**  
No alarm in high, low and changing temperatures from  $-20^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$  to  $+122^{\circ}\text{F}$ ).

#### Disturbance-Free Tamper Switch

Completely sealed housing structure greatly eliminates disturbances to Tamper Switch.

#### Versions

- CX-702 Standard
- CX-702V Alarm Memory
- CX-702RS Battery Operated, Form C

#### Options

- CA-1W Wall Mount Multi-Angle Bracket
- CA-2C Ceiling Mount Multi-Angle Bracket
- BA-70 Backbox for wireless transmitter

