

CL-1806 HDIR™\*\*

SUREN

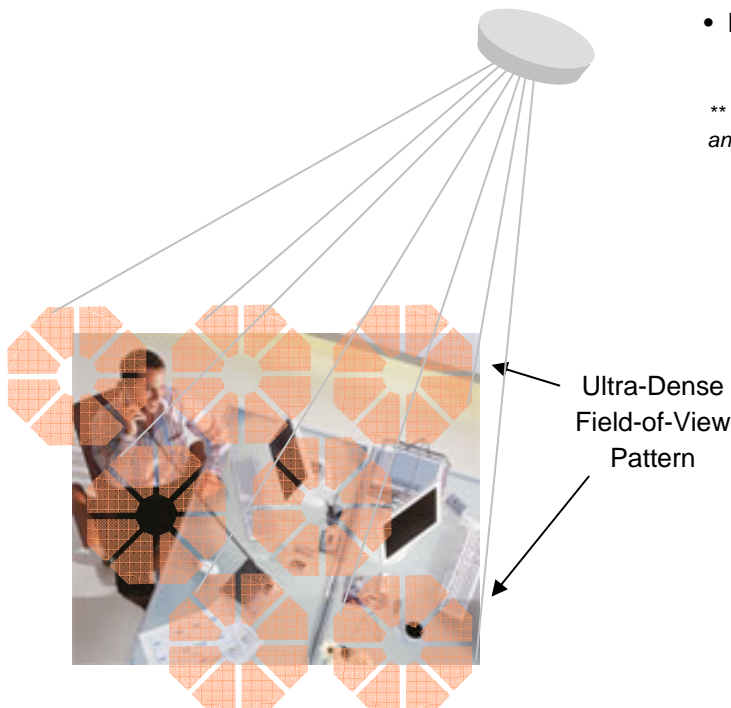
## PIR Presence Sensor



*Keeps Lights ON  
where people settle!*

### Lighting/comfort control

- Conference Rooms
- Offices
- Intelligent Home



HDIR™\*\*

High-Definition InfraRed™\*\*

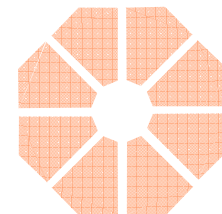
### Small-Motion Detection

- 8-Element Pyroelectric IR Detector**
- High-efficiency Spherical Lens**
  - Maximum optical signal strength
  - Attractive appearance
- 776-field-of-view Lens/Detector System**
  - Staggered layout for best detection
  - Alternating polarity for strong signals
- Stable and Reliable Sensor Electronics**
  - 100% surface-mount components
  - No aluminum electrolytic capacitors

### False Detection Immunity

- Air-Draft Protected Opto-electronics**
  - Sealed optics around detector
  - Detector-lead cover
- Three-Stage White Light Protection**
  - White diffusing lens
  - Clear bug guard – less light concentration
  - Large white-light filter on detector window

*\*\* U.S Pat. 7,579,595; continuation-in-part and additional patents pending worldwide.*



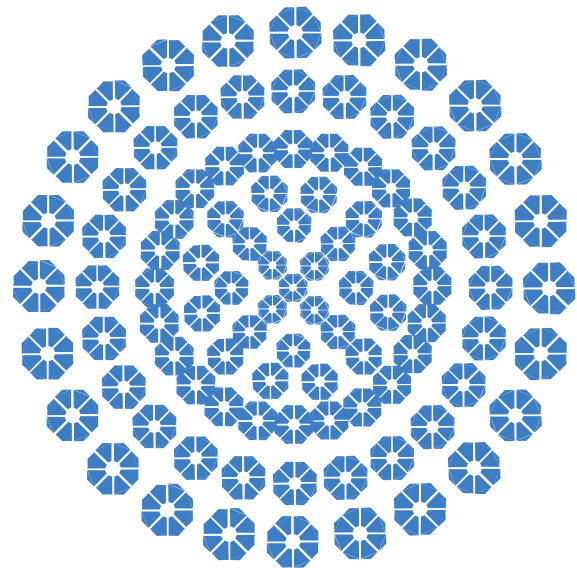
8-Element Detector  
for High Definition

## Product Features

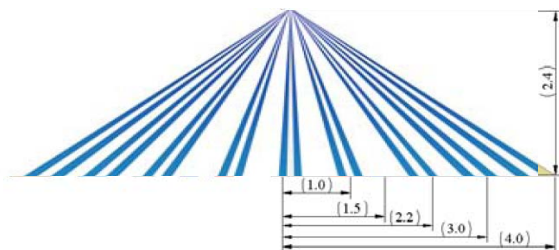
- ❑ **HDIR™\*\* 8-Element IR Detector** and patent-pending DSP detection work together for small-motion detection within a 6-meter circle.
- ❑ Small-signal relay output to control external contactors
- ❑ Adjustable 5s-30m setting for relay "ON" time
- ❑ Sunset sensor to enable lighting only when ambient light is low
- ❑ Wide operating temperature range (-40°C to + 55°C)
- ❑ Microcontroller temperature analysis for best summertime detection
- ❑ Tightly-mated bug guard to protect the sensor optics from insects, spiders and dust
- ❑ Selectable detection sensitivity (standard/verified) for different environmental requirements
- ❑ Spring clips for mounting in drop ceiling
- ❑ Trim ring for mounting on solid ceiling

## Optical View Pattern

Top View



Side View



## Specifications

Relay:	Solid-state, 30V, 50mA			
Detection Range:	6m circle with sensor mounted at 2.4m height. Motion Detection 4-6cm within 4m circle			
Power Supply:	8-16 Vdc / 20 mA			
RF Immunity:	20 V/m 10 – 1000 MHz; 10 V/m 1000-2000 MHz			
Sensitivity:	1-event or 2-event			
Temperature Range:	-40°C to +55°C			
Height range:	2.3 - 4.0 m			
Housing:	High-impact ABS			
Dimensions:	38mm overall height; 93mm diameter; 25mm below drop ceiling			
Optical fields-of-view	Long Range	Mid Range	Short Range	Look-down
	384	288	64	40

All specifications are subject to change without notice.