POLYMER OPTICS LTD™
intelligent engineering with light

DOME CAP LENS HORIZONTAL CURTAIN (HC)

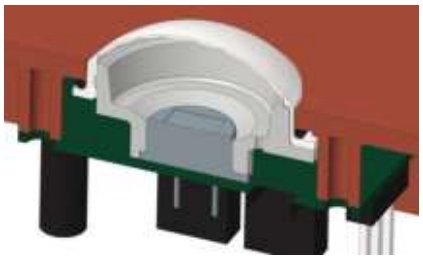
FOR PIR MOTION SENSING

OVERVIEW

High performance motion detection lens for security and lighting applications. Horizontal curtain (HC) beam pattern with 100deg FOV and up to 12m range. Ideal for portable security devices where pet immunity is required. Pyro not included.



Dome Cap Lens HC

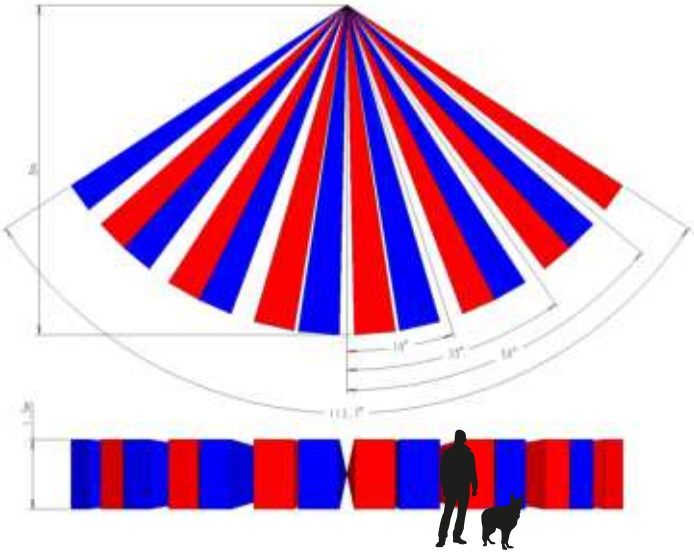


Typical mounting method: 20x1mm o-ring stretched around lens flange. PCB screwed to housing via pillars. Orientation tab sits in channel next to fixing pillar.

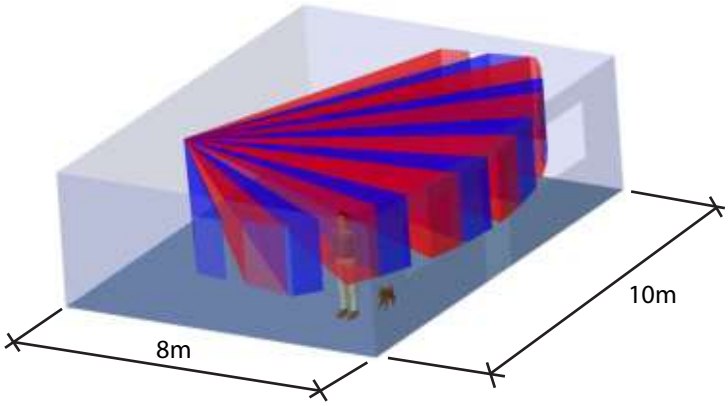
FEATURES

- Designed to press onto standard T05 pyro
- Automatically sets correct focal distance
- Fresnel lenses fo maximise IR collection
- Spherical shape creates natural rigidity
- Designed using optical ray-tracing software
- Compact shape with clearance for pcb components
- Available in natural, white and black colours

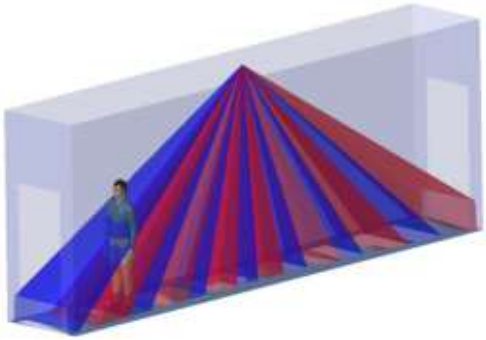
Part Number	Drawing	Colour
707-N	A3-10707	Natural
707-W	A3-10707	White
707-B	A3-10707	Black



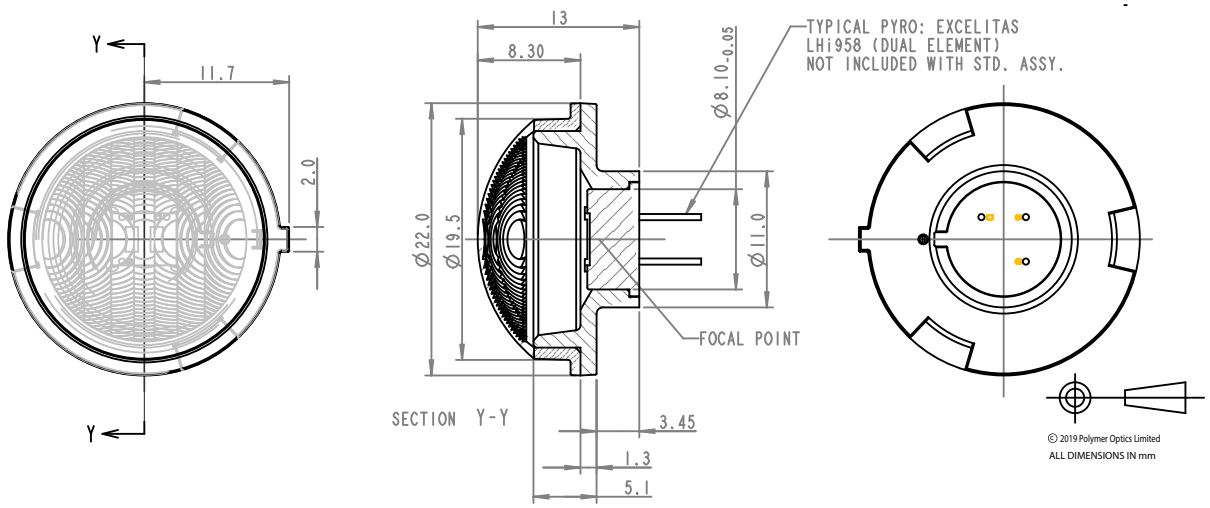
Theoretical zone plot. Optimum range is 8m.
Maximum Range 12m depending on electronic gain



Typical application 1: Bookshelf device, mounted 1.5m above floor, detects humans, immune to pets.



Typical application 2: Ceiling mounted corridor detection. Ideal for ceiling mounted luminaires. Detector is immune from air movement around windows and doors.



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CAP LENS RANGE

FOR PIR MOTION SENSING

FEATURES

- Designed to press onto standard T05 pyro
- Horizontal curtain and circular beam patterns
- Choice of profile shape to suit product styling
- Designed using optical ray-tracing software
- Compact shape with clearance for pcb components
- Available in natural, white and black colours



Dome Cap Lens HC



Dome Cap Lens 360



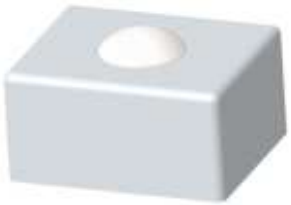
Flat Cap Lens HC

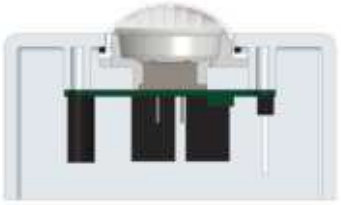


Flat Cap Lens 360

APPLICATIONS

- Office and household lighting control
- Motion detection for security applications
- Individual luminaire switching
- Fan and air conditioning control
- Control panel illumination for appliances
- Vending machines, ATM's, streetlights



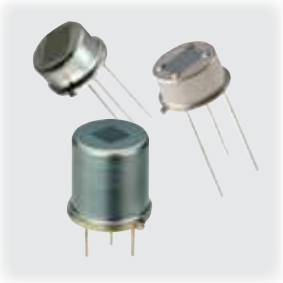


Lens pushes onto TO5 pyro. Slot in flange ensures correct orientation with pyro. Casing traps lens flange so that lens is held securely. 'O' ring can be used to seal. Lens has clearance for PCB components. Sealed lens environment prevents false detections from contamination and air movement. Indicator LED can project light through lens.



Low voltage sensor modules are available. Sensor modules have analogue pyro with switching circuit and sensitivity sdjustment. Can be combined with relay module for mains switching. Modules can be used for alarm activation or lighting.

Cap lenses can be ordered to fit most of the leading pyro-electric sensor brands such as Excelitas, Nicera, Murata and Panasonic. The lens presses onto the T05 cannister and is held at the correct focal distance.









Small and compact, these lenses are suitable for numerous security and lighting applications, in the office, or around the home. Available in two beam pattern versions, horizontal curtain (HC) and 360deg ceiling, there is a lens suitable for every application.

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