

3D-Quad

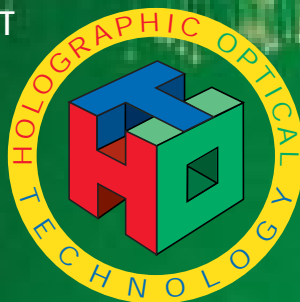
RAISING THE STANDARD



The 15m range **3D-Quad** further enhances the unique **3D-Series** of residential detectors. By adding all the additional false alarm immunity of genuine Quad element detection to Texecom's patented Holographic Technology, the **3D-Quad** is the ultimate residential PIR for total reliability & false alarm immunity.

Outstanding features of the **3D-Quad** include:

- ✓ GENUINE QUAD ELEMENT DETECTION
- ✓ PATENTED HOLOGRAPHIC OPTICAL TECHNOLOGY (*HOTLens™*)
- ✓ PATENTED TAMPER-PROOF MOUNTING BRACKETS
- ✓ 1.5 - 3.1m ADJUSTABLE MOUNTING HEIGHT
- ✓ SURFACE MOUNT TECHNOLOGY (SMT)
- ✓ 15m (50ft) RANGE
- ✓ 50V/m RF IMMUNITY
- ✓ ACTIVE WHITE LIGHT REJECTION
- ✓ LASER TUNED IR FILTERING
- ✓ SEALED OPTICS



CE ^{3D-Pro, 3D-Quad, 3D-Petwise, HOTLens}
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All PIR detectors rely on an optical system to transmit the small amount of infrared radiation emitted by an intruder onto a pyro-electric detector. This is typically achieved using either grooved Fresnel lenses or segmented mirrors. In spite of the fact that this is probably the most crucial part of any detector these technologies have remained largely unchanged for more than 25 years.

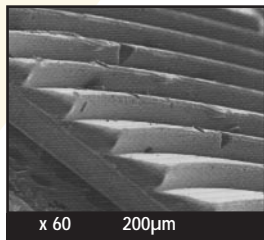
HOLOGRAPHIC OPTICAL TECHNOLOGY

The *HOTLens™* is widely regarded as one of the greatest breakthroughs in PIR optics to date. Using state-of-the-art Holographic Optical Technology Texecom have developed the *3D-Series*, detectors with optics so advanced that they dramatically improve both catch performance & false alarm immunity.

Fig 1. Optimum IR Focussing

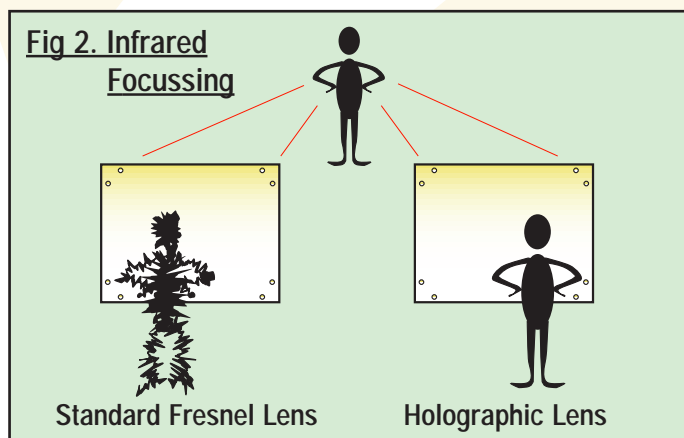
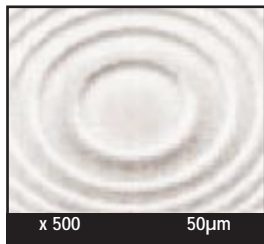
Standard Fresnel Lens

Note the imperfections in the zone facets. These compromise pickup.



Holographic Lens

Laser etching ensures accuracy and repeatability even at sub micron levels.



GENUINE QUAD ELEMENT DETECTION

The *3D-Quad* maximises the critical advantages of the holographic lens technology by incorporating genuine quad element detection & advanced surface mount signal analysis. This guarantees exceptional catch performance & outstanding false alarm immunity.



GENUINE QUAD DETECTOR WITH HOLOGRAPHIC OPTICAL TECHNOLOGY



PIR DETECTOR WITH HOLOGRAPHIC OPTICAL TECHNOLOGY



PET IMMUNE DETECTOR WITH HOLOGRAPHIC OPTICAL TECHNOLOGY

ELECTRICAL

- Voltage** 9-16Vdc.
- Current** 17mA typical at 12Vdc.
- Maximum Ripple** 2Vpp at 12Vdc (50-120Hz sinusoidal).
- Alarm Output** Normally closed (failsafe) voltage free relay contacts. Rated at 24Vdc, 50mA protected by 18Ω series resistor.
- Tamper Output** Normally closed voltage free switch contacts. Rated at 24Vdc, 50mA.
- Alarm Period** 2-3 seconds typical.
- Walk Test LED** Internal link to enable/disable.
- Detection Method** Passive infrared.
- Pyro-electric Detector** Quad element, low noise.

ENVIRONMENTAL

- Operating Temperature** -10°C (14°F) to 55°C (131°F).
- Temperature Tolerance** No false alarm up to 1.7°C/minute (3°F/minute).
- Maximum Humidity** 95% non-condensing.
- Storage Temperature** -20°C (-4°F) to 60°C (140°F).
- EMC Environment** Residential/Commercial/Light Industrial and Industrial.

FALSE ALARM PROTECTION

- Design** Noise reduction circuits and maximum ground plane.
- RF Immunity** No false alarm from 80MHz to 1GHz at 50V/m modulated, equivalent to a 700W uniform transmitter at 3m (10ft). Complies with EN61000-4-3:1997.
- Electrostatic Discharge** No false alarm up to ±8kV. Complies with EN61000-4-2:1995.
- Fast Transient Immunity** No false alarm up to ±1kV. Complies with EN61000-4-4:1995.
- High Energy Transient Immunity** No false alarm up to ±1kV. Complies with EN61000-4-5:1995.
- Conducted RF Susceptibility** No false alarm at 10Vrms. Complies with EN61000-4-6:1996.
- Conducted Emissions** Complies with EN55022 Class B.
- Radiated Emissions** Complies with EN55022 Class B.
- EMC** Independently certified to EN50130-4:1996.
- Pulse Count** Internal link to select.

PHYSICAL

- Mounting** Corner or wall mount (without mounting bracket). Optional ceiling and wall mount brackets supplied as standard with adjustment range ±30° horizontal. Mounting height up to 3.1m (10'0").
- Casing** 2.5mm (0.1") wall thickness in flame retardant ABS.
- Dimensions** 90mm x 63mm x 40mm (3.6" x 2.5" x 1.6").
- Packed Weight** 125g (4.5oz) approx.
- Colour** Designer white with super-white lens.

COVERAGE

Volumetric (standard) 15m (50ft) range; 24 facets with look-down creep zones; 104° coverage producing a maximum width of 23.6m (77ft).

EUROPEAN STANDARDS

Conforms to European Union (EU) Electro-Magnetic Compatibility (EMC) Directive 89/336/EEC.

**BEST MANUFACTURER 1999
INTRUDER ALARM MANUFACTURER
OF THE YEAR 2000**

- 1st** For offering the best quality products at the right prices
- 1st** For reliability and responsiveness
- 1st** For excellence in customer care & service
- 1st** For providing a high level of support and servicing including training and help lines



Certificate Number: FM 35285



British Security Industry Association

