



A & E Specification – GJD 'D-TECT®' Detector Wired PIR only or Dual-Tech Variants

1. Description

The unit shall be designed for use as an external detector. The unit shall meet or exceed the following design and performance specifications.

2. Key Product Characteristics

Detector models shall ideally be from the D-Tect® range. They include well-proven and unique features with innovative design elements that leverage and maximise the benefits of tried and tested technology. They are designed to keep nuisance alarms to an absolute minimum.

Product features and characteristics shall include:

- Advanced signal processing algorithms & unique optical systems to minimise nuisance alarms
- Quad or dual element pyro (PIR) infra-red scanner module with electronic range adjustment
- Optional dual-tech variant using a microwave sensor in conjunction with the PIR sensor (AND logic). Also with electronic range adjustment
- Integral masking curtains and adjustable pan and tilt sensor to allow the field of view of the detector, camera and illumination to be matched
- Variable range selection with at least two options e.g. 10m and 20m selectable
- Units can be safely mounted up to 4m. Optimum mounting height 3m
- Covert sensor module. So the would be intruder will have no indication of where the detector is looking

3. General

- a) Detection distance options: range selectable including volumetric and narrow field of view alternatives
- b) Field of view: ideally adjustable up to 20 meters wide for volumetric and 4 meters for narrow beam at max range
- c) Mounting Height: 1.5 - 4m. Optimum around 3m
- d) Detection Speed: Typically 0.2 – 5m/s
- e) Sensor: pyro electric: dual or quad element pyro with sunlight shielding. X-Band microwave with approved country frequencies. E.g. 10.525GHz, 10.587GHz, etc.
- f) Resistance to sunlight: up to 50,000 Lux
- g) Optics: Fresnel lens with short, medium and long range beam patterns
- h) Front window: covert (concealed sensor module) offering pan and tilt functionality behind HDPE cover, IR transmissive

- i) Sensitivity adjustment: programme button with LED or DIP switches to change Pulse Count 1, 2
- j) Walk test: walk test mode option to aid set up and commissioning
- k) LED disable: ability to turn off LED's after commissioning
- l) Relay timer: selectable times to reduce repeat alarms
- m) Front and rear tamper switches in compliance with BS8418
- n) Option of integral end of line (EOL) resistors on certain models
- o) Digital temperature sensitivity adjustment
- p) Options that have been designed for tropical environments

4. Interfacing

- 3.1 Cable Entries: 2 x M10 or similar
- 3.2 Ethernet connector for IP and bus connectable versions
- 4. Electrical
 - 4.1 Power supply: Ideally 12-24 V AC/DC or 9-15V DC
 - 4.2 Power consumption: standby < 25mA @ 12VDC nominal, < 15mA @ 24VAC
 - 4.3 Alarm relay output: Selectable or fixed N/O or N/C
 - 4.4 Turn-on settling time: Typically 180 seconds from power on
 - 4.5 8 Core 7/0.2mm or 8 Core 16/0.2mm wire

5. Physical

- 5.1 Mounting options: direct wall mount for rear cable entry, conduit cable entry adaptor, pole mount clamp and vandal guard
- 5.2 Material: heavy-duty plastic or high impact zinc alloy
- 5.3 Housing colour: Silver, Chrome, White or Black
- 5.4 External Dimensions: 150mm x 120mm x 120mm
- 5.5 Weight: 0.9Kg Gross
- 6. Environmental
 - 6.1 Operating temperature: -20° to +55°C
 - 6.2 IP Rating: minimum IP55, IP65 preferred
- 7. Warranty
 - 7.1 2 Years

