

Technical Publication

## ***DDT-85***

### **Outdoor High-Security Digital Motion Detector**

Sensor DDT-85 is an Outdoor High-Security Digital Motion Detector that combines a special weatherproof design and the world-renown technology of our High-Security Motion Detector with Pet Immunity to provide the same reliable protection—outdoors.

DDT-85 is resistant to water, insects, dust, wind, sunlight and other outdoor disturbances due to its specially designed casing (made using a double injection process), PCB, sensors and lens. To eliminate false alarms caused by small- to medium-sized animals, which can be an outdoor nuisance, DDT-85 features a combination of advanced optics and digital processing technologies for unmatched animal immunity (up to 40kg/90lbs).

Developed for applications that require high security and stability, this advanced circuit design performs direct analog to digital conversion of the PIR sensor's signal using a powerful, high-speed microprocessor-based digital IC. This unique technology provides increased accuracy, reliability and superior false alarm immunity. DDT-85 also uses the following digital processing technologies to differentiate between a movement signal and an interference signal: Dual Opposed Detection, Shield algorithm, Automatic Temperature Compensation and Dual Edge Processing.

DDT-85 provides several other advanced features, such as Auto Pulse Signal Processing, multi-level sensitivity adjustment, two operational modes (addressable or conventional relay operation) and a metal shield to maximize protection from EMI and RFI signals.

Reliable, weatherproof and stylish, DDT-85 will give you the detection and versatility you need in virtually any outdoor application.

#### **Main Features**



#### **Weatherproof Design**

- Impact and temperature resistant casing
- Casing lined with an injected rubber gasket
- PCB Cloak covers and protects electronics
- Rubber foam to seal wire entry
- Dual Optical Filtering System
- Recessed lens design with protective mask
- UV protected lens

#### **Advanced Detection System**

- Extremely reliable and false-alarm free
- Patented Animal Immunity (up to 40kg/90lbs)
- Dual optics (2 dual opposed element sensors)
- Auto Pulse Signal Processing
- Digital Dual Opposed Detection
- Digital Shield algorithm
- Digital Automatic Temperature Compensation
- Metal shield maximizes protection from EMI and RFI signals
- Multi-level sensitivity adjustment
- Two operational modes

## Technical Overview



## Two Operational Modes

### Addressable Mode:

DDT-85 will function by communicating its alarm and tamper signals, data and settings via the communication bus. In this mode, the relay remains active and can be used to activate other devices.

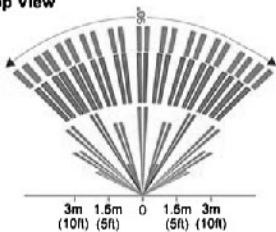
### Conventional Relay Mode:

When set to Relay Mode, DDT-85 functions as would any conventional motion detector by communicating its alarm and tamper signals via relays.

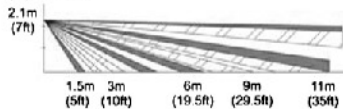
## Specifications

### Order Number: DDT-85

#### Top View



#### Side View



- 11m X 11m (35ft X 35ft); 90° viewing angle
- Operates at -20°C to +50°C (-4°F to +122°F)
- Installation height of 2m to 2.7m (7ft to 9ft)
- Walk speed of 0.2m/s to 3.5m/s (0.6ft/s to 11.5ft/s)
- Operates at 9 to 16Vdc
- 15mA maximum current consumption
- 2nd generation Fresnel lens, segments, 0.05mm (0.0020") Poly
- Alarm output (relay 100mA/28Vdc, N.C. or optional form C relay 5A/28Vdc, N.C./N.O.)
- Anti-tamper switch (150mA/28Vdc, N.C.)
- 10V/m rejection from 10MHz to 1GHz
- Size: H 17.5cm (6.9") W 8.4cm (3.3") D 6.9cm (2.7")
- Connects to 4-wire communication bus (addressable mode only)
- Program sensitivity and other settings via keypad or software (addressable mode only)

*Protect your Home*

Distributed by: