

# Motion Detectors

From outdoor and pet-friendly digital motion detectors to analog motion detectors, the Paradox series of motion detectors combine advanced features and patented technologies to provide a high level of detection and false alarm prevention.

The Digigard (DG55, DG65, DG75 and DG85W), Elegance (DG483), Digital Vision (525D) and Paradome DG466 line of motion detectors offer patented digital motion detection. Developed for high-security applications, 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. Completely software-driven, true digital motion detection converts, amplifies and processes the sensor's low-level signal in the digital domain without any analog circuitry (no saturation, no loss of data and no noise). This unique technology provides increased accuracy, reliability and superior false alarm immunity.

The Digigard series includes a DG85W Outdoor Digital Dual-Optic High-Performance PIR (40kg/90lb True Pet Immunity) that combines a special weatherproof design and the proven technology of our DG75 Digital Dual-Optic High-Performance PIR (40kg/90lb True Pet Immunity) to provide the same reliable protection—outdoors. With its patented optics and digital processing technologies, the world-renown Digigard DG75 is a reliable false-alarm free motion detector with unmatched pet immunity.

Our patented Auto Pulse Signal Processing transforms the signal energy to a pulse output to determine if the progression of the detected occurrence corresponds to an alarm condition. Energy from the signals are measured and stored in memory until a minimum level is reached. The processor then rejects signals that do not meet its required specifications for generating an alarm.

Whatever the application, there's a Paradox motion detector that will suit your needs and surpass your expectations.

## Digital Motion Detectors



### Features Common to All Digital Motion Detectors

- Patented\* Digital Motion Detection (see above)
- Patented Auto Pulse Signal Processing
- Digital Shield algorithm software with adjustable sensitivity
- Single or Dual Edge Processing†
- Automatic Temperature Compensation
- Metal shield maximizes protection from EMI and RFI signals‡
- Solid-state relay
- Anti-tamper switch

\* The patent does not apply to the DG467 (see page 39)

† Except DG466 (see page 39)

‡ Except DG483 (see page 37) and DG467 (see page 39)



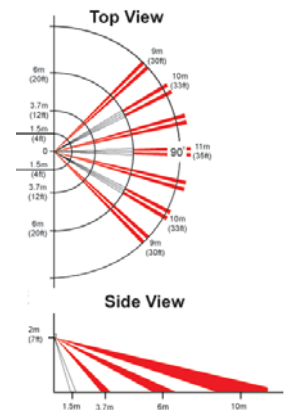
DG483:

New

Available  
Q1 2007

### Elegance

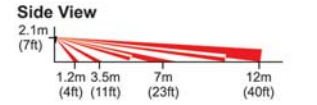
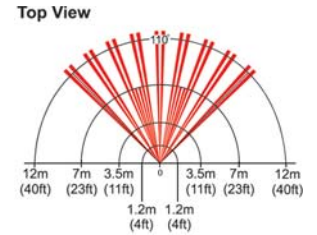
- Dual element sensor
- 12m x 12m (40ft x 40ft); 110° viewing angle
- See Features Common to All Digital Motion Detectors above
- Unique simple design
- Small size 8.2cm x 5cm x 4.5cm (3.2in x 1.9in x 1.7in)





**DG55: Dual Element Digital Motion Detector**

- Dual element sensor
- 12m x 12m (40ft x 40ft); 110° viewing angle
- See Features Common to All Digital Motion Detectors on page 37

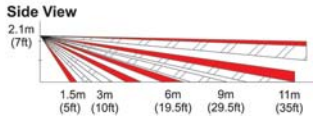
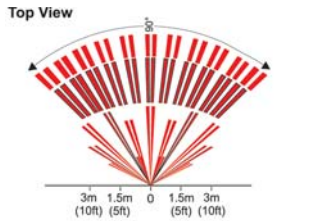


**DG65: Quad Element Digital Motion Detector**

- Digital Dual Opposed Detection
- Interlock Sensor Geometry
- Quad element sensor
- 12m x 12m (40ft x 40ft); 110° viewing angle
- See Features Common to All Digital Motion Detectors on page 37

**DG75: Digital Dual-Optic High-Performance PIR (40kg/90lb True Pet Immunity)**

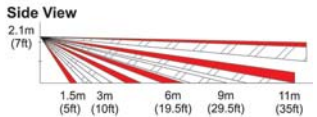
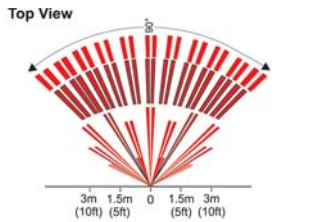
- Extremely reliable and false-alarm free
- Dual optics (2 dual opposed element sensors)
- Provides superior pet immunity using a patented combination of advanced optics and digital processing technologies
- Immune to pets weighing up to 40kg (90lb)
- Digital Dual Opposed Detection
- 11m x 11m (35ft x 35ft); 90° viewing angle
- See Features Common to All Digital Motion Detectors on page 37



**DG85W: Outdoor Digital Dual-Optic High-Performance PIR (40kg/90lb True Pet Immunity)**

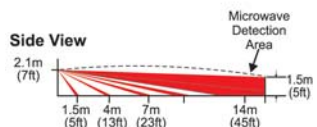
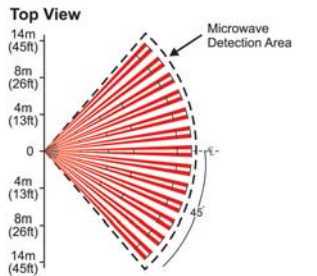
Same features as the DG75 (see above) plus a special weatherproof design:

- Impact and temperature resistant casing
- Operates at -35°C to +50°C (-31°F to +122°F)
- Casing lined with an injected rubber gasket
- UV protected lens
- Dual Optical Filtering System
- Multi-level sensitivity adjustment
- Two operational modes (addressable for the Digiplex series or conventional relay operation)



**525D: Microwave and Infrared Digital Motion Detector**

- Digital microwave detection
- 3 LED indicators display type of movement
- Once the PIR validates that a signal meets alarm conditions, Digital Vision uses microwave signals to confirm the results before generating an alarm
- Adjustable microwave range
- 14m x 14m (45ft x 45ft); 90° viewing angle
- See Features Common to All Digital Motion Detectors on page 37

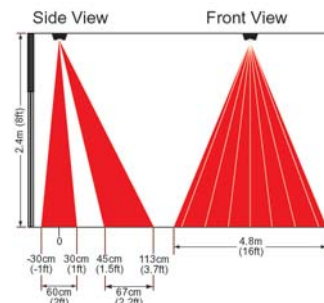




**DG466:**

**Directional Ceiling-Mounted Digital Motion Detector**

- Two dual element sensors (determine if movement is incoming or outgoing)
- One incoming detection relay output
- One outgoing detection relay output
- Adjustable return delay timer (exit and reenter without causing an alarm)
- Patented Digital Detection (see Features Common to All Digital Motion Detectors on page 37)
- 67cm x 4.8m (2.2ft x 16ft) and 60cm x 4.8m (2ft x 16ft)



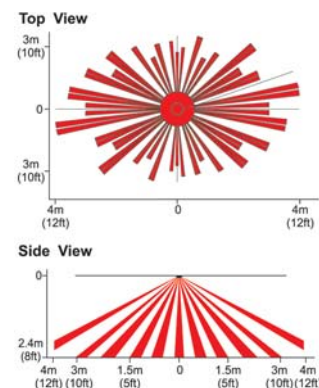
**DG467:**



Available Q1 2007

**360° Ceiling Mounted Motion Detector**

- Dual opposed element sensor
- Patented Digital Detection (see Features Common to All Digital Motion Detectors on page 37)
- 7m x 6m (24ft x 20ft) at 2.4m (8ft)
- 11m x 6m (35ft x 20ft) at 3.7m (12ft)
- 360° viewing angle
- Two operational modes (addressable for the Digiplex and Digiplex EVO series or conventional relay operation)



**Analog Motion Detectors**

**Features Common to All Analog Motion Detectors**

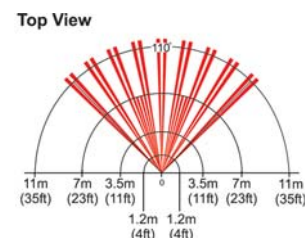
- Patented Auto Pulse Signal Processing
- Automatic Temperature Compensation
- Metal shield maximizes protection from EMI and RFI signals
- Dual element sensor
- Anti-tamper switch



**476+:**

**PIR with High EMI and RFI Rejection**

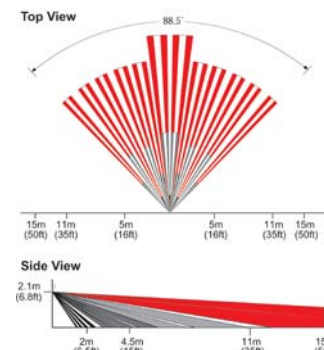
- Extremely high EMI and RFI rejection
- PCB uses only surface mount components
- Solid-state relay
- 11m x 11m (35ft x 35ft); 110° viewing angle
- See Features Common to All Analog Motion Detectors above



**476PET:**

**Analog Single-Optic PIR (18kg/40lb Pet Immunity)**

- Immune to animals weighing up to 18kg (40lb)
- When a higher level of immunity is required, such as when animals are constantly in the detection area, consider using DG75
- 11m x 11m (35ft x 35ft) and up to 15m (50ft) for center beams with 88.5° viewing angle
- Extremely high EMI and RFI rejection
- PCB uses only surface mount components
- Solid-state relay
- See Features Common to All Analog Motion Detectors above

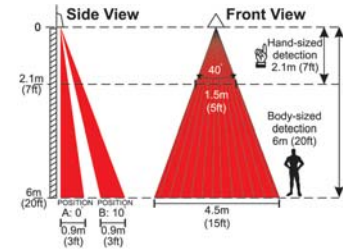




460:

**Vertical View Motion Detector**

- Adjustable lens position (0° or 10°)
- Selectable operational voltage (12Vdc or 24Vdc)
- Adjustable alarm signal duration
- Detects hand-sized objects for card access applications: 2.1m x 1.5m (7ft x 5ft)
- Detects body-sized objects for security applications: 6m x 4.5m (20ft x 15ft)
- See Features Common to All Analog Motion Detectors on page 39



**Specialized Detectors and Accessories**

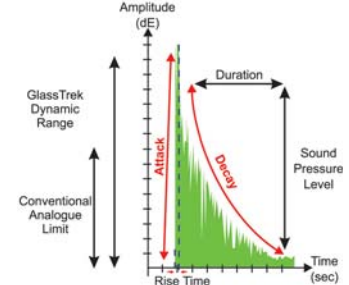


456:

**Glassbreak Detector**

- Full audio and infrasonic spectrum analysis
- 7 frequency digital filters, digital amplifier gain and frequency fluctuation assessment
- Impact and shock wave analysis
- High-immunity to RFI and EMI signals
- Adjustable sensitivity: covers up to 9m (30ft) when set to high and up to 4.5m (15ft) when set to low
- TestTrek (459) used for testing available separately
- Anti-tamper switch

**Signal Envelope Analysis**



950:

**Safe Protector**

- High-sensitivity piezoelectric element
- Five sensitivity settings
- 2.5m (8ft) protection range
- Anti-tamper switch



469:

**Swivel Mount Bracket**

- 3 in 1: ceiling, wall or corner mount bracket
- Ensures optimal coverage



**MG-SB85W: Heavy Duty Outdoor Swivel Bracket**

- For use with the MG-PMD85W (page 7) and DG85W (page 38) outdoor digital PIRs
- Innovative T-joint allows for movement along two axes for better maneuverability and better detector positioning
- 3 in 1: ceiling, wall or corner mount bracket
- Cap lock prevents unauthorized repositioning of outdoor detector



**Lenses**

The following beam patterns represent the optional lenses that are available for the Pro+ (476+), Digigard 55 (DG55), Digigard 65 (DG65), Digiplex Motion Detector Modules (DGP2-50 and DGP2-60), Digital Vision (525D) and Magellan (MG-PMD1P) motion detectors. Distances shown may vary according to the selected motion detector; please verify the motion detector's specifications.

