

# BMD500 SERIES

**NEW**  
Bentel Security BMD500 Series  
of Detection Devices



**BENTEL**  
SECURITY

# BMD501



## Digital PIR Detector with Pet Immunity BMD501

Whether it's a residential or commercial installation, the BMD500 series of detection devices readies a security system for the unexpected by providing protection for every room, corner and corridor. The BMD501 effectively blends performance with competitive pricing. The detector features intelligent signal analysis for reliable detection, pet immunity up to 25 kg (55 lbs) and a slim design that complements any décor.

- Form 'A' alarm contact and tamper switch
- Digital signal analysis
- Slim profile design
- Features ABS plastic for shock and impact protection
- Pet immunity up to 25 kg (55 lbs)
- Exceptional white light immunity
- Quad Linear Imaging Technology for sharp analysis of body dimensions and differentiation from backgrounds and pets
- Advanced ASIC-based electronics
- Compact design for residential installations
- Adjustable variable pulse count
- PIR sensitivity adjustment
- Height installation calibration free

### RELIABLE PROTECTION

Advanced ASIC-based processing provides both superior detection and false alarm rejection to help keep people and possessions secure. Quad Linear Imaging Technology provides sharp analysis of body dimensions and differentiation from backgrounds and pets.

### DIGITAL SIGNAL PROCESSING

Effective motion detection is dependent on a sensor's ability to identify intruders and provide true false alarm resistance. The LC series of detection devices pinpoints intruders through digital signal processing. Digital information is more accurately analyzed using software and is not subject to signal degradation caused by amplification, noise, distortion or signal clipping.

### PET IMMUNITY

Highly accurate sensors are able to provide quality detection while at the same time ignoring pets weighing up to 25 kg (55 lbs).

### FAST AND EASY INSTALLATION

Once the detector is installed at the recommended height, installers simply conduct a brief walk-test, make any necessary adjustments, and the unit is ready to perform. Highly visible LEDs can be viewed at a glance and help the installer identify the detection range from any distance or angle within the coverage pattern.

### LOCATING THE DETECTOR

When choosing a location for the detector, be sure to consider the following:

- Do not aim the detector at reflective surfaces
- Avoid locations that are subject to direct high air flow
- Do not locate the detector in the path of direct or reflected sunlight
- Do not place next to large obstructions that may limit the coverage area

### EXCEPTIONAL WHITE

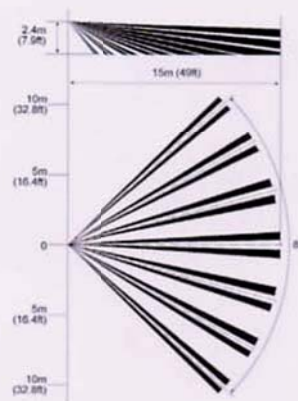
Built-in temperature compensation adjusts processing to ensure the detector is able to function in harsh environments without causing false alarms.

### DETECTION RANGE

Adjustment The detection range of the motion detector is adjustable to about 3 m to 15 m (10' to 40'). A potentiometer can be adjusted clockwise or counter-clockwise to increase or decrease the range respectively. For optimum performance, range should be adjusted so that it effectively protects the dimensions of the intended area. The LC-100-PI is factory-set for 84%.

## FEATURES

- Dimensions: 92 mm x 62.5 mm x 40 mm (3.62" x 2.46" x 1.57")
- Weight: 58 gr (2.04 oz)
- Detection Method: Quad (Four Element) PIR
- Power Input: 8.2 to 16 VDC
- Current Draw (Standby): 8 mA ( $\pm 5\%$ )
- Current Draw (Active): 10 mA ( $\pm 5\%$ )
- Tamper Switch: Contact Rating: 0.1 Amp @ 28 VDC
- RFI Protection: 30 V/m 10-1000 MHz EMI
- Protection: 50,000 V



## ORDERING INFORMATION

BMD501	Digital PIR Detector with Pet Immunity
BMD-MB	Swivel mounting bracket
BMD-F	Filter for 10K LUX (set of 12)
BMD-CL	Curtain Lens Set (set of 12)

# BMD503-504



## Digital PIR and Microwave Detector with Anti-Masking and Pet Immunity BMD503 and BMD504

Whether it's a residential or commercial installation, the BMD500 series of detection devices readies a security system for the unexpected by providing protection for every room, corner and corridor. The BMD503 is a dual-technology motion detector that combines passive infrared and microwave detection with anti-masking features. The anti-masking feature prevents intruders from defeating the detector by covering its field of view. The BMD504 dual-technology motion detector with out anti-masking offers reliable prevention of false alarms at an economical price

- Anti-masking (BMD503 only)
- Form 'A' alarm contact and tamper switch
- Digital signal analysis
- Slim profile design
- Features ABS plastic for shock and impact protection
- Pet immunity up to 25 kg (55 lbs)
- Exceptional white light immunity
- Quad Linear Imaging Technology for sharp analysis of body dimensions and differentiation from backgrounds and pets
- Microwave detection based on Doppler concept
- Unique microwave motion sensor module with micro-strip patch antenna
- Advanced ASIC-based electronics
- Height installation calibration free
- 2-way PIR/microwave sensitivity adjustment
- User-friendly installation with or without swivel-mount bracket; (bracket sold separately)

### RELIABLE PROTECTION

Advanced ASIC-based processing provides both superior detection and false alarm rejection to help keep people and possessions secure. Quad Linear Imaging Technology provides sharp analysis of body dimensions and differentiation from backgrounds and pets.

### DIGITAL SIGNAL PROCESSING

Effective motion detection is dependent on a sensor's ability to identify intruders and provide true false alarm resistance. The LC series of detection devices pinpoints intruders through digital signal processing. Digital information is more accurately analyzed using software and is not subject to signal degradation caused by amplification, noise, distortion or signal clipping.

### ANTI-MASKING

The BMD503 features PIR and microwave sensors. The microwave sensor of the detector features two channels, one for microwave (MW) detection, and the other for anti-masking detection. The anti-masking feature works by sensing intruders who approach the detector from the distance of 0.8 m and closer. If the field of view of the detector is intentionally obscured by an intruder, the anti-masking relay opens (switches from NC to NO) and remains in this status until the PIR sensor is activated.

### PET IMMUNITY

Highly accurate sensors are able to provide quality detection while at the same time ignoring pets weighing up to 25 kg (55 lbs).

### FAST AND EASY INSTALLATION

Once the detector is installed at the recommended height, installers simply conduct a brief walk-test, make any necessary adjustments, and the unit is ready to perform. Highly visible LEDs can be viewed at a glance and help the installer identify the detection range from any distance or angle within the coverage pattern.

### LOCATING THE DETECTOR

When choosing a location for the detector, be sure to consider the following:

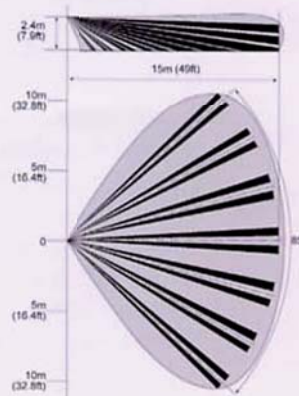
- Do not aim the detector at reflective surfaces
- Avoid locations that are subject to direct high air flow
- Do not locate the detector in the path of direct or reflected sunlight
- Do not place next to large obstructions that may limit the coverage area

### DETECTION RANGE

The detection range of the motion detector is adjustable to about 3 m to 15 m (10' to 40'). A potentiometer can be adjusted clockwise or counter-clockwise to increase or decrease the range respectively. For optimum performance, range should be adjusted so that it effectively protects the dimensions of the intended area. The BMD503 and BMD504 are factory-set for 65%.

## FEATURES

- Dimensions: 118 mm x 62.5 mm x 41 mm (4.65" x 2.46" x 1.61")
- Weight: 97 gr (3.42 oz)
- Detection Method: Quad (Four Element) PIR & Microwave Pulse Doppler
- Power Input: 8.2 to 16 VDC
- Current Draw (Standby): 18 mA
- Current Draw (Active): 25.5 mA
- Tamper Switch: Contact Rating...0.1 Amp @ 28 VDC
- RFI Protection: 30 V/m 10-1000 MHz
- EMI Protection: 50,000 V



## ORDERING INFORMATION

BMD503	Digital PIR and Microwave Detector with Anti-Masking and Pet Immunity (10.525 GHz)
BMD504	Digital PIR and Microwave Detector with Pet Immunity (10.525 GHz)
BMD-MB	Swivel mounting bracket
BMD-F	Filter for 10K LUX (set of 12)
BMD-CL	Curtain Lens Set (set of 12)

# BMD500 SERIES



## NEW BMD500 Series of Detection Devices

### SENSIBILITY AND DESIGN



The new BMD500 detector series guarantees the highest levels of reliability, catch performance and false alarm immunity.

- BMD501: Infrared detector with Pet immunity (up to 25 kg)
- BMD503/504: Double Technology Detectors with Pet immunity
- Advanced ASIC technology
- Digital Analysis Signal
- Quad Linear Imaging Technology
- Anti-masking (BMD503)
- Adjustment of PIR range from 3 to 15 m
- CE approved
- Linear Design
- User-friendly Installation



[www.ais-security.be](http://www.ais-security.be)