

The powerful synthesis of PIR and MW technologies with integrated anti-masking detection

Visonic's Duet AM detector with anti-masking combines digital PIR and microwave technologies, to optimize intrusion detection for industrial environments.

Advanced infrared and microwave technologies with self test motion simulation ensure total reliability

Enhanced anti-masking and tamper-proof mechanism assures immunity to masking and tampering

New microstrip DRO stabilized microwave design with unique patented cylindrical lens technology provides superior range, detection and coverage

Patented True Motion Recognition (TMR™) enhances detection processing and dramatically reduces false alarms

Remote test input and two separate relays ensure easy installation and compliance to latest European EN50131-2 rules



Duet AM

Advanced dual-technology detector with integrated anti-masking for industrial environments

FEATURES

- Superior coverage extended to 20 meters
- Anti-masking for tamper-proof security
- Remote test input for easy installation and testing
- Separate solid state relays for 'trouble/masking' and 'alarm'
- Combined Fresnel and cylindrical optics (patented)
- Look-down creep zone lens
- Easy to use three-position vertical adjustment
- Compliance with the latest European EN50131-2 security standards

Duet AM dual-technology detector incorporates Visonic's digital passive infrared and microwave technologies, guaranteeing long-range coverage, detection accuracy and superior false alarm immunity.

The PIR sensor utilizes new advanced Digital Signal Processing (DSP) algorithms, which eliminate the many types of noise and interference that affect the reliability of traditional detectors. Advanced technology embedded in the microwave sensing module increases coverage flexibility and reliability. Unique patented lens design combines Frensel and cylindrical optics for superior detection range. Solid state relays achieve immunity to magnetic field, high reliability and silent operation.

Visonic's patented True Motion Recognition (TMR™) algorithm and advanced circuitry enhance detection of human motion, dramatically reduce false alarms, and guarantee long-term performance. Featuring Visonic's improved anti-masking technology, the Duet-AM detector utilizes the MW channel to detect and alert upon masking and tampering attempts.

To aid the installer, Visonic has added key features for easy installation - separate trouble and alarm dry contact relays, remote test input, easy to use three-position vertical adjustment, and EOL terminal. Software selftests with true motion simulation of both MW and PIR channels assure greater reliability.

Its accurate long-range detection, reliable performance and easy installation make Duet AM the ideal detector for industrial applications.

SPECIFICATIONS

ELECTRICAL

Input Voltage: 9 to 16 VDC

Current Drain @ 12 VDC: 21 mA standby, 29 mA max.

OPTICAL

Max. Coverage: 20×20 m (60×60 ft) / 90° (field of view Vertical Adjustment: FAR, MID and NEAR, by sliding the circuit board along a 3-position scale.

MICROWAVE

Oscillator: Microstrip DRO-stabilized Doppler sensor Frequency: 10.525 GHz or 10.687 GHz (in the UK only) Detection Range: Adjustable from 25% to 100% (5 m to 20 m)

ALARM, TAMPER & TROUBLE DATA

Alarm Relay: Solid state, N.C., 0.1 A resistive / 30 VDC; 35Ωmax. internal resistance

Alarm Duration: 2 to 3 seconds

Tamper Switch: N.C., rated at 50 mA resistive / 30 VDC Trouble Relay: Solid state, N.C., 0.1 A resistive / 30 VDC; 35Ω max. internal resistance Masking Detection Delay:

About 60 seconds MOUNTING

Form: Surface or corner (no brackets); surface, corner and ceiling with brackets Height: 2 - 2.6 m (6.5 - 8.5 ft) without bracket, 2 - 3.6 m (6.5 - 12 ft) with bracket.

ENVIRONMENTAL

RFI Protection: >30 V/m up to 1000 MHz. Operating Temperatures: -10°C to 50°C 14°F to 122°F. Storage Temperatures:

-20°C to 60°C -4°F to 140°F.

PHYSICAL

Size (H X W X D): 123 x 76 x 48 mm (4-13/16 x 3 x 1-7/8 in.) Weight: 145 g (4.5 oz).

PATENTS

U.S. Patents: 6,211,522 and 5,936,524 (other patents pending)

Visonic reserves the right to change specifications without prior notice. Full warranty statement availble upon request.



