



# **DT-7550CEU**

# **DUAL TEC® Motion Sensor with anti-mask technology**

Designed for high security commercial installations where masking is a concern, Honeywell's DUAL TEC<sup>®</sup> DT-7550CEU Motion Sensor combines DualCore<sup>™</sup> signal processing with MaskAlert<sup>™</sup> anti-mask technology to ensure superior performance.

# **Features**

• Superior Anti-mask Protection Through a combination of PIR and microwave signal processing, MaskAlert technology quickly detects intentional and accidental masks or blocks. The sensor sends a trouble signal whenever it encounters mask conditions. Powerup anti-mask detects mask conditions at start-up to reduce sensor security breaches during installation, servicing, and power outages.

# Advanced DualCore Signal Processing

DualCore signal processing analyzes PIR and microwave signals through the DT7550's microcontroller. DualCore processing supports a multitude of advanced functions, including concurrent diagnostics, digital fluorescent light interference filter, digital adaptive microwave threshold, adaptive baselines, and bi-directional temperature compensation.

# Superb Detection Through K-Band Technology

K-Band microwave technology delivers sharp detection without holes or weak spots. The custom made source offers pattern shaping to fill the protected area with a broad, balloon-shaped pattern which matches the PIR pattern. It also offers pattern containment to reduce the penetration of microwave energy through walls.

# • Self-Testing for Consistently Reliable Operation

Concurrent diagnostics assure optimum performance and reliability. Self-testing is performed upon power-up and at least once every hour on the PIR, microwave, PCB circuitry and temperature compensation circuitry.

### DualCore Signal Processing

PIR and microwave signals are analyzed in the microcontroller in multiple domains, including amplitude, time, frequency and duration to provide superior false alarm immunity without compromising detection. DualCore processing not only supports alarm functions, but also advanced temperature compensation, diagnostics, and false alarm features.

#### Uniform Sensitivity Optics

The custom-designed Fresnel lens provides the same sensitivity for human targets at the edge of the pattern as exists directly in front of the sensor, giving the DT7550 consistent coverage throughout the protected area.

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# **Specificaties**

Range	15m x 18m
Alarm Relay	Energized Form C 125mA, 25V dc, 20 Ohm series resistor
Mounting Height	2.3m optimal
Trouble Relay	De-energized Form B (NC 125mA, 25V dc
Tamper	(NC) 50mA, 24V dc
Power Requirements	7.5–16V dc – 30mA typ., 40mA max. at 12V dc AC Ripple: 3V peak-to-peak at 12V dc nominal
Frequencies	24.125GHz (K-Band)
PIR White Light Immunity	6,500 Lux typical
RFI Immunity	30V/m, 10MHz – 1000MHz
Operating Temperature	-10° to 55°C 5% – 95% relative humidity (non-condensing)
Self-Test Intervals	Microwave Supervision: Continuous PIR Self-Test: Once every hour Temperature Compensation: Every 30 seconds
PIR Fields of View	22 long range, 12 intermediate, 6 lower, 4 look-down
Dimensions	11.9cm x 7.1cm x 4.2cm
Sensitivity	Low (Pulse Count 2): 3-4 steps High (Pulse Count 1): 2-3 steps
Temperature Compensation	Advanced Dual Slope Temperature Compensation

# **Detection patterns:**





• Side View



# **Ordering:**

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# Accessories:

#### SMB10

Universal White Swivel Mount Bracket (5 pack)

## SMB10C

Universal White Ceiling Mount Bracket (5 pack)

#### SMB10T

Tampered Universal White Swivel Mount Bracket (5 pack)

### **Honeywell Security & Custom Electronics**

Netwerk 121 1446 WV Purmerend The Netherlands Tel : +31 (0) 299-410200 Fax : +31 (0) 299-410201 www.honeywell.com/security/nl

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