# DT8012F24/16F24 MOTION SENSOR

### **DUAL TEC® Motion Sensor with/without Pet Immunity**

Designed with the installer in mind, the DT8012F24/DT8016F24 high performance small form factor motion detectors offer a trouble-free, out of the box experience to simplify and reduce the installation time. With the DUAL TEC DT8012F24 and DT8016F25, optimum performance is achieved using custom developed extended range Fresnel optics, look down, cover and wall tamper, and selectable pet immunity\*.

Leading edge sensing technologies and a wide range of models to suit the requirements of most applications, Honeywell's family of Dual Tec 24G motion detectors will maximise intruder detection while diminishing false alarms.



#### **FEATURES**

- Sleek, sturdy housing -The sleek, sturdy housing fits into a variety of residential and building styles and blends with any room décor. ABS plastic is used for shock and impact protection. The housing offers a convenient wiring channel, knockouts for mounting and wiring, and easy access to wiring terminals. To make installation easier, mounting screws are conveniently secured inside the detector rear housing
- Sealed optics and electronics The optics and electronics are assembled into the front enclosure and sealed with a protective cover to prevent damage during installation. The sealed optical chamber also prevents drafts and insects from affecting the detector

- Integrated screw retention features To mount the detector on the wall, the installer will insert the screw into the integrated mounting feature where it will be automatically held in place, making mounting the detector quick and
- 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 detector,
  giving these detectors
  consistent coverage
  throughout the protected
  area
- Wall-to-wall coverage –
   Wide and long detection
   coverage with look-down
   zone for coverage range
   protection that exceeds
   similar products in the
   market
- Advanced DualCore signal - Processing (DUAL TEC®) DualCore signal processing analyzes PIR and microwave signals through the microcontroller. It supports a multitude of advanced functions, including concurrent diagnostics, digital fluorescent light interference filter, digital adaptive microwave threshold, adaptive baselines and bidirectional temperature compensation
- False alarm immunity The DUAL TEC 24G family is designed to meet false alarm standards including NF&A2P two shields and EN50131-2-2 or EN50131-2-4. Microprocessor controls help filter out real signals from false sources
- Pet-friendly selectivity Installers can turn pet immunity on or off with the flip of a DIP switch. When pet immunity is enabled, the detector can distinguish between signals caused by humans and signals caused by pets up to 45 kg\*

- Patented mirror look down – Provides better coverage up close with multiple zones in the lookdown area
- PIR white light immunity A patented black bug guard reduces false alarms by providing white light immunity. This helps reduce false alarm problems caused by lights, flashlights or reflective objects
- Flexible mountings The IS3000 and DT8000 family mounts on walls, in corners or on ceilings, with heights from 2.1 m to 2,7 m. The DT24G family of sensors works with the SMB10 family of swivel brackets

<sup>\*</sup> Pet immunity available on DT8012F24

# DT8012F24/16F24 - DUAL TEC MOTION SENSOR

TABLE 1. SPECIFICATIONS	
Characteristic	Parameter
Detection type	PIR + Microwave
Range (DT8012F24)	12 m × 17 m
Range (DT8016F24)	16 m × 22 m
EOL resistors	Alarm & tamper : 1K, 2.2K, 4.7K & 5.6K ; default = 1K
Detection zones	36 long range, 46 intermediate, 18 lower, 2 look down
Walk test	30 s
Microwave frequency	K-Band : 24.200 GHz
RFI immunity	20 V/m 10 to 1000 MHz, 15 V/m 1000 to 2700 MHz
Mounting height	2.3 m optimal
Power requirements	9 Vdc to 15 Vdc
Consumption	24 mA typical, 30 mA maximum, 12 Vdc; AC ripple: 3 V peak-to-peak at nominal 12 Vdc
Alarm relay	Energized form A; 30 mA, 25 Vdc, 22 Ohms resistance maximum. Alarm relay duration: 3 seconds
Tamper	Cover & wall; (NC with cover installed) Form A; 30 mA, 25 Vdc; magnetic field
Operating temperature	-10°C to 55°C
Temperature compensation	Advanced dual slope
Relative humidity	5 % to 95 %, non-condensing
PIR white light immunity	10,000 Lux typical
Fluorescent light filter	50 Hz/60 Hz
Dimensions	9,85 cm H × 5,7 cm W × 4,4 cm D
Weight	94,2 g / 3.32 oz (net weight)
Weight Pet Immunity (DT8012F24)	45 kg
Approval (DT8012F24)	EN50131-2-4 Grade 2 Class II, NF&A2P two shields
Approval (DT8016F24)	EN50131-2-4 Grade 2 Class II, NF&A2P two shields

#### Inside View



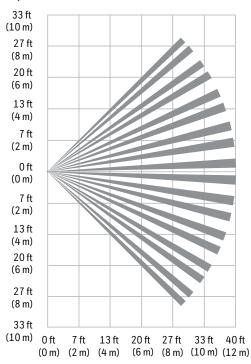
TABLE 2. ORDERING INFORMATION	
Part Number	Description
DT8012F24	DUAL TEC Motion Sensor, 12 m, PI, 24 GHz
DT8016F24	DUAL TEC Motion Sensor, 16 m, 24 GHz
SMB10	White swivel mount bracket (5 pack)
SMB10C	White ceiling mount bracket (5 pack)
SMB10T	Tampered white swivel mount bracket (5 pack)

## DT8012F24/16F24 - DUAL TEC MOTION SENSOR

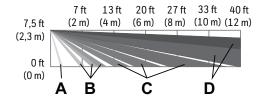
#### **DETECTION PATTERNS**

#### DT8012F24

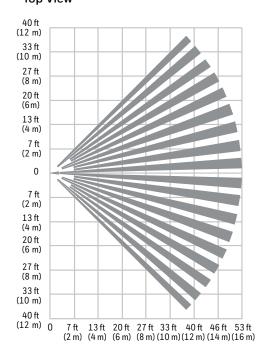
#### **Top View**



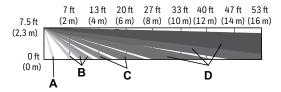
#### Side View



#### DT8016F24 **Top View**



#### Side View



#### For More Information

hwll.co/securityUK

#### Honeywell Commercial Security

Building 5 Carlton Park King Edward Avenue Narborough, Leicester

LE19 OLF Tel: +44 (0)1163 500714 www.honeywell.com

DUAL TEC $^\circ$  is a trademark or registered trademark of Honeywell Inrternartional Inc. in the United States and other countries. All other trademarks are property of their respective owners.

Honeywell reserves the right, without notification, to make changes in product design or specifications.

THE **FUTURE** IS **WHAT** WE **MAKE IT** 

