

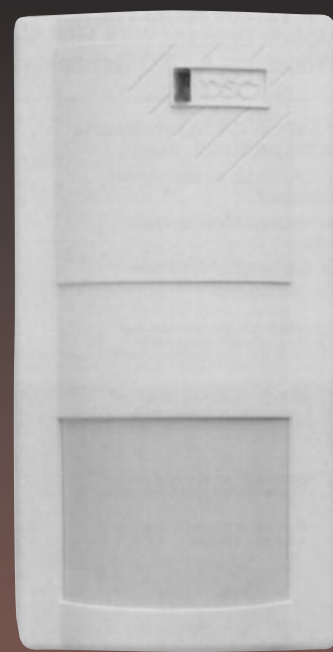
FORCE 2[®]

PIR/MICROWAVE MOTION DETECTOR

FEATURES:

- Multi-level PIR signal processing**
- Digital Microwave signal processing
- DRO microwave technology for low current and reliable operation
- MOV transient/static protection
- High RF immunity with SMD construction
- Exceptional white light immunity
- Microcontroller low voltage reset circuit
- Optional tamper switch
- Optional Form 'C' alarm contacts
- Digital temperature compensation (F2-200, F2-220 only)
- Adjustable microwave detection pattern to match room size (F2-200, F2-220 only)

** patent pending



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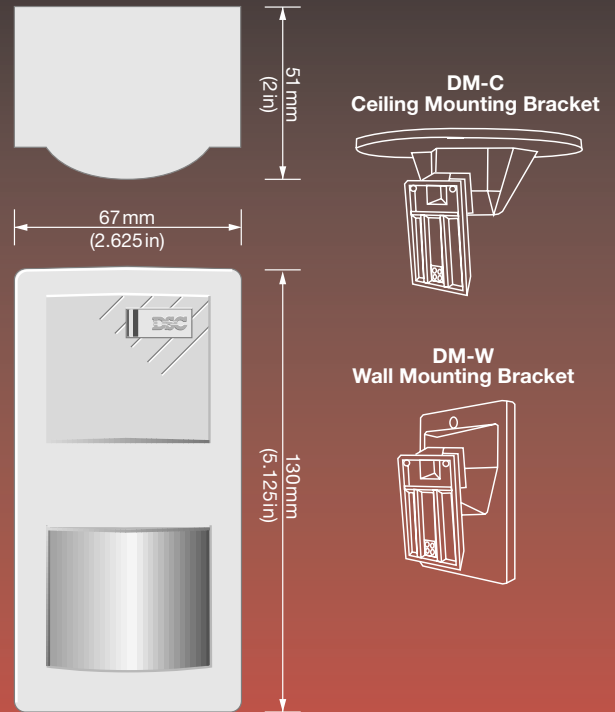
FORCE 2 motion detectors are Dual Detectors employing both Microwave (MW) and Passive Infrared (PIR) motion sensors. The sensors are combined through a microprocessor to provide "intelligent" motion detection designed to eliminate "single detector" false alarms.

Significant new technical features such as Multi-Level PIR signal processing, digital temperature compensation, a high reliability DRO microwave sensor, and digital MW signal analysis combine for a new level of detection sensitivity, stability, and false alarm immunity.

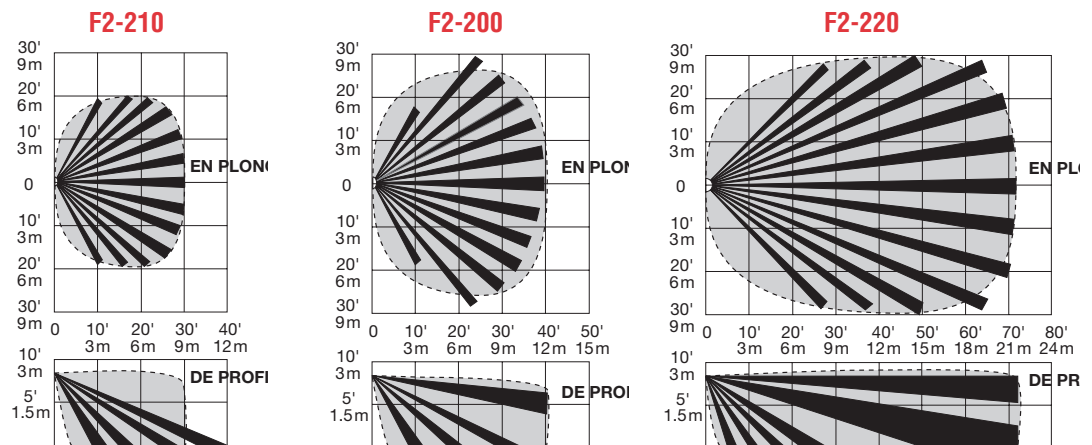
The PIR and MW systems are each designed as independent, high quality motion detectors. When combined, the result is a detector with unmatched performance.

SPECIFICATIONS*

- ELECTRICAL :**
 - Operating voltage.....9.5 to 14.5Vdc
 - Ripple tolerance.....3VP-P at 12VDC
 - Stand-by current30mA at 12VDC
 - Alarm current30mA at 12VDC
 - Alarm contactsForm 'A' (standard)
 -Form 'C' (optional)
 - Tamper contactOptional
 - Contact ratings100mA at 24 Vdc
 - Alarm contact series resistance10Ω 0.25W
- OPERATION :**
 - Alarm duration2 seconds
 - Walk speed0.5 to 10ft/s
 -(0.15 to 3.0m/s)
 - Nominal mounting height7.5ft (2.3m)
 - JumperAlarm LED on/off
- IMMUNITY :**
 - RF immunity30V/m over range 0.01 to 1200MHz
 - Transients at terminals.....2.4kV at 1.2 joules
 - Static discharge immunity25kV
 - White light20,000Lux at the detector
 - Operating temperature32° to 122°F (0° to 50°C)
 - Humidity5% to 95% RH non-condensing



- F2-200, 210, 220 - with Form 'A' alarm contact
- F2-201, 211, 221 - with Form 'A' alarm contact & tamper switch
- F2-202, 212, 222 - with Form 'A' alarm contact & tamper switch



Coverage (max. L x max. W) : 30 x 40ft (9 x 12m)
 MW range adjust :
 Temperature compensation :

40 x 50ft (12 x 15m)
 10 to 40ft (3 to 13m)
 over entire operating range

70 x 60ft (21 x 18m)
 30 to 70ft (9 to 21m)
 over entire operating range

ARCHITECTS SPECIFICATIONS

* Specifications are subject to change without notice

Motion detectors shall be the dual detector type, employing both Microwave and Passive Infrared motion sensors. To prevent false alarms, both sensors must detect motion within a 10 second period of each other before any alarm is sent.

For additional reliability and false alarm protection, detectors shall employ MOV transient/static protection, SMD construction for high RF immunity, protection from white light, and microcontroller low voltage reset circuit.

Short, medium, and long range motion detectors shall be selected as required to suit the room in which they are to be installed. Medium and long range detectors shall have adjustable microwave detection pattern and built-in temperature compensation.

Detectors shall have built-in tamper switch and form 'A' or 'C' alarm contacts as required to suit the application.