

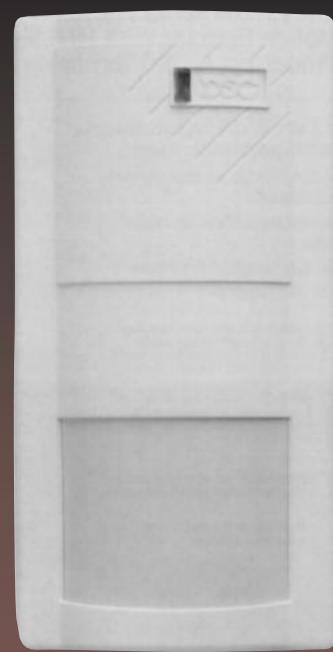
FORCE 2[®]

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



Force 2[®]

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 :

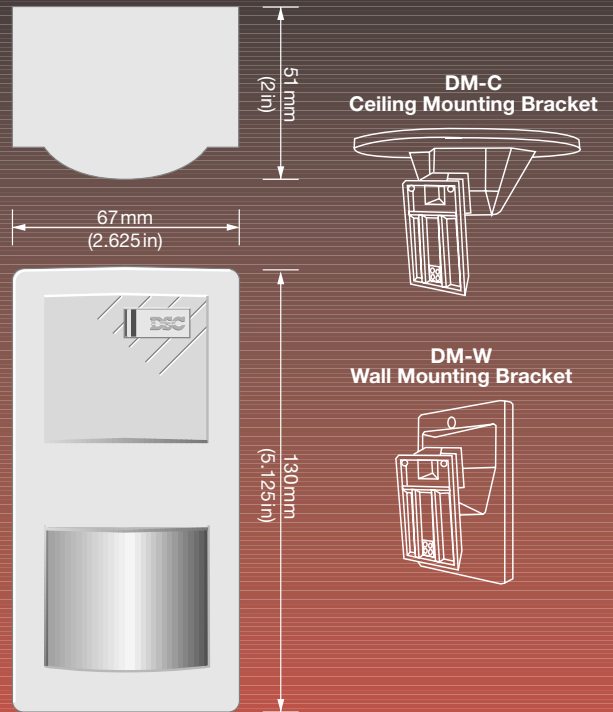
Operating voltage.....	9.5 to 14.5Vdc
Ripple tolerance.....	3VP-P at 12Vdc
Stand-by current	30mA at 12Vdc
Alarm current	30mA at 12Vdc
Alarm contacts	Form 'A' (standard)
.....	Form 'C' (optional)
Tamper contact	Optional
Contact ratings	100 mA at 24 Vdc
Alarm contact series resistance	10Ω 0.25W

OPERATION :

Alarm duration	2 seconds
Walk speed	0.5 to 10ft/s
.....	(0.15 to 3.0m/s)
Nominal mounting height	7.5ft (2.3m)
Jumper	Alarm LED on/off

IMMUNITY :

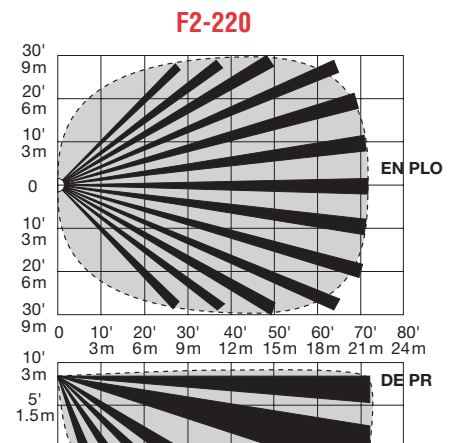
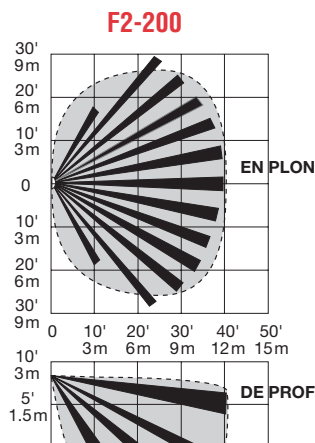
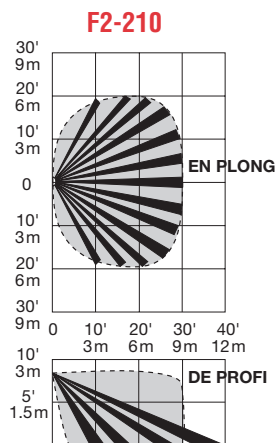
RF immunity	30V/m over range 0.01 to 1200MHz
Transients at terminals.....	2.4kV at 1.2 joules
Static discharge immunity	25kV
White light	20,000Lux at the detector
Operating temperature	32° to 122°F (0° to 50°C)
Humidity	5% to 95% RH non-condensing



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.



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