

DS825 and DS840 TriTech Microwave/PIR

DS825	This model is 25 ft. (7.5 m) and does not include the optional tamper switch.
DS840	This model is 40 ft. (13 m) and does not include the optional tamper switch.
DS825T	This model is 25 ft. (7.5 m) and includes a tamper switch.
DS840T	This model is 40 ft. (13 m) and includes a tamper switch.



The DS825 and DS840 are microprocessor-based TriTech Passive Infrared/Microwave Intrusion Detectors that provide immunity to false alarms caused by pets. Passive Infrared and Microwave processing provides excellent catch performance with freedom from false alarms.



■ Features

- Artificial Intelligence*
- Pointable Mirrored Optics
- 4 Mounting Options

- Supervised Microwave and PIR*
Patented fully supervised microwave and PIR circuitry provides single technology coverage in the event the microwave subsystem fails.
- Pet/Animal Immunity*
The detector is able to distinguish between signals caused by humans and signals caused by pets (one dog up to 100 lbs. / 27 kg., up to 10 cats, and other small animals such as birds and rodents). This provides immunity to false alarms while maintaining proper catch performance of human targets.
- Temperature Compensation
The sensor provides compensation at critical temperatures.
- UL Listed, ULC Listed, FCC Certified, CE

* patented

■ Basic Function

Signal Processing

- Uses passive infrared and microwave technologies to provide an alarm condition when both fields of protection are simultaneously activated. Alarm signals must meet the signaling requirements of both technologies to activate an alarm. Adjustable PIR and microwave sensitivity.

First Step Processing (FSP)

- First Step Processing (FSP) allows virtually instant response to human targets without sacrificing false alarm immunity to other sources. By adjusting its sensitivity based upon signal amplitude, polarity, slope and timing, FSP eliminates the need for the installer to select the sensitivity level for the application. Each sensor is processed individually and both must agree there is an alarm before the alarm relay is activated.

Microwave Signal

- Pattern recognition circuitry identifies and ignores repetitive false alarm sources. Adaptive Processing adjusts to background disturbances. This helps to reduce false alarms while maintaining catch performance.

Test Features

- Externally visible, tricolor alarm LED indicates each technology independently and flashes to indicate a trouble condition.



Certification

UL Listing	FCC Listing
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Patents

4,660,024	5,077,548
4,764,755	5,262,783
5,208,567	5,670,943
5,450,062	

Optional Accessories

	B335 Low Profile Mount Bracket Shipped in packages of 3.
	B338 Ceiling Mount Bracket

Technical Specifications

Power Requirements	6 to 15 VDC, 16 mA @ 12 VDC
Alarm Output	Normally Closed reed relay rated at 3.0 watts, 125 mA @ 28 VDC for resistive loads and protected by a 4.7 ohm resistor in the common "C" leg.
Tamper Output	Normally Closed tamper switch. Contacts rated at 28 VDC, 0.125 Amp maximum.
Microwave Frequency	DS825/DS825T: 10.525 GHz (UL Listed) DS840/DS840T: 10.525 GHz (UL Listed) DS825TA/DS840TA: 10.687 GHz (export only, not UL Listed) DS825TB/DS840TB: 9.9 GHz (export only, not UL Listed)
Radio Frequency Interference (RFI) Immunity	No alarm or setup on critical frequencies in the range from 26 to 950 Megahertz at 50 v/m.

Storage & Operating Temperatures	-40°F to +120°F (-40°C to +49°C). For UL Listed installations, +32°F to +120°F (0°C to +49°C).
Enclosure Design	Low profile, high impact, ABS white plastic enclosure. Measures (HxWxD) 4.25 in. x 2.75 in. x 1.8 in. (10.8 cm x 7 cm x 4.6 cm).
Standard Mounting	Surface or corner mount. Recommended mounting height is 6.5 (2 m).
Optional Mounting	B335 Low Profile Mount Bracket, B338 Ceiling Mount Bracket

Coverage

Standard Coverage

DS825/DS25T/DS825TA/DS825TB Broad: 25 ft. x 25 ft. (7.5 m x 7.5 m)

DS840/DS840T/DS840TA/DS840TB Broad: 40 ft. x 40 ft. (13 x 13 m)

