

DS415i and DS435i Single Beam Photoelectric Detectors

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- ▶ 150 m (500 ft) range
- ▶ Friction lock optics
- ▶ Alarm retransmission
- ▶ Alarm memory (DS435i only)
- ▶ Inhibit wiring (DS435i only)

This single-beam photoelectric detector series consists of the surface mount DS415i and DS435i Detectors with their separate transmitters and receivers. The transmitter emits one invisible infrared beam to the receiver. If the beam is broken, the receiver signals an alarm. The detectors operate in either AC/DC or DC-only mode according to the following table:

Product	AC	DC
DS415i Detector	•	•
DS415iDC Detector		•
DS435i High Performance Detector		•

Functions

Alarm Memory (DS435i only)

Provides indication of stored alarms for use in multiple unit applications by latching the alarm LED at the receiver. Controlled by a switched voltage from the control panel.

Alarm Retransmission

Supervised alarm circuit transmitter that allows connection of normally open or normally closed devices such as magnetic contacts or relays from other detectors. Their condition is relayed to the receiver by transmitter shutdown.

Inhibit Wiring (DS435i only)

Optional signal synchronization wire between transmitter and receiver. Prevents receiver from being activated by other sources such as another transmitter. Units must have a common ground connection.

Test Features

- Alarm LED
- Margin test switch to assist with alignment

Certifications and approvals

Region	Certification	
USA	UL	DS415i and DS435i: ANSR: Intrusion Detection Units (UL639)
Canada	ULC	ANSR7.BP1448 Intrusion-detection Units Certified for Canada

Technical specifications

Photobeam

DS415i Range: 150 m (500 ft)

DS435i Range: 150 m (t)

Enclosure Design

Dimensions: 16.2 cm x 7.7 cm x 6.6 cm
(6.375 in. x 3 in. x 2.6 in.)

Material: High impact Lexan cover with die cast zinc base.

Environmental Considerations

Operating Temperature: -18°C to +49°C (0°F to +120°F).

For UL installations the operating range is 0°C to +49°C (+32°F to +120°F), indoor use.

Mounting

Location: Surface mount

Pointability: ±90° horizontal, ±20° vertical.

Power Requirements

Input Power:

- AC Operation: 12 VAC
- DC Operation: 8 VDC to 14.5 VDC

Transmitter Current Draw:

- DS415i
AC Operation: 68 mA RMS with battery
DC Operation: 8 mA at 12 VDC
- DS415iDC and DS435i
DC Operation Only: 8 mA at 12 VDC

Receiver Current Draw:

- DS415i
AC Operation: 95 mA RMS with battery
DC Operation: 33 mA at 12 VDC
- DS415iDC
DC Operation Only: 33 mA at 12 VDC
- DS435i
DC Operation Only: 20 mA at 12 VDC

Alarm Output: Form C contacts rated at 3.0 W, 125 mA at 28 VDC for resistive loads.

Tamper Output: Form A contact rated 125 mA at 28 VDC.

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Ordering information

DS415i Detector

Provides AC/DC operation and battery backup. Includes a P333 Standby Battery. The range is 150 m (500 ft).

Order number **DS415i**

DS415iDC Detector

Provides DC operation only. The range is 150 m (500 ft).

Order number **DS415iDC**

DS435i High Performance Detector

Provides DC operation only, alarm memory, and inhibit wiring. The range is 150 m (500 ft).

Order number **DS435i**

Accessories

P333 Rechargeable Battery Pack

Rechargeable (Nickel-Cadmium) battery pack rated for 3.6 V, 0.65 Ah.

Order number **P333**

TC6000 Test Cord

Test cord for connecting a compatible detector's test pins to a voltmeter. It is 4.6 m (15 ft) long.

Order number **TC6000**

TR12 Transformer

12 VAC, 0.93 A transformer.

Order number **TR12**

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