

# DS416 Single-Beam Photoelectric Detector

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Invented for life



- ▶ Single beam detection
- ▶ 10 m (30 ft) range
- ▶ Internally pointable optics
- ▶ AC/DC operation

The pole or surface mount DS416 Single Beam Photoelectric Detector is designed for indoor and outdoor applications. Consisting of a separate transmitter and receiver, it is designed to activate an alarm when an intruder passes within the direct line of sight between the transmitter and receiver. Its compact design makes it an ideal choice for short range outdoor applications.

## Functions

### Test Features

Red alarm LED activates upon detection. Green LEDs indicate normal operation.

## Certifications and approvals

Region	Certification	
Europe	CE	89/336/EEC, EN50081-1: 1992 (EN55022: 1998, ClassB), EN50130-4: 1995 +A1: 1998, EN61000-4-2: 1995, EN61000-4-3: 1995, EN61000-4-4: 1995, EN61000-4-5: 1995, ENV50141: 1993
USA	UL	ANSR: Intrusion Detection Units (UL639)

## Technical specifications

### Photobeam

Outdoor Range:	10 m (30 ft)
Beam:	Pulsed infrared; 950 nm, 1 kHz
Response Time:	100 ms minimum

### Environmental Considerations

Operating Temperature:	-20°C to +50°C (-4°F to +122°F)
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### Mounting Considerations

Location:	Pole mount or surface mount
Pointability:	Coverage is adjustable $\pm 90^\circ$ horizontally, $\pm 5^\circ$ vertically.

### Enclosure Design

Dimensions:	14 cm x 8.6 cm x 10.7 cm (5.5 in. x 3.4 in. x 4.2 in.)
Material:	Smoked Lexan® housing.

## Power Requirements

Current Consumption (at 12 VDC):	Transmitter: 7 mA maximum Receiver: 25 mA maximum
Voltage:	10 VDC to 26 VDC; 8 VAC to 18.5 VAC.
Relay:	Form C alarm-activated contacts rated at 0.5 A maximum at 120 VAC; 1 A maximum at 24 VDC (resistive load).
Tamper:	Normally-closed with cover in place; rated 0.5 A at 30 V.

## Trademarks

Lexan® is either a trademark or registered trademark of General Electric Company in the United States and other countries.

## Ordering information

### DS416 Single-Beam Photoelectric Detector

Provides single beam detection and 10 m (30 ft) range.

Order number **DS416**

### Accessories

#### MP1 Metal Pole, 1 m (3 ft)

Straight metal poles measuring 1 m (3 ft) for pole mounting photoelectric detectors. Shipped in packages of two.

Order number **MP1**

#### MP2 Metal Pole, 1.2 m (4 ft)

Straight metal poles measuring 1.2 m (4 ft) for pole mounting photoelectric detectors. Shipped in packages of two.

Order number **MP2**

#### MP3 L-Curved Metal Pole

Curved metal poles for mounting to vertical surfaces for pole mounting photoelectric detectors. Shipped in packages of two.

Order number **MP3**

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