



DS484Q and DS486Q Quad Beam Photoelectric Detectors



- ▶ Quad beams
- ▶ Easy alignment (sounder, LEDs, and voltage readings)
- ▶ Two coverage ranges
- ▶ Four mounting options with optional mounting poles
- ▶ Environmental discrimination circuit
- ▶ Multiple channel operation
- ▶ And-Or mode selection

The DS484Q and DS486Q Detectors have separate transmitters and receivers. The transmitter sends an invisible infrared beam to the receiver. If the beam is broken, the receiver signals an alarm. Multiple channel operation provides increased system flexibility.

Functions

Environmental Discrimination Circuitry

Monitors gradual loss of signal due to dust, fog, rain, snow, and so on. Normally-closed output opens when signal loss reaches 70%. Can be field configured to bypass alarm relay when activated.

Test Features

The transmitters have three features for use in alignment and testing.

- Voltage output (requires a voltmeter)
- Sounder for alignment
- LEDs (alignment)

Multiple Channel Operation

Configure the detectors for up to eight different channels. This allows multiple units to be used near one another without the possibility of receiver cross-talk.

This is particularly useful when stacking multiple beam sets.

And-Or Mode Selection

You can configure the detectors to cause an alarm when all four beams are blocked, or when either the upper two beams or lower two beams are blocked. This configuration detects smaller objects and eliminates the possibility of someone crawling through the beam.

Certifications and Approvals

UL639, Intrusion Detection Units

CE

Installation/Configuration Notes

Mounting Considerations

Mount these detectors on solid vibration free surfaces or poles.

Technical Specifications

Photobeam

Selectable Beams:	Two groups by four channels
Maximum Outdoor Coverage DS484Q:	120 m (400 ft)
Maximum Outdoor Coverage DS486Q:	200 m (660 ft)
Response Time:	Selectable response time of 35 ms to 700 ms
Beam Interrupt Time:	Adjustable from 50 ms to 500 ms

Enclosure Design

Material:	Polycarbonate
Dimensions:	35 cm x 10 cm x 11 cm (13.75 in. x 4 in. x 4.1 in.)
Receiver Weight:	1.2 kg (2.64 lb)
Transmitter Weight:	1.2 kg (2.64 lb)

Environmental Considerations

Operating Temperature:	-25° C to + 55° C (-13°F to + 130° F)
IP Rating:	IP 54 (protection against dust; protection against splashing water)

Mounting Considerations

Location:	Surface or pole mount
Pattern Pointability:	±90° horizontal, ±10° vertical

Power Requirements

Voltage:	10.5 VDC to 28 VDC non-polarized
Receiver Current Draw:	80 mA standby, 50 mA alarm
DS484Q Transmitter Current Draw:	35 mA
DS486Q Transmitter Current Draw:	55 mA
Backup Power Requirements:	4 hours (120 mAh) minimum required for UL Certificated Installations
Tamper Output:	Normally-closed contacts rated at 0.1 A at 30 VDC
Alarm Output:	Form C 0.2 A at 30 VDC, output period: 3 sec
EDC Output:	Normally-closed 0.2 A at 30 VDC, output period: 3 sec
Tamper Output:	Normally-closed 0.1 A at 30 VDC, output period: while cover is removed
Environmental Discrimination Circuit Output:	Normally-closed contacts rated at 0.2 A at 30 VDC

Ordering Information

DS484Q Photoelectric Detector Provides an outdoor range of 120 m (400 ft).	DS484Q
---	--------

DS486Q Photoelectric Detector Provides an outdoor range of 200 m (660 ft).	DS486Q
---	--------

Hardware 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.	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.	MP2
--	-----

MP3 L-Curved Metal Pole Curved metal poles for mounting to vertical surfaces for pole mounting photoelectric detectors. Shipped in packages of two.	MP3
--	-----

PC1A Weather Enclosure Protects detectors when mounted outside. The enclosure's dimensions are 39.4 cm x 10.3 cm x 6 cm (15.5 in. x 4 in. x 2.4 in.).	PC1A
--	------

PC3A Back-to-back Box Allows back-to-back mounting of detectors on a pole.	PC3A
---	------

PEH-2 Heater Reduces the effects of frost, intense fog, cold, and damp conditions on photoelectric beam detectors. Shipped in packages of four (two for transmitter and two for receiver).	PEH2
---	------

Americas:
Bosch Security Systems
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 585 223 4060
Fax: +1 800 289 0096
security.sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: +31 40 27 83955
Fax: +31 40 27 86668
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:
Bosch Security Systems Pte Ltd
38C Jalan Pemimpin
Singapore 577180
Phone: +65 6319 3450
Fax: +65 6319 3499
apr.securitysystems@bosch.com
www.boschsecurity.com

Represented by