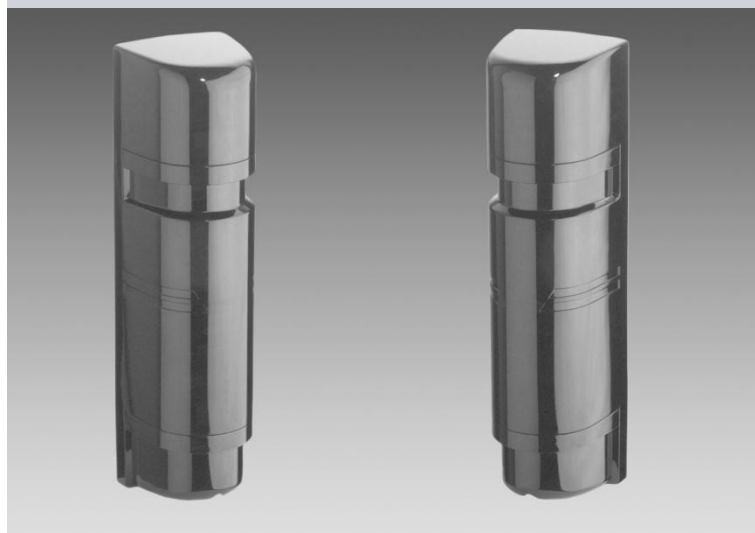




# IS443 / IS444 / IS445

## Photoelectric infrared beams

with quad beams for outdoor applications



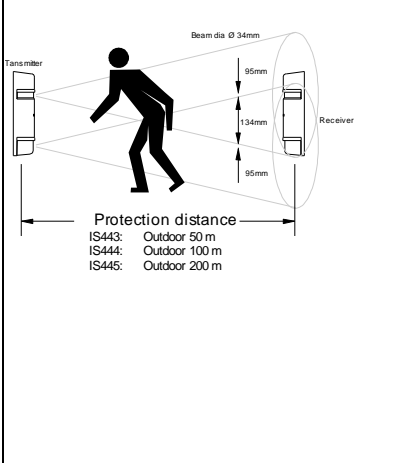
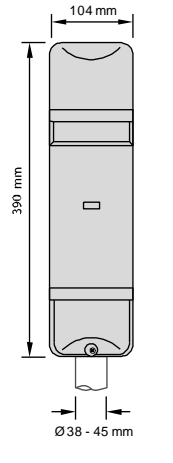
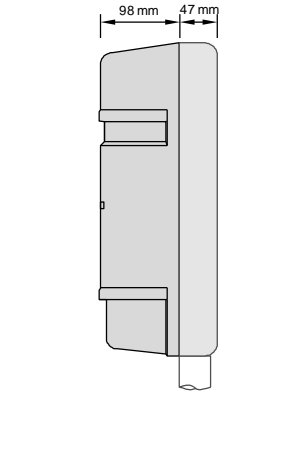
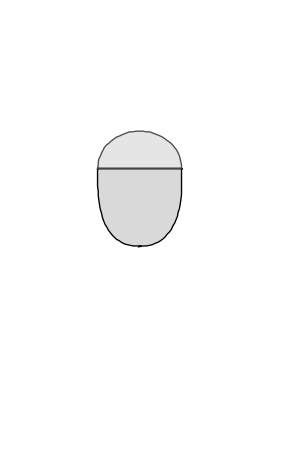
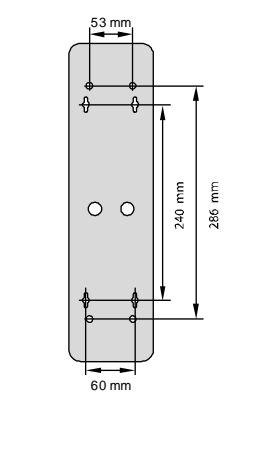
- Perimeter protection from 50 m to 200 m
- Synchronised and sophisticated quad beams serve to reinforce the range and stability in harsh environments and severe weather conditions
- Automatic gain control
- 4 separate choices of frequencies
- Selectable beam transmission strength

**Approved detection performance.** The 4 infrared beams work in an AND-function, which guarantees immunity from falling leaves and small animals. Strong active infrared transmission with a ten times greater infrared power than for the specified maximum distance. Special housing design ensures reliable operation when there is frost or dew.

**Automatic gain control.** The sensitivity is automatically increased in severe weather conditions to contend with fog, heavy rain, frost or snow.

**Highest false alarm immunity.** Special light compensation circuit for excellent immunity against sun, car, fluorescent or mercury lights.

**Environmental module.** Notification via a relay output when the received beam signal level reaches an unacceptable level.

Operating Range	Dimensions			
 <p>Beam dia Ø 34mm</p> <p>Transmitter</p> <p>Receiver</p> <p>95mm</p> <p>134mm</p> <p>95mm</p> <p>Protection distance</p> <p>IS443: Outdoor 50 m</p> <p>IS444: Outdoor 100 m</p> <p>IS445: Outdoor 200 m</p>	 <p>104 mm</p> <p>390 mm</p> <p>Ø 38 - 45 mm</p>	 <p>98 mm</p> <p>47 mm</p>		 <p>53 mm</p> <p>240 mm</p> <p>286 mm</p> <p>60 mm</p>

#### ■ Technical Data

Type	IS443	IS444	IS445
Detection system	Simultaneous breaking of 4 beams		
Infrared beam	Double modulation pulsed beam by LED		
Protection distance	Outdoor < 50 m	Outdoor < 100 m	Outdoor < 200 m
Response time	50 ms ... 700 ms variable (Standard: 50 ms)		
Power supply	12 VDC ... 30 VDC (non-polarity)		
Current consumption	95 mA	105 mA	120 mA
Alarm output			
- Relay (change over contact)	30 VAC/DC 1 A		
- Alarm hold time	approx. 1.5 s		
Indications			
- Alarm (Receiver)	Red LED		
- Sensitivity attenuation (Receiver)	Red LED		
Tamper output			
- Cover contact (opens on tamper)	30 VAC/DC 0.1 A		
Functions	Modulated beam frequency selection, tone indicator, environmental module, alarm memory indication, programmed AGC, auto-gain lock function, monitor jack		
Beam adjustment	Horizontal: ± 90° C, Vertical ± 10° C		
Environmental conditions	- 35° C ... + 66° C		
Mounting location	Outdoor		
Mounting position	Wall, tower or 45mm diameter pole (clamps supplied)		
Housing protection (EN 60529, EN 50102)	IP55		

■ **Ordering Information**

<b>Type</b>	<b>Art.-No.</b>	<b>Description</b>	<b>Weight</b>
IS443	BPZ:5299920001	Photoelectric beam sensor (50 m)	2.500 kg
IS444	BPZ:5299890001	Photoelectric beam sensor (100 m)	2.500 kg
IS445	BPZ:5299500001	Photoelectric beam sensor (200 m)	2.500 kg

# Options

## Beam Towers

A selection of free standing and wall mounted beam towers, which are used to disguise the mounting height of the beam(s) and to increase the IP rating of the beams. Each tower is supplied with an anti-tamper lid and the free standing towers are supplied with support brackets.

## Heaters

The heaters are required for cold environments, where the build-up of frost and/or snow is likely. The heaters can be mounted in the detectors or the beam towers.

## Pole Covers

The covers provide additional ingress protection to the beams when they are pole mounted.

## ■ Technical Specifications

Type	No.	Description	Weight
MB200	S54539-Z281-A100	Free standing beam tower 180°, 2.0m	10.55 kg
MB200W	S54539-Z282-A100	Free standing beam Tower 180°, 1.5m	9.00 kg
MB150	S54539-Z110-A100	Free standing beam Tower 180°, 1.5m	2.500 kg
HTF-24	BPZ:5386110001	Heater (2 pieces./set) 24 VDC ; 860 mA	0.082 kg
BP-200F	BPZ:5386240001	Pole cover (2 pieces./set)	0.300 kg

The information in this document includes general descriptions of the technical possibilities, which need not be installed in each individual case. The desired performance characteristics must therefore be specified for the individual case when the contract is concluded.

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