

# IR Illuminator 5000 LR

www.boschsecurity.com



**BOSCH**  
Invented for life



- ▶ Integrated adjustable photocell
- ▶ Adjustable IR intensity
- ▶ Interchangeable beam pattern diffusers to match beam to camera
- ▶ Telemetry input and photocell output for external switching
- ▶ Self-cleaning lens coating technology

The infrared illuminator provides covert or semi-covert lighting for long-range indoor and outdoor surveillance applications. IR illumination dramatically improves night-time imaging, and reduces noise and bit rates. The set of interchangeable diffuser lenses means that beam patterns can be selected that match your application to provide accurately illuminated scenes. The self-cleaning window reduces maintenance requirements. Specifically designed for energy efficient operation, the illuminator can be powered directly from any 12 to 32 VDC or 24 VAC supply for faster, flexible, cost effective installations.

## System overview

Energy efficient surface-mount high-power LEDs deliver maximum illumination with reduced power consumption. Advanced electronic control circuitry delivers improved thermal management, long life and low cost of ownership. A pressure equalization valve prevents thermal expansion and pressure cycling. Easy access to power and photo cell adjustment facilitates quick and easy installation.

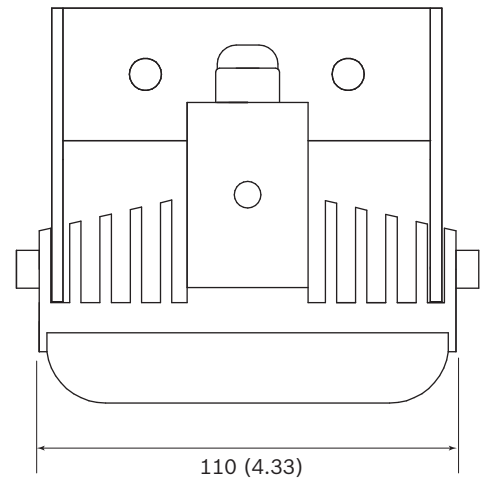
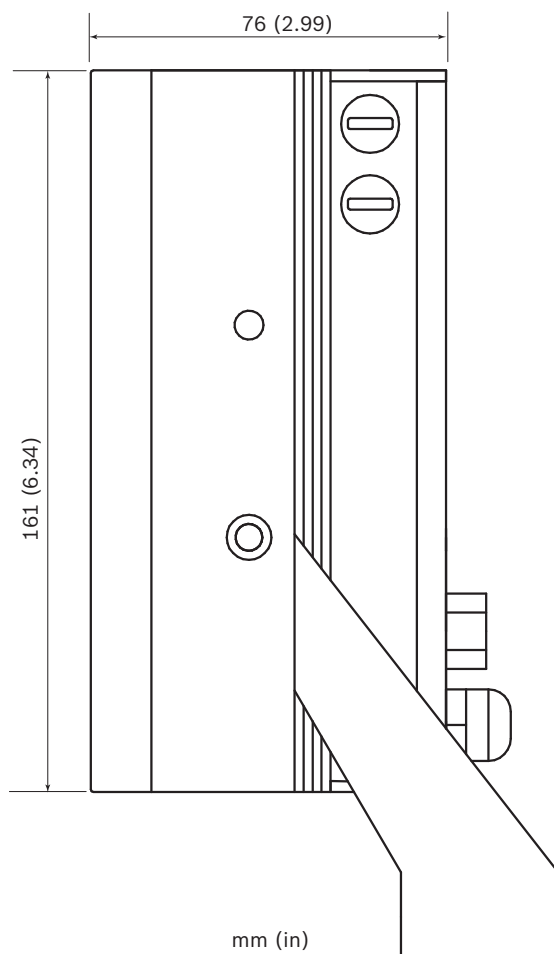
## Certifications and approvals

| Standards     | Type                                     |
|---------------|------------------------------------------|
| CE-EMC        | EN 61547 (Lighting-Immunity)             |
|               | EN 55015 (Lighting-Emission)             |
|               | EN 62493( Lighting EMF)                  |
|               | EN 50130-4 (Alarm EMC)                   |
| Safety        |                                          |
|               |                                          |
| CE-LVD        | EN-60598-1 (Luminaires-General)          |
|               | EN-60598-2-1 (Luminaires)                |
| LED           | EN 62471 Risk group 2 (LED safety)       |
| Environmental | IEC / EN 60529 IP66                      |
|               | IEC / EN 62262 IK09                      |
|               | EN50130-5 Class IV (Alarm-environmental) |
|               | EN 50581 RoHS,                           |
| USA cULus     | UL 2108 Low Voltage Lighting Systems     |

| Standards | Type                                                                     |
|-----------|--------------------------------------------------------------------------|
|           | UL 8750 Light Emitting Diode (LED) equipment for use in lighting systems |
|           | CSA C22.2 No. 250.0-08 Luminaires                                        |
|           | FCC, Class B                                                             |
| AUS       | RCM AS / NZS CISPR 22 Class B                                            |
| Region    | Certification                                                            |
| Europe    | CE                                                                       |
| USA       | UL                                                                       |

### Installation/configuration notes

### Dimensions



### Technical specifications

#### Power

|                   |                                   |
|-------------------|-----------------------------------|
| Power supply      | 12 to 32 VDC or 24 VAC $\pm 10\%$ |
| Power consumption | 39 W                              |

#### Optical

|                  |                                                    |
|------------------|----------------------------------------------------|
| Wavelength       | 850 nm or 940 nm                                   |
| IR control       | Adjustable IR intensity (10% to 100%)              |
| Day/night switch | Photocell, sensitivity adjustable (20 lx to 70 lx) |
| Beam angles      | 10°, 20°, 30°, 60°, 80°, and 95°                   |

#### Range 850 nm

| Beam pattern diffuser | Achievable Distance* | HFOV           |
|-----------------------|----------------------|----------------|
| 10°                   | 268 m (881 ft)       | 47 m (154 ft)  |
| 20°                   | 183 m (640 ft)       | 65 m (212 ft)  |
| 30°                   | 134 m (440 ft)       | 72 m (236 ft)  |
| 60°                   | 85 m (280 ft)        | 99 m (324 ft)  |
| 80°                   | 61 m (200 ft)        | 102 m (336 ft) |
| 95°                   | 43 m (140 ft)        | 93 m (306 ft)  |

#### Range 940 nm

| Beam pattern diffuser | Achievable Distance* | HFOV          |
|-----------------------|----------------------|---------------|
| 10°                   | 165 m (540 ft)       | 29 m (95 ft)  |
| 20°                   | 98 m (320 ft)        | 34 m (113 ft) |
| 30°                   | 79 m (260 ft)        | 42 m (139 ft) |
| 60°                   | 49 m (160 ft)        | 56 m (185 ft) |

| Range 940 nm          |                      |               |
|-----------------------|----------------------|---------------|
| Beam pattern diffuser | Achievable Distance* | HFOV          |
| 80°                   | 37 m (120 ft)        | 61 m (202 ft) |
| 95°                   | 24 m (80 ft)         | 53 m (175 ft) |

\* Actual illumination distance achieved is dependent on camera and lens characteristics.

| Mechanical                     |                                                                                       |
|--------------------------------|---------------------------------------------------------------------------------------|
| Housing                        | Robust anodized aluminum extrusion, black                                             |
| Front window                   | Polycarbonate high transmittance (vandal-resistant) with self-cleaning technology     |
| Mount                          | Black powder coated stainless steel U-bracket (adjustable with M6 socket-head wrench) |
| Cable                          | 3 m (9 ft)                                                                            |
| Dimensions (W x H x D)         | 110 x 161 x 76 mm (4.33 x 6.34 x 2.99 in)                                             |
| Bracket dimensions (W x H x D) | 110 x 125 x 35 mm (4.33 x 4.92 x 1.38 in)                                             |
| Weight                         | 1.4 kg (3.1 lbs)                                                                      |
| Bracket weight                 | 0.2 kg (0.44 lbs)                                                                     |

| Environmental               |                                      |
|-----------------------------|--------------------------------------|
| Operation Temperature Range | -50 °C to +50 °C (-58 °F to +122 °F) |
| Protection                  | IP66                                 |

### Ordering information

#### IR Illuminator 5000 LR

Long range IR illuminator  
850 nm  
Order number **IIR-50850-LR**

#### IR Illuminator 5000 LR

Long range IR illuminator  
940 nm  
Order number **IIR-50940-LR**

#### Accessories

##### IIR-MNT-SLB Single L-bracket

Illuminator single L-bracket, black  
Order number **IIR-MNT-SLB**

##### IIR-MNT-DLB Double L-bracket

Illuminator double L-bracket, black  
Order number **IIR-MNT-DLB**

##### IIR-MNT-TLB Triple L-bracket

Illuminator triple L-bracket, black  
Order number **IIR-MNT-TLB**

#### IIR-MNT-PMB Pole mount bracket

Illuminator pole mount bracket, black  
Order number **IIR-MNT-PMB**

**Represented by:**

**Europe, Middle East, Africa:**  
Bosch Security Systems B.V.  
P.O. Box 80002  
5600 JB Eindhoven, The Netherlands  
Phone: + 31 40 2577 284  
emea.securitysystems@bosch.com  
emea.boschsecurity.com

**Germany:**  
Bosch Sicherheitssysteme GmbH  
Robert-Bosch-Ring 5  
85630 Grasbrunn  
Germany  
www.boschsecurity.com

**North America:**  
Bosch Security Systems, Inc.  
130 Perinton Parkway  
Fairport, New York, 14450, USA  
Phone: +1 800 289 0096  
Fax: +1 585 223 9180  
onlinehelp@us.bosch.com  
www.boschsecurity.us

**Asia-Pacific:**  
Robert Bosch (SEA) Pte Ltd, Security Systems  
11 Bishan Street 21  
Singapore 573943  
Phone: +65 6571 2808  
Fax: +65 6571 2699  
apr.securitysystems@bosch.com  
www.boschsecurity.asia