BOSCH

IR Illuminator 5000 SR

- ▶ 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 short-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.
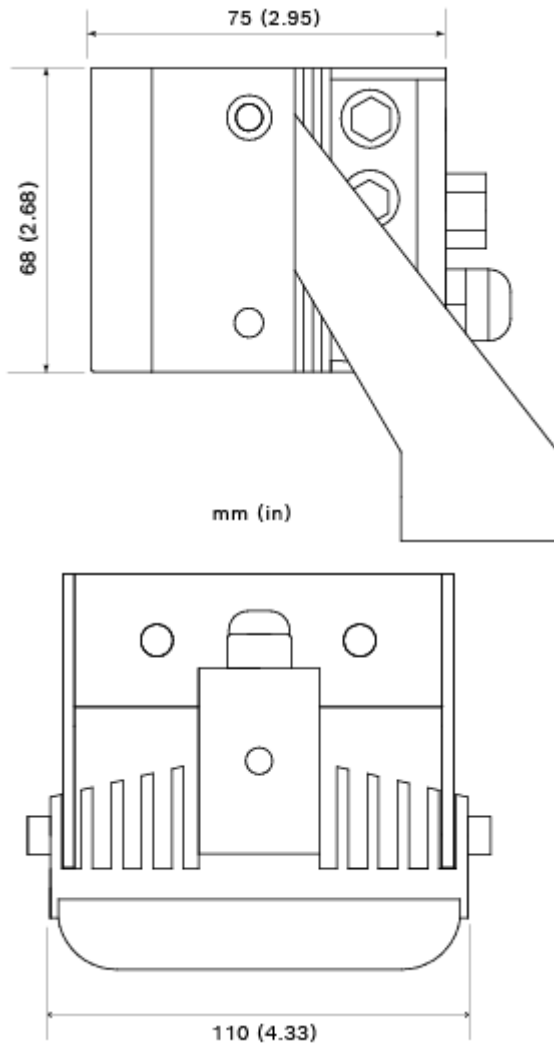
Certifications and approvals

Standards	Type
CE-EMC	EN 61547 (Lighting-Immunity)
	EN 55015 (Lighting-Emission)
	EN 62493(Lighting EMF)
	EN 50130-4 (Alarm EMC)

Standards	Type
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
	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	Regulatory compliance/quality marks	
Europe	CE	
USA	UL	

Installation/configuration notes

Dimensions

mm (in)

Technical specifications

Power

Power supply	12 to 32 VDC or 24 VAC ±10%
Power consumption	13 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°	156 m (510 ft)	27 m (89 ft)
20°	106 m (348 ft)	37 m (123 ft)
30°	78 m (255 ft)	42 m (137 ft)
60°	49 m (162 ft)	57 m (187 ft)
80°	35 m (116 ft)	59 m (195 ft)
95°	25 m (81 ft)	54 m (177 ft)

Range 940 nm

Beam pattern diffuser	Achievable Distance*	HFOV
10°	95 m (313 ft)	17 m (55 ft)
20°	57 m (186 ft)	20 m (65 ft)
30°	46 m (151 ft)	25 m (81 ft)
60°	28 m (93 ft)	33 m (107 ft)
80°	21 m (70 ft)	36 m (117 ft)
95°	14 m (46 ft)	31 m (101 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 68 x 75 mm (4.33 x 2.68 x 2.95 in)
Bracket dimensions (W x H x D)	110 x 125 x 35 mm (4.33 x 4.92 x 1.38 in)
Weight	750 g (1.6 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

IIR-50850-SR Illuminator, 850nm, short range
Short range IR illuminator
850 nm
Order number **IIR-50850-SR | F.01U.319.313**

IIR-50940-SR Illuminator, 940nm, short range
Short range IR illuminator
940 nm
Order number **IIR-50940-SR | F.01U.319.314**

Accessories

IIR-MNT-SLB Bracket for illuminator, single L, black
Illuminator single L-bracket, black
Order number **IIR-MNT-SLB | F.01U.319.324**

IIR-MNT-DLB Bracket for illuminator, double L, black
Illuminator double L-bracket, black
Order number **IIR-MNT-DLB | F.01U.319.325**

IIR-MNT-TLB Bracket for illuminator, triple L, black
Illuminator triple L-bracket, black
Order number **IIR-MNT-TLB | F.01U.319.326**

IIR-MNT-PMB Bracket for illuminator, pole mount
Illuminator pole mount bracket, black
Order number **IIR-MNT-PMB | F.01U.319.327**

PSU-IIR-35 Power supply, 100-240VAC/24VDC, 1.25A
Constant Voltage, 24 VDC, 35W power supply designed
for LED lighting applications. 100-240VAC in, 1.46A out.
Aluminum case rated IP67.
Order number **PSU-IIR-35 | F.01U.319.328**

PSU-IIR-60 Power supply, 100-240VAC/24VDC, 2.5A
Constant Voltage, 24 VDC, 60W power supply designed
for LED lighting applications. 100-240VAC in, 2.5A out.
Aluminum case rated IP67.
Order number **PSU-IIR-60 | F.01U.319.329**

PSU-IIR-100 Power supply, 100-240VAC/24VDC, 4.2A
Constant Voltage 24 VDC, 100W power supply designed
for LED lighting applications. 100-240VAC in, 4.16A out.
Aluminum case rated IP67.
Order number **PSU-IIR-100 | F.01U.319.330**

Services

EWE-IIR850-IW 12mths wrty ext IR Illuminator 850 nm
12 months warranty extension
Order number **EWE-IIR850-IW | F.01U.346.347**

EWE-IIR940-IW 12mths wrty ext IR Illuminator 940 nm
12 months warranty extension
Order number **EWE-IIR940-IW | F.01U.346.364**