# MIC IP starlight 7000i illuminator

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- Combination of IR (850 nm/940 nm) + White light (5600-6300K) LEDs
- ► Enables Detection of moving objects up to 450 m (1476 ft) using IR illumination
- Dynamic IR automatically adjusts the beam angle and intensity to match the camera's field of view
- ▶ Field-installable on MIC IP starlight 7000i cameras
- ► Rugged IP68/Type 6P ingress-rated housing design matches colors of MIC IP starlight 7000i cameras

The MIC IP starlight 7000i illuminator accessory has a dualpod housing incorporating a combination of long-life Infrared (IR) (850 nm and 940 nm) and White light LEDs. The illuminator enables viewing of objects even in total darkness, ensuring high-quality images regardless of the lighting conditions.

When attached to a MIC IP starlight 7000i camera, the illuminator allows Detection of objects at a maximum distance of 450 m (1476 ft) with infrared (850 nm) (250 m (820 ft) with White light).

#### **Functions**

#### Variable beam illumination

IR arrays with multiple beam angles (ranging from 16° to 47°) provide illumination of a wide area of view. The MIC camera can steer the IR beam dynamically to match the illumination intensity with the camera's field of view according to the zoom level.

Beam intensity is controlled automatically or manually, depending on user preference. Decreasing intensity reduces overexposure.

The patented, integrated Constant Light technology delivers a consistent level of illumination performance throughout the life of the product, even in fluctuating temperatures.

#### IR Array

As ambient light decreases in the scene, the camera switches to monochrome mode and automatically activates the IR LEDs of the illuminator.

When IR illuminators are active, the IR focus correction feature is enabled automatically in the camera. Covert LEDs (940 nm) allow operators to illuminate near-range scenes they prefer not to illuminate with LEDs that human eyes can see.

#### White light mode

White light mode allows operators to capture full scene details in color.

Operators can turn the White light LEDs on and off as necessary, especially to use as a deterrent effect. Operators have the option to set automatic timeout of the White light mode. After this mode times out, the illuminator will operate in IR mode.

Operators can disable the White light functionality permanently or by sector in order to prevent activation in situations where White light might create a hazardous situation such as distracting a driver on a highway.

# Robust design rated to an industry-leading IP68, Type 6P, IK10

The MIC illuminator's vandal-resistant design integrates tough, polycarbonate windows attached to a corrosion-resistant aluminum body finished with a

durable powder coat paint. The illuminator is exceptionally resistant to relatively high levels of wind, vibration, and shock. The camera and attached illuminator accessory combination has MIC's traditional IP68 / Type 6 dust and immersion ratings as well as an IK10 impact rating.

## **Easy installation**

The illuminator accessory is easily installed in the field on a MIC IP starlight 7000i camera that is mounted in upright, inverted, or canted orientation. The camera provides power to the illuminator; no additional power source is required.

The illuminator accessory is backward compatible with MIC-7130 and MIC-7230 model MIC cameras. When installed on one of the aforementioned cameras, the illuminator accessory functions as its predecessor model (MIC-IL*x*-100).

### **Certifications and approvals**

Safety	UL, CE (including EU eco-directive 2009/125/EC, and harmonized norm based on EU regulation 1194/2012)
Illumination safety	Meets Risk Group 1 exposure limits based on IEC 62471

#### **Technical specifications**

#### **IR Array**

	Narrow	Medium	Wide
Number of LEDs	12	4	4
Wavelength	850 nm	850 nm	940 nm
Vertical Beam Angle	15° FWHM	26° FWHM	45° FWHM
Horizontal Beam Angle	16° FWHM	28° FWHM	47° FWHM

#### White light Array

Number of LEDs	6
Color Temperature	5600-6300K
Vertical Beam Angle	15°FWHM
Horizontal Beam Angle	32° FWHM
Light intensity (3m)	1000 lx

#### Performance Range (based on DORI criteria)

	IR Array	White light
Detection	450 m (1476 ft)	250 m (820 ft)
Observation	400 m (1312 ft)	200 m (656 ft)
Recognition	300 m (984 ft)	150 m (492 ft)
Identification	100 m (328 ft)	75 m (246 ft)

	IR Array (940 nm) (Covert LEDs only)
Detection	75 m (246 ft)
Observation	60 m (197 ft)
Recognition	50 m (164 ft)
Identification	25 m (82 ft)

#### **Electrical**

Power Consumption	30 W (provided by the camera)
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**Note**: The camera requires a power supply capable of delivering this power, such as the 95W High PoE Midspan (NPD-9501A), VIDEOJET connect 7000 (VJC-7000-90), or a 24V PSU (VG4-A-PSU1 or VG4-A-PSU2).

#### **Environmental**

Environmental	
Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Cold Start-up Temperature	-40 °C (-40 °F) (Requires 60-minute warm-up prior to operation.)
Storage Temperature	-60 °C to +70 °C (-76 °F to +158 °F)
Humidity	0-100%
Wind Load	209 km/h (130 mph) (sustained) (Gusts up to 290 km/h (180 mph)) Camera + installed illuminator accessory: Coefficient of Drag: 1.370 Effective Projected Area (EPA): 0.089 m² (0.96 ft²) illuminator accessory only: Effective Projected Area (EPA): 0.019 m² (0.20 ft²)
Vibration	NEMA TS2 Section 2.2.8 Vibration – 5-30 Hz, (0.5G)
Shock	IEC 60068-2-27, Half Sine Impulse, 6ms, 40G NEMA TS 2 Section 2.2.9 Shock (Impact) Test Half Sine Impulse 11 ms, 10G
Ingress Protection	IEC 60529, IP68, Type 6P (when attached to camera)
External Mechanical Impact (IK Code or Impact rating)	IEC 62262, IK10 (when attached to a MIC IP starlight 7000i camera)
Salt Mist Spray (Corrosion Test)	ASTM B117 (2000 hours)

#### Construction

Dimensions (W x H x D)	215 mm x 115 mm x 117 mm (8.5 x 4.5 x 4.6 in.)
Weight	1.2 kg (2.7 lb)
Construction Material	Corrosion-resistant aluminum alloy with polycarbonate windows
Standard Colors	Black (RAL 9005), White (RAL 9010), or Grey (RAL 7001, available in specific regions only)
Finish	Chromate-based surface treatment with powder coat paint, sand finish

# **Ordering information**

#### MIC-ILB-300 Illuminator white-IR light 450m, black

Illuminator accessory for MIC IP starlight 7000i cameras. Combination of IR (850 nm/940 nm) + White light (5600-6300K) LEDs.

Black (RAL 9005). Sand finish.

Order number MIC-ILB-300

#### MIC-ILW-300 Illuminator white-IR light 450m, white

Illuminator accessory for MIC IP starlight 7000i cameras. Combination of IR (850 nm/940 nm) + White light (5600-6300K) LEDs.

White (RAL 9010). Sand finish.

Order number MIC-ILW-300

# MIC-ILG-300 Illuminator white-IR light 450m, gray

Illuminator accessory for MIC IP starlight 7000i cameras. Combination of IR (850 nm/940 nm) + White light (5600-6300K) LEDs.

Grey (RAL 7001) color. Available in specific regions only.

Order number MIC-ILG-300

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