







# > StarLED™ 200

Reliable high performance outdoor infrared LED illuminator

**DESCRIPTION** – StarLED™ 200 is a solid-state infrared Light Emitting Diode (LED) illuminator that creates light which, while invisible to the naked eye, illuminates targets for surveillance by standard infrared sensitive CCTV cameras. StarLED 200 is the low power answer for supplemental lighting for sites with inadequate levels or non-uniformity in their conventional lighting system.

**APPLICATION** – StarLED 200 can be strategically placed to provide fill-in illumination without the need for expensive wiring upgrades. It is also ideal for those sites where local codes limit the intensity of visible illumination.

## **Features**

- · Long range Infrared (IR) illumination
- · Uniform coverage over an extended range
- · Uses a unique lens system
- · Spot or flood models
- Universal voltage input
- · Built-in twilight switch

# Markets

- · Correctional facilities
- · VIP residences
- Utilities
- · Communications sites
- Important historic / cultural sites

### **Benefits**

- · Cost-effective
- Can be used in conjunction with standard IR sensitive CCTV cameras
- · Eye-safe at all distances
- · Lowest life-cycle costs in industry
- Minimal maintenance
- 10-year life expectancy on diodes
- · No bulbs to replace

## **Technical Specifications**

#### How it works

StarLED 200 is available in both spot and flood illumination patterns at a wavelength of 875 nm. When looking directly at the front plate on a dark night with no other light present, only a faint red glow can be seen.

The cameras used with StarLED 200 are low-light black and white cameras with the IR-cut filter removed or disabled. The relative response at a wavelength of 875 nm should be no less than one third peak value for visible light. The imager illumination requirement for usable video should not be greater than 0.02 lux and preferably should be 0.01 lux. The lens should be f / 1.4 or lower to maximize light transmission and should be IR coated. An IR corrected lens can be used to avoid chromatic distortion.

#### **SPECIFICATIONS**

**DIMENSIONS:** 250 x 160 x 100 mm (9.8 x 6.3 x 4 in.) **POWER SOURCE:** 100 - 240 VAC, 50 / 60 Hz, 60 W

**WEIGHT:** 3.4 kg (7.5 lbs.)

**ENCLOSURE:** Aluminum housing with IR transparent cover

**OPERATIONAL DATA:** Built-in twilight switch activates the illuminator at light levels between 300 and 500 lux. Switch can be deactivated to ensure unit is always on when powered

**OPTICAL CONFIGURATION:** Reliability from 20 LED groups. Only a minor change in the illumination profile as a result of a failed LED group. The LED groups are aligned asymmetrically with unique lensing to create uniform illumination

**TEMPERATURE RANGE:** -40° to + 50°C (-40° to +122°F) operation. Integrated over temperature protection will switch off illuminator at +70°C (+158°F) internally

**WEATHERPROOF:** Protection type IP 54/NEMA 3; protection against dust and splashing water from all directions, with internal vent to avoid condensation

**COVERT, INVISIBLE:** No obvious surveillance or distracting visible light **LONG RANGE:** 

- · Fewer illuminators required
- · Long-term cost savings
- · Uniformly covers entire illumination area evenly
- · No "hot spots"

EYE SAFE: Complies with EN60825

#### **PLUG-IN CONNECTORS:**

- · Provides for easy installation
- · Unnecessary to open unit

**BUILT-IN TWILIGHT SWITCH:** Automatic on / off switch for added power savings

**SOLID-STATE COMPONENTS:** Provides long-life and low operating & maintenance costs

#### **STARLED 200 (SPOT)**

**WAVELENGTH:** 875 nm ± 40 nm (very faint glow visible when looking directly into illuminator)

**ILLUMINATION PROFILE:** 25° horizontal, 7.5° asymmetric vertical

ILLUMINATION LEVEL: 0.5 µW / cm<sup>2</sup> at 85 m typical

**ILLUMINATION RANGE:** to 85 m when mounted 4 m (13ft.) high, with IR-sensitive camera (0.01 lux faceplate illumination, minimum 30% relative response at 875 nm) and high speed lens (f/0.95)

**ILLUMINATION QUALITY:** homogeneous illumination with less than 60% variation (no hot spot at close range)

#### **STARLED 200 (FLOOD)**

**WAVELENGTH:** 875 nm ± 40 nm (very faint glow visible when looking directly into illuminator)

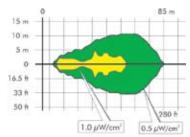
ILLUMINATION PROFILE: 50° horizontal, 7.5° asymmetric vertical

ILLUMINATION LEVEL: 0.5 μW / cm<sup>2</sup> at 75 m typical

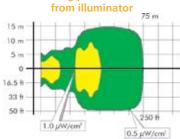
**ILLUMINATION RANGE:** to 75 m when mounted 4 m (13ft.) high, with IR-sensitive camera (0.01 lux faceplate illumination, minimum 30% relative response at 875 nm) and high speed lens (f/0.95)

**ILLUMINATION QUALITY:** homogeneous illumination with less than 60% variation (no hot spot at close range)

Specifications are subject to change without prior notice.



Spot aiming point at 85 m from illuminator



Flood aiming point at 75 m from illuminator



StarLED 200

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