

# AXON

## LED ICAO Medium Intensity Runway Edge and Approach Omnidirectional Inset, 8-inch



ADB SAFEGATE  
**AXON**

### Compliance with Standards

**ICAO** Annex 14, Volume 1

**IEC** 61827

**EASA** CS-ADR-DSN

CE

### Uses

#### ICAO

- Medium intensity runway edge
- Medium intensity approach

### Features and Benefits

#### Efficiency

- EQ has an integrated ILCMS remote for use with the LINC 360 system providing high data capacity and resisting degradation from various types of radio effects to provide a superior communication platform
- Precision aimed optics enhancing photometric performance and complementing extended LED life
- Reduced bottom pan profile allowing for very shallow base can installation
- LED pulse width modulated (PWM) at 400 Hz optimizing LED performance and eliminating perceptible flicker to a moving human observer throughout the range of brightness steps
- Operates at all steps of constant current regulator technologies designed in compliance with IEC or FAA requirements
- Fully dimmable lights, conforming to the dimming curve of traditional halogen lights
- Low protrusion, high-intensity, Style 3 ( $\leq 6.35$  mm) inset light fixtures
- No negative slope in front of the prisms

### Sustainability

- Fully encapsulated all-in-one universal power supplies for Runway, Taxiway, Approach and Omni inset families
- Latest generation LEDs providing a long-lasting light source with high efficiency and low power consumption
- Reinforced top cover substantially exceeding standards to improve durability and longevity (directional beams only)
- One single family of fixtures covering all runway, taxiway and approach applications
- IP68 rated enclosure designed for harsh environments; all fastenings are stainless steel
- Compatible with existing infrastructure allowing for direct replacement of existing LED inset fixtures

### Safety

- Improved mechanical design to strengthen and consolidate components, improving the customer maintenance experience
- Fail-open option for compatibility with legacy monitoring systems and optimization of advanced control and monitoring systems
- Failed LED detection as required by Engineering Brief 67D
- Robust lightning protection complying with ANSI/IEEE C62.41-1991; Location Category C2 as required by FAA Engineering Brief 67 Category C2 is defined as a 1.2/50  $\mu$ S – 8/20  $\mu$ S combination wave, with a peak voltage of 10,000 V and a peak current of 5,000 A

## Ordering Code

|    | Application              | Standard(s)              | Market Specific          | Dimensions               | Prism                    | Beam Orientation         | Toe-in                   | Color - Side 1 (Left)    | Color - Side 2 (Right)   | Power and Monitoring     | Connector and Cable      | Options                  | Version                  |
|----|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| RS | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### Application

ME = Medium intensity Runway/Approach

### Standard(s)

3 = ICAO

### Market Specific

0 = None

### Dimensions

1 = 8 inch (203 mm) diameter, 2 bolt

### Prism

P = 4 protected prisms

### Beam Orientation

3 = Omnidirectional

### Toe-in

N = Not Applicable

### Color - Side 1 (Left)

W = White

### Color - Side 2 (Right)

N = Not Applicable

### Power and Monitoring

S = 2.8 - 6.6 A, Non-Monitored — Power Only

M = 2.8 - 6.6 A, Fail-Open Monitoring

R = 2.8 - 6.6 A, EQ Integrated LINC 360

### Connector and Cable

1 = 1 x Style 6 2-Pole Plug, 2 Individual Wires

### Options

0 = None

### Version

2 = AXON

## Power Supply Options

- Non-monitored — power only
- Monitored — integrated fail-open technology
- EQ with integrated ILCMS with OFDM technology for use with LINC 360 system

## Installation and Maintenance

The light fixture can be installed in a 12-inch or an 8-inch base. Gaskets are sold separately. Refer to the user manual INTEROPERABILITY appendix to identify the correct gasket and bolts for your specific base and ensure a reliable fit.

## Operating Conditions

**Operating temperature** -55 °C to +55 °C / -67 °F to +131 °F  
**Storage temperature** -60 °C to +80 °C / -76 °F to +176 °F  
**Humidity** Up to 100%

## Dimensions and Weight

**Dimensions** 203 mm (8 in)  
**Weight** 2.8 kg / 6.1 lb (8 in)

## ANNEX

### 8-inch light fixtures without arctic kit (heater)

| Fixture type – 1 cord set <sup>1</sup>                    | Fixture load | Isolation transformer |        | CCR load |
|---|--------------|-----------------------|--------|----------|
|   |              | Wattage               | Load   |          |
| Runway edge & approach, medium intensity, omnidirectional | 9.6 VA       | 15 W                  | 5.1 VA | 14.7 VA  |

<sup>1</sup>Values provided are for the "S" option non-monitored power only.

#### Note:

- EQ fixtures:
  - The isolation transformer must have an additional 8 VA available above the fixture load for communication bandwidth. Size transformer to next size up to assure additional 8 VA coverage
  - Legacy BRITE II or AGLAS 2 systems — Order "M" power supply
- Fail-open fixtures:
  - The maximum rating for the isolation transformer is 150 W (a correctly calibrated CCR is important to achieve an accurate fail open response)
- Additional voltage loss not included in the above table which must be factored into the circuit load calculation:
  - Primary cables will result in a higher CCR load
  - Longer secondary cables may result in a larger size isolation transformer requirement
- Efficiency of the isolation transformer depends on the manufacturer of the transformer
- See omni user manual UM-5091 for other power supplies

For more information about the product, including manuals and certifications, please see our Product Center on the ADB SAFEGATE website: [www.adbsafegate.com](http://www.adbsafegate.com).