

# AXON

## LED ICAO Medium intensity Runway Edge & Approach, Omnidirectional Inset 8-inch

### Omnidirectional Inset 8-inch



### Compliance with Standards (current version)

ICAO	Annex 14, Volume 1
IEC	61827
EASA	CS-ADR-DSN
CE	

### Uses

The AXON 8-inch low-protrusion, protected prism, omni-directional inset LED light fixture is provided with white LEDs. This fixture can be used in the following applications:

- 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 or 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
- LEDs 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
- Protected top cover substantially exceeding standards to improve durability and longevity
- 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 Eng. Brief 67. Category C2 is defined as a  $1.2/50\mu\text{S} - 8/20 \mu\text{S}$  combination wave, with a peak voltage of 10,000 V and a peak current of 5,000 A

### 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.

## Ordering Code

**Primary Standard**  
3 = ICAO

**Market Specific**  
0 = None

**Dimensions**  
1 = 8 inch (203 mm) diameter

**Prism**  
P = 4 protected prisms

**Beam Orientation**  
3 = Omnidirectional

**Toe-in**  
N = Not applicable

**Color - side 1**  
W = White

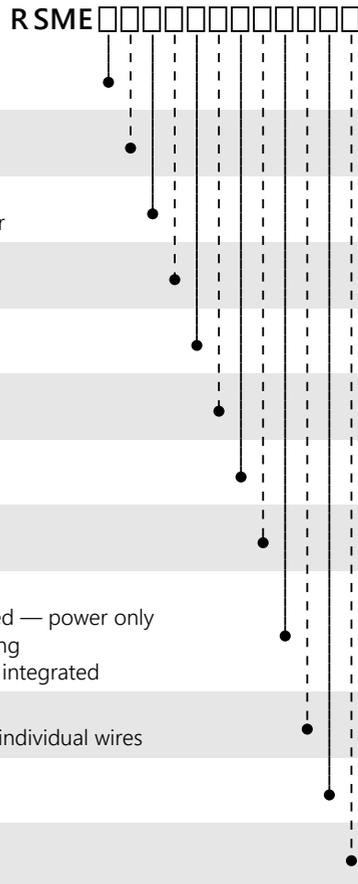
**Color - side 2**  
N = Not applicable

**Power and Monitoring**  
S = 2.8 - 6.6 A, non-monitored — power only  
M = 2.8 - 6.6 A, with monitoring  
R = 2.8 - 6.6 A, ILCMS OFDM integrated

**Connector and Cable**  
1 = 1 x Style 6 2-pole plug, 2 individual wires

**Options**  
0 = None

**Version**  
2 = Second edition



## Dimension and Weight

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

## Maintenance and Installation

The light fixture can be installed on an 8-inch. Gaskets are sold separately. Check what gasket and bolts to order depending on base and installation.

**Note:** Refer to the user manual UM-5091 for 8-inch lights and to the interoperability info for installation on a specific base.

## Operating Conditions

**Operating temperature** -60 °C to +55 °C / -76 °F to +131 °F

**Storage temperature** -60 °C to +80 °C / -76 °F to +176 °F

**Humidity** Up to 100%

**ANNEX**

**8-inch light fixtures without Arctic Kit (heater)**

Fixture type – 1 cord set	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

**Note:**

- See user manual UM-5091 for other power supplies.
- 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. Transformers can be safely overloaded by 10 %.
  - Legacy BRITE II or AGLAS 2 systems — Order "M" power supply
- Fail-open fixtures:
  - The maximum rating for the isolation transformer is 200 W
- Additional voltage loss when longer secondary cables are used is not included in above table; these additional losses may result in a larger size isolation transformer requirement and must be factored into the circuit load calculation
- Additional voltage loss in primary cable is not included in above table; this additional loss will result in a higher CCR load and must be factored into the circuit load calculation
- Efficiency of the isolation transformer depends on the manufacturer of the transformer

*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).*