

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 (≤ 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

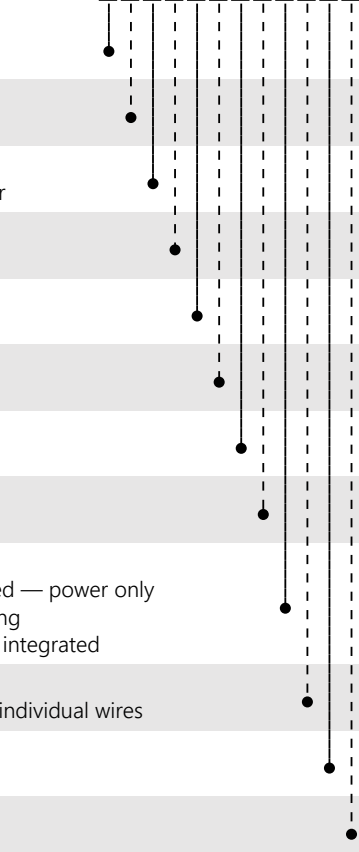
Power and Monitoring
S = 2.8 - 6.6 A, non-monitored — power only
M = 2.8 - 6.6 A, with monitoring
R = 2.8 - 6.6 A, ILCMS OFDM integrated

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

Options
0 = None

Version
2 = Second edition

RSME



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.