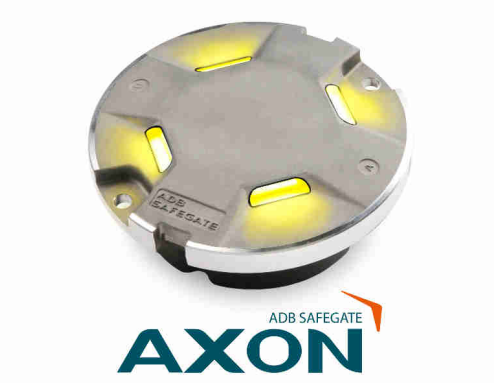
AXON

LED Apron Maneuvering Guidance

Omnidirectional Inset, 8-inch



Compliance with Standards (current versions)

ICAO	Annex 14, Volume 1
IEC	61827
EASA	CS-ADR-DSN
Canada	TP 312
Australia	MOS 139

CE

Uses

The AXON 8-inch omnidirectional low-protrusion protected inset LED light fixture This fixture can be used in the following applications:

- Aircraft Stand Maneuvering Guidance

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
- 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/ 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 µS – 8/20 µS combination wave, with a peak voltage of 10,000 V and a peak current of 5,000 A

Accessories

Refer to the user manual UM-5091 for 8 inch protected inset lights.

Power Supply

An integrated, encapsulated 6.6A electronic converter. Two-pole L-823 FAA Style 6 (2-pin) plug for connection to the transformer. Power factor typically > 0.95 at 6.6 A. French (flat 3-pin) plugs available for the French market.

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Ordering Code

RSAM□□□□□□□□□□□□

Standard
3 = ICAO

Market-Specific
0 = None

Dimensions
1 = 8 inch

Prism
P = 4 protected prisms

Beam Orientation
3 = Omnidirectional

Toe-in
N= Not applicable

Colors (Side 1)
R = Red
Y = Yellow

Colors (Side 2)
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 A - 6.6 A, ILCMS integrated OFDM EQ

Connector and Cable
1 = 1 x Style 6 2-pin plug, 2 individual wires
5 = 1 x flat 3-pin plug, 3 individual wires [1]

Options
0 = None
1 = Arctic Kit

Version
2 = Second edition

Ordering Code Notes

[1]French 3-pin plug (1F).

Note: Deep base and / or adapter rings to be ordered separately.

Maintenance and Installation

Refer to the AXON protected Omni inset user manual UM-5091 for 8-inch lights and to the interoperability information for installation in a specific base.

Dimensions and Weight

Outer diameter / depth	Approx. 203 mm / 81.35 mm 8 in / 3.2 in
Weight without packaging	Approx. 2.8 kg 6.1 lb

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
Relative humidity	Up to 100%

ANNEX

8-inch and 12-inch light fixtures without Arctic Kit (heater)

Fixture type – 1 cord set [1]	Fixture load	Isolation transformer		CCR load
		Wattage	Load	
RS -AM (omnidirectional, inset)	35 VA	45 W	9 VA	44 VA

8-inch and 12-inch light fixtures with Arctic Kit (heater)

Fixture type – 1 cord set [1]	Fixture load	Isolation transformer		CCR load
		Wattage	Load	
RS -AM (omnidirectional, inset)	65 VA	65 W	10 VA	75 VA

Notes

[1] Values provided are for the "S" option non-monitored power only.

Note:

- Refer to the appendix of protected Omni inset user manual for 8-inch lights for a complete power table and the cable loss formula.
- Refer to the annex section.
- EQ fixtures:
  - The isolation transformer must have an additional 8 VA available above the fixture load for communication bandwidth. Size transformer to 65 W on fixture with arctic kit 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.