AXON

LED RETIL

Unidirectional Inset 8-inch and 12-inch



Compliance with Standards (current Version)

ICAO Annex 14, Volume 1

NATO STANAG 3316

 IEC
 61827

 Canada
 TP 312

 Australia
 MOS 139

 ϵ

Uses

ICAO

Rapid Exit Taxiway Indicator Light (RETIL)

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 (≤ 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
- One single family of fixtures covering all runway, taxiway and approach applications
- IP68 rated enclosure designed for harsh environments; all fastenings are stainless steel
- · Reinforced prism available as an option
- 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 μ S 8/20 μ S combination wave, with a peak voltage of 10,000 V and a peak current of 5,000 A



AXON

Ordering Code

	Application	Standards	Market Specific	Dimensions	Prism	Beam Orientation	Toe-in	Color - Side 1 (Left)	Color - Side 2 (Right)	Power and Monitoring	Cable and connector2	Options	Version	
RS []												

Application

RY = Rapid Exit Taxiway Indicator Light (RETIL)

Standards

 $3 = ICAO^1$

Market Specific

0 = None

4 = German Military 7-step FO

Dimensions

1 = 8 inch (203 mm) diameter

2 = 12 inch (305 mm) diameter, 11.25 inch BC (285 mm)

Prism

S = Standard prism

R = Reinforced prism

Beam Orientation

1 = Unidirectional

Toe-in

N = None

Color - Side 1 (Left)

Y = Yellow

Color - Side 2 (Right)

N = Not applicable

Power and Monitoring

M = 2.8 A - 6.6 A Fail-Open monitoring²

R = 2.8 A - 6.6 A, EQ Integrated LINC 360

Cable and connector²

1 = 1 x Style 6 2-pole plug, 2 individual wires³

2 = 1 x Style 1 2-pole plug, jacketed SO 2-core cable³

5 = 1 x Flat 3-pole plug, 3 individual wires

Options

0 = None

1 = Arctic Kit

Version

1 = Version 1

Ordering Code Notes

- 1. Includes standards NATO, EASA, STAC, TP 312 and MOS 139.
- 2. EQ light fixtures are only available as a one connector option.
- 3. All Style 1 corded fixtures will include a ground lug. All Style 6 or 3-pole corded fixtures will be provided with grounding screw(s).

Power Supply Options

- Monitored integrated Fail-open technology
- EQ with integrated ILCMS with OFDM technology for use with LINC 360 system

Maintenance and Installation

The light fixture can be installed on an 8-inch or 12-inch base. Gaskets are sold separately. Check what gasket and bolts to order depending on base and installation. Refer to the interoperability section of the user manual for installation on a specific base.





Operating Conditions

Dimensions and Weight

Operating temperature $-60 \, ^{\circ}\text{C}$ to +55 $^{\circ}\text{C}$ / -76 $^{\circ}\text{F}$ to +131 $^{\circ}\text{F}$

Storage temperature $-60 \,^{\circ}\text{C}$ to $+80 \,^{\circ}\text{C}$ / $-76 \,^{\circ}\text{F}$ to $+176 \,^{\circ}\text{F}$

Humidity Up to 100%

 Dimensions
 203 mm (8 in)
 305 mm (12 in)

 Weight
 3.0 kg / 6.6 lb (8 in)
 6.8 kg / 15 lb (12 in)

ANNEX

8-inch and 12-inch light fixtures without Arctic Kit

Eivtura tuna 1 card cat ¹	Fixture load	Isolation tr	CCR load		
Fixture type – 1 cord set'	rixture load	Wattage	Load	CCR IDau	
Rapid Exit Taxiway Indicator Light	25.5 VA	45 W	7.2 VA	32.7 VA	

Note: ¹Values 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
- 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 runway user manual UM-5055 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.

