

AXON

LED ICAO Rapid Exit Taxiway Indicator Light (RETIL)

Unidirectional Inset, 8-inch and 12-inch



Compliance with Standards

ICAO Annex 14, Volume 1

IEC 61827

NATO STANAG 3316

Canada TP 312

Australia MOS 139

CE

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 (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
- 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

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 ²	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

RY = Rapid Exit Taxiway Indicator Light (RETIL)

Standard(s)

3 = ICAO¹

Market Specific

0 = None

4 = German MIL 7-step FO

Dimensions

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

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 - 6.6 A, Fail-Open Monitoring²

R = 2.8 - 6.6 A, EQ Integrated LINC 360

Connector and Cable²

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

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 to order for your specific base and ensure a reliable fit.

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%

Dimensions and Weight

Dimensions 203 mm (8 in) 305 mm (12 in)
Weight 3 kg / 6.6 lb (8 in) 6.8 kg / 15 lb (12 in)

ANNEX

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

Fixture type – 1 cord set ¹	Fixture load	Isolation transformer		CCR load
		Wattage	Load	
Rapid Exit Taxiway Indicator Light	20 VA	45 W	7.2 VA	27.2 VA

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 (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 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.