

AXON

LED Taxiway Centerline ICAO

Uni- and Bidirectional Inset 8-inch and 12-inch



Compliance with Standards (current version)

ICAO	Annex 14 Volume 1
IEC	61827
NATO	STANAG 3316
EASA	CS-ADR-DSN
STAC	PRO/STAC/SE/VIS
Canada	TP 312
Australia	MOS 139
CE	

Uses

ICAO

- Taxiway centerline
- Lead-in
- Intermediate holding position

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
- At-a-Glance top cover identification to quickly differentiate runway fixtures from taxiway fixtures to minimize installation errors
- 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
- 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/ 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

- Non-Monitored — power only
- Monitored — integrated Fail-open technology
- EQ with integrated ILCMS with OFDM technology for use with LINC 360 system

Ordering Code

Application

TC = Taxiway Centerline narrow¹
 TK = Taxiway Centerline curved²
 TR = Enhanced Taxiway Centerline
 for Rapid Exit³
 TW = Taxiway centerline wide^{4,5}

Standards

3 = ICAO⁶

Market-specific

0 = None

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
 2 = Bidirectional

Toe-in

N = None⁸
 C = Curved^{7,8}

Color – Side 1 (Left)

G = G-Green (ICAO and MOS)
 F = F-Green (ICAO, STD)
 Y = Yellow
 B = Blue
 N = None⁹

Color – Side 2 (Right)

G = G-Green (ICAO and MOS)
 F = F-Green (ICAO, STD)
 Y = Yellow
 B = Blue
 N = None

Power and Monitoring

S = 2.8 A – 6.6 A, non-monitored — power only¹⁰
 M = 2.8 A – 6.6 A, Fail-open monitoring¹⁰
 R = 2.8 A – 6.6 A, EQ integrated LINC 360

Cable and connector

1 = 1 x Style 6 2-pole plug, 2 individual wires¹¹
 2 = 1 x Style 1 2-pole plug^{11,12}
 3 = 2 x Style 6 2-pole plug, 2 individual wires^{11,13}
 4 = 2 x Style 1 2-pole plug^{11,12,13}
 5 = 1 x flat 3-pole plug, 3 individual wires¹¹
 6 = 2 x flat 3-pole plug, 3 individual wires^{11,13}

Options

0 = None
 1 = Arctic kit

Version

1 = Version 1

RS

Ordering Code Notes

Light fixtures with internal remote allows for control and monitoring of the light fixture. Light fixtures with internal remotes are only available as 1-connector option.

¹ Straight sections, Narrow Beam, < 350 m RVR

² Lead-on/exit, Curved Beam, < 350 m RVR

³ Taxiway centerline, Wide Beam, < 350 m RVR

⁴ Taxiway centerline, straight sections, Wide Beam, < 350 m RVR

⁵ TW application includes Intermediate Holding Position light which is Yellow/Blank with wide beam distribution

⁶ Includes standards NATO, EASA, STAC, TP 312 and MOS 139

⁷ TK application only

⁸ To assure the correct toe-in direction, per color, place the required color option in Side 1 (Left) and/or 2 (Right). Left and right side determined by standing over fixture while looking towards the taxiway edge in the direction of the curve.

⁹ TK CVR application only

¹⁰ 2-cord set option available

¹¹ All Style 1 corded fixtures will include a ground lug. All Style 6 or 3-pole corded fixtures will be provided without a ground lug.

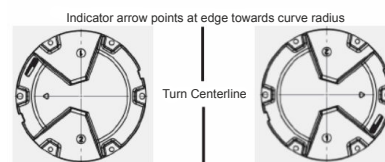
¹² Jacketed SO 2 core cable

¹³ Not valid option for unidirectional

Maintenance and Installation

The light fixture can be installed on an 8- or 12-inch base. Gaskets are sold separately. Check what gasket and bolts to order depending on base and installation.

Toe-in Color Coding for ICAO Taxiway Centerline Light



Left and right side determined by viewing fixture from interior turn radius pavement edge. Side 1 is on your left, side 2 is on your right.

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
Operating humidity	Up to 100 %

Dimensions and Weight

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 (heater)

Fixture type – 1 cord set ¹	Fixture load	Isolation transformer		CCR load
		Wattage	Load	
Taxiway Centerline Wide, bidirectional	13.5 VA	15 W	7.6 VA	21.1 VA
Taxiway Centerline Curved, bidirectional	12.4 VA	15 W	7.6 VA	20 VA
Taxiway Centerline Narrow, unidirectional	7.8 VA	15 W	10.1 VA	17.9 VA

Fixture type – 2 cord sets ¹	Fixture load		Isolation transformer				CCR load	
	Side 1	Side 2	Wattage		Load		Side 1	Side 2
			Side 1	Side 2	Side 1	Side 2		
Taxiway Centerline Narrow, bidirectional	10.9 VA	10.9 VA	15 W	15 W	7.9 VA	7.9 VA	18.8 VA	18.8 VA
Taxiway Centerline Wide, bidirectional	13.1 VA	13.1 VA	15 W	15 W	7.7 VA	7.7 VA	20.8 VA	20.8 VA

Notes

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

Note:

- See user manual UM-5056 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
- For fail-open fixtures:
 - The maximum dimension 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 the ADB SAFEGATE Product Center at www.adbsafegate.com.

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