# **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

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### Uses

### **ICAO**

- · Taxiway centerline
- · Apron Stand Lead-in
- Intermediate holding position
- Turn pad light
- · Enhanced taxiway centerline

# **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
- 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 1.2/50μS 8/20 μS 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



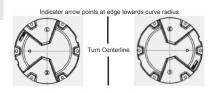
Ordering Code	$RS \square \square$
Application  TC = Taxiway Centerline of TK = Taxiway Centerline of TR = Enhanced Taxiway Centerline of TR = Taxiway Centerline with Taxiway Centerline	arved <sup>2</sup>
Standards 3 = ICAO <sup>6</sup>	•
Market-specific 0 = None	•
Dimensions 1 = 8 inch (203 mm) diam- 2 = 12 inch (305 mm) diam- BC (285 mm)	
Prism S = Standard prism R = Reinforced prism	
Beam Orientation 1 = Unidirectional 2 = Bidirectional	•
Toe-in N= None <sup>8</sup> C= Curved <sup>7,8</sup>	
Color – Side 1 (Left) G= G-Green (ICAO and M F = F-Green (ICAO, default Y = Yellow B = Blue N= None <sup>9</sup>	
Color – Side 2 (Right) G= G-Green (ICAO and M F = F-Green (ICAO, default Y = Yellow B = Blue N= None	
Power and Monitoring S = 2.8 A - 6.6 A, non-mo M= 2.8 A - 6.6 A, Fail-oper R = 2.8 A - 6.6 A, EQ integ	n monitoring
$3 = 2 \times \text{Style } 6 \text{ 2-pole plug}$	jacketed SO 2-core cable <sup>12</sup> , 2 individual wires jacketed SO 2-core cable <sup>12</sup> ndividual wires
Options 0 = None 1 = Arctic kit	•
Version	

- $^{1}$  Straight sections, Narrow Beam, < 350 m RVR. Used for turn pad centerline light.
- <sup>2</sup> Lead-on/exit, Curved Beam, < 350 m RVR. Used for turn pad light.
- <sup>3</sup> Taxiway centerline, Wide Beam, < 350 m RVR
- <sup>4</sup> Taxiway centerline, straight sections, Wide Beam, < 350 m RVR
- <sup>5</sup> TW application includes Intermediate Holding Postion light which is Yellow/Blank with wide beam distribution
- <sup>6</sup> Includes standards NATO, EASA, STAC, TP 312 and MOS 139.
- <sup>7</sup> TK application only
- <sup>8</sup> 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.
- <sup>9</sup> TK CVR application only
- <sup>10</sup> EQ light fixtures are only available as a one-connector option
- <sup>11</sup> All Style 1 corded fixtures will include a ground lug. All Style 6 and 3-pole corded fixtures will be provided with grounding screw(s).
- <sup>12</sup> SO cord set option is not compatible with shallow bases. If required please contact ADB Safegate

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

Operating humidity Up to 100 %



1 = Version 1

# **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)

Fivture type 1 cord cot 1	Fixture load	Isolatio	Isolation transformer		
Fixture type – 1 cord set <sup>1</sup>	rixture load	Wattage	Load	CCR 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	18 VA	

Fixture type – 2 cord sets <sup>1</sup>	Fixture load		Isolation transformer				CCR load	
	Side 1	Side 2	Wattage		Load		CCN IDAU	
			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	18.6 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

### 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

www.adbsafegate.com



<sup>&</sup>lt;sup>1</sup> Values provided are for the "S" option non-monitored power only.