# **AXON**

# LED Approach Centerline, Crossbar and Siderow

Unidirectional Inset 12-inch



## Compliance with Standards (current version)

ICAO Annex 14 Volume 1

EASA CS-ADR-DSN

**IEC** 61827

NATO STANAG 3316

STAC PRO/STAC/SE/ENIS/600S

Canada TP 312

Australia MOS 139

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## Uses

#### **ICAO**

- · Approach centerline
- · Approach crossbar
- · Approach siderow

### **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 supply.
- 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



## **AXON**

## **Ordering Code Application** AC= Approach Centerline / Crossbar AS = Approach Siderow SF = Approach Siderow Flash Standards $3 = ICAO^1$ **Market Specific** 0 = None3 = U.S. Military 4 = German MIL 7-step FO **Dimensions** 2 = 12 inch (304 mm) Diameter Prism S = Standard prism R = Reinforced prism **Beam Orientation** 1 = Unidirectional Toe-in N= None L = LeftR = Right Color - Side 1 (Left) R = Red(AS)W= White (AC) Color – Side 2 (Right) N= None **Power and Monitoring** S = 2.8 A - 6.6 A non-monitored - power only M= 2.8 A - 6.6 A Fail-Open monitoring R = 2.8 A - 6.6 A, ILCMS integrated OFDM EQ Cable and connector $1 = 1 \times \text{Style } 6 \text{ 2-pole plug, 2 individual wires}^2$ $2 = 1 \times \text{Style } 1 \text{ 2-pole plug, jacketed SO } 2 \text{ core cable}^2$ 5 = 1 x Flat 3-pole plug, 3 individual wires<sup>2</sup> **Options** 0 = None1 = Arctic Kit **Version Control**

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 and Weight**

 Dimensions
 304 mm (12 in)

 Weight
 6.8 kg / 15 lb (12 in)

## Maintenance and Installation

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

Refer to the approach user manual for 12-inch lights and to the interoperability information for installation on a specific base.



1 = Version 1

**Operating Conditions** 

<sup>&</sup>lt;sup>1</sup> Option 3 covers standards: EASA, NATO, STAC, TP-312, MOS 139

 $<sup>^2</sup>$  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 UNLESS digit 6 is option 1 "BAP".

### **ANNEX**

## 12-inch light fixtures without Arctic Kit

Fixture type – 1 cord set	Fixture load	Isolation transformer		CCR load
		Wattage	Load	CCK load
Approach Centerline	60 VA	65 W	15 VA	75 VA
Approach Crossbar	60 VA	65 W	15 VA	75 VA
Approach Siderow	42 VA	45 W	12 VA	54 VA

#### Note:

- See approach user manual for other power supplies.
- · EQ fixtures:
  - The isolation transformer must have an additional 8 VA available above the fixture load for communication bandwidth. Please Transformers can be safely overloaded by 10 %.
  - Legacy BRITE II or AGLAS 2 systems Order "M" power supply
- · For 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.

