

# AXON

## LED ICAO Approach Centerline and Siderow

Elevated, Unidirectional



AXON

### Compliance with Standards

<b>ICAO</b>	Annex 14, Volume 1
<b>NATO</b>	STANAG 3316
<b>IEC</b>	61827
<b>EASA</b>	CS-ADR-DSN
<b>STAC</b>	SPE/STAC/SE/E/VIS/6008
<b>UK</b>	CAP 168
<b>UFC</b>	3-535-01
<b>Canada</b>	TP 312
<b>Australia</b>	MOS 139
<b>UKCA</b>	3-535-01
CE	

### Uses

#### ICAO

- Approach Centerline & Cross Bar
- Approach Siderow

### Features and Benefits

#### Efficiency

- Infra Red for EFVS / NVG compatibility. Highly configurable to suit operational requirement
- LED is PWM-modulated at 400 Hz to optimize performance and eliminate human flicker perception, regardless of brightness levels
- Lights are fully dimmable and conform to FAA EB 67D and ICAO Annex 14 dimming curve
- Dedicated aiming device allows easy leveling and azimuth aiming of the light
- Option of low intensity omnidirectional approach
- Central barrel screw with two opposing locking screws ensure easy and stable leveling

### Sustainability

- Independent Product Carbon Footprint calculation to support in product lifecycle analysis
- Modular housing maximizes parts commonality and enables midlife upgrades
- Options for either glass or UV-resistant polycarbonate outer lens
- A single fixture family covers all elevated approach, runway and stop bar applications
- IP68 & IP69K rated enclosure designed for harsh environments; all fastenings are stainless steel
- This product is a direct replacement for ADB Safegate LED elevated fixtures, thanks to its mechanical and photometric backwards compatibility
- Finishing: Stainless steel hardware, aluminum body, phosphated aviation yellow electrostatic polyester powder coating
- Based on the LED manufacturer's ratings & calculations, we guarantee a LED life expectancy L70 higher than 50,000 operation hours
- Aerodynamic and lightweight weight designed to withstand heaviest jet blast

### Safety

- Identifiable daytime recognition, with large surface area colored optical module surround
- Modular mechanical design consolidates and strengthens product components for faster, easier maintenance and reconfiguration
- Failed-LED Detection as required by Engineering Brief 67D
- The product meets the lightning protection criteria of ANSI/IEEE C62.41-1991 and FAA Eng. Brief 67's Location Category C2 requirements, which outlines a 1.2/50 - 8/20  $\mu$ s combination wave, peaking at 10,000 V and 5,000 A

## Ordering Code

Application	Standards	Market Specific	Lens Type	Toe-in	Color - Side 1 (Left)	Color - Side 2 (Right)	Omnidirectional	Power Supply	Cable and Connector	Fixture Height	Coupling	Option 2	Advanced Connectivity	Refurbished	Version control
A															

### Application

AC = Approach centerline / cross bar  
AS = Approach siderow

### Standards

2 = FAA  
3 = ICAO

### Market Specific

0 = None  
1 = Buy American preference (BAP)  
4 = German MIL 7-step

### Lens Type

G = Glass  
P = UV resistant polycarbonate

### Toe-in

N = No toe-in

### Color - Side 1 (Left)

W = White  
R = Red

### Color - Side 2 (Right)

N = None (obscured)

### Omnidirectional

0 = None  
3 = Low intensity approach omni light (white)  
4 = Low intensity approach omni light (red)

### Power Supply

S = No monitoring  
M = With monitoring

### Cable and Connector

2 = 1 x style 1 2-pole plug, jacketed SO 2 core cable<sup>1</sup>  
7 = 2 individual wires, 16-18 AWG, 90" length, non terminated

### Fixture Height

A = Approach mount for 60 mm mast or pole<sup>2</sup>

### Coupling

A = No coupling (for approach only)

### Option 2

0 = None  
1 = Smart arctic kit  
3 = Near infra red  
4 = Smart arctic kit & near infra red

### Advanced Connectivity

0 = 0

### Refurbished

0 = 0

### Version control

1 = 1

## Ordering Code Notes

1. With separate earth for external routing
2. Also for 60 mm coupling or base plate

## Power Supply

- Non-monitored power only
- Monitored — integrated fail-open technology

## Maintenance and Installation

The light is made of a body, with an approach mount for 60mm mast or frangible coupling for ground mounting.



## Operating Conditions

<b>Operating temperature</b>	-55 °C to +55 °C / -67 °F to +131 °F
<b>Storage temperature</b>	-60 °C to +80 °C / -76 °F to +176 °F
<b>Humidity</b>	Up to 100%

## Dimensions and Weight

<b>Dimensions</b>	TBC	TBC
<b>Weight</b>	Min 2.7 kg (6 lb, 8-in)	TBC

## ANNEX

### Elevated Approach Fixture

Fixture type <sup>1</sup>	Fixture load <sup>2</sup>	Isolation transformer		CCR load
		Wattage	Load	
<b>All Features Enabled (Arctic Kit, Combined Low Intensity &amp; Infra Red)<sup>2</sup></b>				
Approach Centerline / Cross Bar	60 VA	65 W	12 VA	72 VA
Approach Side Row	51 VA	65 W	10 VA	61 VA

### Notes

1. Arctic Kit, Combined Low Intensity & Infra Red
2. Fixture load listing is **all features enabled** (worst case scenario) according to FAA datasheet requirements. To maintain consistency, this logic is **also applied to ICAO specific datasheets**. To calculate actual fixture VA for a light configuration, please use the **Subtraction VA** in the table below to subtract from the fixture load.

### Subtraction Overhead VA per Function

Fixture type	Subtraction Fixture VA
Arctic Kit	5 VA / 10 VA
Infra Red	3 VA / 6 VA
Low Intensity Omni White	10 VA
Low Intensity Omni Red	9 VA

### Note:

- 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 user manual for a complete overview of all variant power consumption data and other power supplies

For more information about the product, including manuals and certifications, please see the Product Center on the ADB SAFEGATE website: [www.adbsafegate.com](http://www.adbsafegate.com).