

# AXON

ICAO Runway Threshold,  
Threshold/End, Threshold Wingbar,  
End

LED Elevated Uni & Bi-Directional



AXON

## Compliance with Standards (current version)

<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>	PRO/STAC/SE/ENIS/600S
<b>UK</b>	CAP 168
<b>Canada</b>	TP 312
<b>Australia</b>	MOS 139
CE	

## Uses

### ICAO

- Runway Threshold
- Runway Threshold Wingbar
- Runway Threshold / End
- Runway End

## 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.
- Three screws allow for 4° leveling adjustment of the fixture after installation.

## 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.
- The fail-open option enables compatibility with both legacy and advanced control/monitoring systems.
- 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 1	Color - Side 1 Left	Color - Side 2 Right	Omni Directional	Power Supply	Cable & Connector	Fixture Height	Coupling	Option 2	Advanced Connectivity	Refurbished	Version Control
A															

### Application

RT = Runway Threshold / End  
 RN = Runway End  
 RW = Runway Threshold Wingbar

### Standards

3 = ICAO

### Market Specific

0 = None  
 4 = German MIL 7-step

### Lens Type

G = Glass  
 P = UV Resistant Polycarbonate

### Toe-In<sup>1</sup>

N = No Toe-In  
 L = Side 1 – Left Toe-In  
 R = Side 2 – Right Toe-In

### Color - Side 1 Left

F = F-Green  
 R = Red  
 N = None (Obscured)

### Color - Side 2 Right

F = F-Green  
 R = Red  
 N = None (Obscured)

### Omni Directional

0 = No Circling Guidance

### Power Supply

S = No monitoring  
 M = With Monitoring

### Cable & Connector

1 = 1 x Style 6 2-Pole Plug, 2 Individual Wires with Separate Earth for Internal Routing  
 2 = 1 x Style 1 2-Pole Plug, Jacketed SO 2 Core Cable with Separate Earth for External Routing

### Fixture Height

B = <350mm  
 C = 14" OAH  
 D = 20" OAH  
 E = 24" OAH  
 F = 30" OAH

### Coupling

B = 2" 11TPI (BSP) Coupling No Base Plate  
 C = 2" 11.5TPI (NPS) Coupling No Base Plate  
 E = 2" 11TPI (BSP) Flush Break Coupling No Base Plate  
 F = 2" 11.5TPI (NPS) Flush Break Coupling No Base Plate

### Option 2

0 = None  
 1 = Smart Arctic Kit  
 3 = Near Infra Red  
 4 = with Smart Arctic Kit & Near Infra Red

### Advanced Connectivity

0 = 0

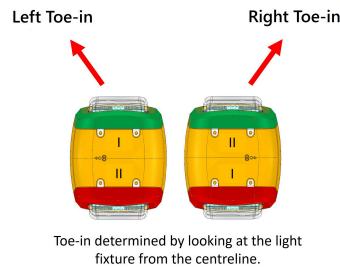
### Refurbished

0 = 0

### Version Control

1 = 1

## Toe-in Coding



<sup>1</sup> L/R is always referencing the F-Green color.

## Power Supply

- Non-Monitored Power only
- Monitored — integrated Fail-open technology

## Maintenance and Installation

The light is made of an aluminum body, with mounting stem and frangible coupling, with three screws to allow for 4° leveling adjustment of the fixture after installation.

# AXON

## Operating Conditions

<b>Operating temperature</b>	-60 °C to +55 °C / -76 °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

### ICAO Runway Threshold, Threshold/End, Wingbar, End

Fixture type	Fixture load	Isolation transformer		CCR load
		Wattage	Load	
Runway Threshold	19 VA	20 W / 25 W	5 VA	24 VA
Runway Threshold/End	24 VA	20 W / 25 W	6 VA	30 VA
Runway Threshold Wingbar	22 VA	20 W / 25 W	6 VA	28 VA
Runway End	12 VA	10 W / 15 W	4 VA	16 VA
Runway End/End	17 VA	20 W / 25 W	5 VA	22 VA

### Additional Overhead VA per Function

Fixture type	Additional fixture VA Uni-/Bi-directional
Arctic Kit	5 VA / 10 VA
Infra Red	3 VA / 6 VA

#### Note:

- See manual 5055 for other power supplies.
- Fail-open fixtures:
  - The maximum rating for the isolation transformer is 150 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 Product Center on the ADB SAFEGATE website: [www.adbsafegate.com](http://www.adbsafegate.com).