

AXON

LED ICAO Runway Threshold, End, Threshold/End and Threshold Wingbar Elevated, Uni & Bidirectional



AXON

Compliance with Standards

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

Uses

ICAO

- Runway threshold
- Runway end
- Runway threshold/end
- Runway threshold wingbar

Features and Benefits

Efficiency

- Infrared for EFVS/NVG compatibility. Highly configurable to meet operational requirements
- The LED uses 400 Hz PWM modulation to optimize performance and prevent visible flicker at all brightness levels.
- The Lights are fully dimmable and conform to the FAA EB 67D and ICAO Annex 14 dimming curve
- A dedicated aiming device allows easy leveling and azimuth adjustment of the light
- Three screws allow up to 4° leveling adjustment of the fixture after installation

Sustainability

- Independent Product Carbon Footprint calculation available to support in product lifecycle analysis
- Modular housing maximizes parts commonality and allows midlife upgrades for enhanced functionality without replacing the product
- Available with either a glass or UV-resistant polycarbonate outer lens
- A single fixture family covers all elevated approach, runway, and stop bar applications
- The enclosure is IP68 and IP69K rated for harsh environments; All fastenings are stainless steel
- This product is a direct replacement for ADB SAFEGATE LED elevated fixtures due to its mechanical and photometric backwards compatibility
- Finish: Stainless steel hardware, aluminum body, phosphated aviation yellow electrostatic polyester powder coating
- Based on the LED manufacturer's ratings and calculations, LED life expectancy (L70) is guaranteed to exceed 50,000 operating hours
- Aerodynamic and lightweight design built to withstand the strongest jet blast

Safety

- Clear daytime recognition with large colored optical module surround
- Modular mechanical design consolidates and strengthens components for faster and easier maintenance and reconfiguration
- SMART Arctic kit available with optional heater output down to 4.1 A
- The fail-open option allows compatibility with both legacy and advanced control and monitoring systems
- Failed-LED detection as required by FAA Engineering Brief 67D
- The product meets the lightning protection requirements of ANSI/IEEE C62.41-1991 and FAA Engineering Brief 67, Location Category C2. It is tested with a 1.2/50-8/20 μ s combination wave, up to 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

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

L = Side 1 - left toe-in
 R = Side 2 - right toe-in
 N = No toe-in

Color - Side 1 (Left)

R = Red
 F = Green
 N = None (obscured)

Color - Side 2 (Right)

R = Red
 F = Green
 N = None (obscured)

Omnidirectional

0 = None

Power Supply

S = No monitoring
 M = With monitoring

Cable and Connector

1 = 1 x style 6 2-pole plug, 2 individual wires¹
 2 = 1 x style 1 2-pole plug, jacketed SO 2 core cable²

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 = Smart arctic kit & near infra red

Advanced Connectivity

0 = 0

Refurbished

0 = 0

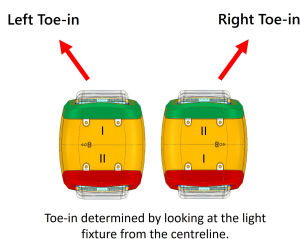
Version control

1 = 1

Ordering Code Notes

1. With separate earth for internal routing
2. With separate earth for external routing

Toe-in Coding



Note:

L/R is always referencing the F-Green color.

Power Supply

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

Maintenance and Installation

The fixture has an aluminum body. Install it on the ground with a frangible coupling or elevated on a mast with a mounting stem, as applicable. Designed for backward compatibility with ADB SAFEGATE LEAP and EREL fixtures in existing installations.



Operating Conditions

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

Dimensions and Weight

Dimensions	TBC
Weight	Min 2.7 kg (6 lb)

ANNEX

Elevated light fixtures with arctic kit and infra red (both features enabled)¹

Fixture type	Fixture load ¹	Isolation transformer		CCR load
		Wattage	Load	
Runway threshold, unidirectional, green	27 VA	30 W / 45 W	5 VA	32 VA
Runway threshold/end, bidirectional, green / red	40 VA	30 W / 45 W	8 VA	48 VA
Runway threshold and wingbar, unidirectional, green	30 VA	30 W / 45 W	6 VA	36 VA
Runway end, unidirectional, red	20 VA	20 W / 25 W	6 VA	26 VA
Runway end/end, bidirectional, red / red	33 VA	30 W / 45 W	7 VA	40 VA

Notes

1. The fixture load list shows the load with **all functions enabled**, as required by the FAA. This also applies to ICAO-specific datasheets. To calculate the fixture VA, use the table that follows and subtract the applicable values from the fixture load.

Overhead VA per function

Fixture type	Fixture VA
SMART arctic kit	5 VA / 10 VA
Infra red	3 VA / 6 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.