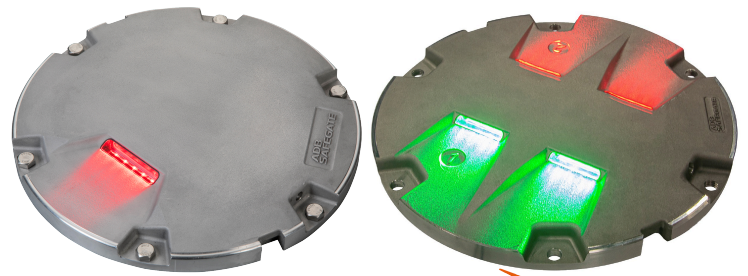


AXON

LED ICAO Runway Threshold,
Threshold/End and End
Uni and Bidirectional Inset, 12-inch



ADB SAFEGATE
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
Canada	TP 312
CE	

Uses

ICAO

- Runway threshold
- Runway end
- Runway threshold/end

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 of 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
- LED 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 (directional beams only)
- 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 and 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 Engineering Brief 67 Category C2 is defined as a 1.2/50 μ S – 8/20 μ S combination wave, with a peak voltage of 10,000 V and a peak current of 5,000 A

Ordering Code

Application	Standard(s)	Market Specific	Dimensions	Prism	Beam Orientation	Toe-in	Color - Side 1 (Left)	Color - Side 2 (Right)	Power and Monitoring	Connector and Cable	Options	Version
RS												

Application

RN = Runway End⁸

RT = Runway Threshold, Threshold/End

Standard(s)

3 = ICAO¹

Market Specific

0 = None

4 = German MIL 7-step FO

Dimensions

2 = 12 inch (305 mm) diameter, 11.25 inch BC (285 mm)

Prism

S = Standard prism

R = Reinforced prism

Beam Orientation

1 = Unidirectional

2 = Bidirectional

Toe-in

L = Left Side Toe-in (Unidirectional)^{3,4}

R = Right Side Toe-in (Unidirectional)

N = None^{2,3}

Color - Side 1 (Left)

R = Red

F = F-Green (ICAO, default green)

Color - Side 2 (Right)

R = Red

N = None

Power and Monitoring

S = 2.8 - 6.6 A, Non-Monitored — Power Only⁵

M = 2.8 - 6.6 A, Fail-Open Monitoring⁵

R = 2.8 - 6.6 A, EQ Integrated LINC 360

Connector and Cable⁶

1 = 1 x Style 6 2-Pole Plug, 2 Individual Wires

2 = 1 x Style 1 2-Pole Plug, Jacketed SO 2 Core Cable

3 = 2 x Style 6 2-Pole Plug, 2 Individual Wires

4 = 2 x Style 1 2-Pole Plug, Jacketed SO 2 Core Cable

5 = 1 x Flat 3-Pole Plug, 3 Individual Wires

6 = 2 x Flat 3-Pole Plug, 3 Individual Wires

Options

0 = None

1 = Arctic Kit⁷

Version

1 = Version 1

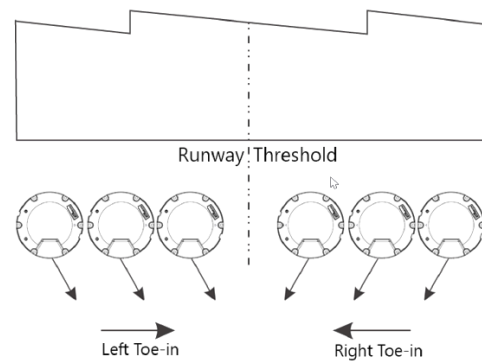
Ordering Code Notes

1. Includes standards NATO, EASA, STAC, TP 312 and MOS 139.
2. L and R designations are always in relationship to side 1 only.
3. RN must be N.
4. RT green/red only - always toed.
5. 2-cordset option available.
6. All Style 1 corded fixtures will include a ground lug. All Style 6 or 3-pole corded fixtures will be provided with grounding screw(s).
7. Only with RN (RT meets EB67d Arctic kit requirements on its own)
8. See runway UM-5055 for spare parts

Power Supply Options

- Non-monitored — power only
- Monitored — integrated fail-open technology
- EQ with integrated ILCMS with OFDM technology for use with LINC 360 system

Toe-in Coding RT



Installation and Maintenance

The light fixture can be installed in a 12-inch base. Gaskets are sold separately. Refer to the user manual INTEROPERABILITY appendix to identify the correct gasket and bolts for your specific base and ensure a reliable fit.

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 304 mm (12 in)
Weight 6.8 kg / 15 lb (12 in)

ANNEX

12-inch light fixtures without Arctic Kit (heater)

Fixture type – 1 cord set ¹	Fixture load	Isolation transformer		CCR load
		Wattage	Load	
Threshold/End	43 VA	45 W	12 VA	55 VA
End/End	32 VA	45 W	9 VA	41 VA
Threshold	32VA	45 W	9 VA	41 VA
End	19 VA	25 W	6 VA	25 VA

¹Values provided are for the "S" option non-monitored power only.

Note:

- 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
 - Legacy BRITE II or AGLAS 2 systems — Order "M" power supply
- Fail-open fixtures:
 - The maximum rating for the isolation transformer is 150 W (a correctly calibrated CCR is important to achieve an accurate fail open response)
- 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 high intensity approach user manual UM-5057 for other power supplies

For more information about the product, including manuals and certifications, please see our Product Center on the ADB SAFEGATE website: www.adbsafegate.com.