AXON

LED L-852G(L) Runway Guard Light

Unidirectional Inset, 8-inch and 12-inch

Compliance with Standards

FAA	AC 150/5345-46 and FAA Engineering Brief No. 67
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 guard light

FAA

- L-852(L) runway guard light

Features and Benefits

Efficiency

- Autonomous version for applications where fixtures are not electronically monitored. Synchronization circuitry is contained within each fixture, eliminating the need for any synchronizing local control devices. Fixture connects directly into isolation transformer. Fixtures will ship either flash-on or flash-off as per the ordering code. Available for ICAO or FAA.
- 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
- 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 µS – 8/20 µS 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)	Programming – Side 2 (Right)	Power and Monitoring	Connector and Cable	Options	Version
RS													

Application
RG = L-852(L) Runway Guard Light

Standard(s)
2 = FAA
3 = ICAO[6]

Market Specific
0 = None
1 = Buy American Preference (BAP)[1, 7]
6 = Buy American Preference (BAP)[1, 8]

Dimensions
1 = 8 inch (203 mm) diameter, 2 bolt
2 = 12 inch (305 mm) diameter, 11.25 inch BC (285 mm)
3 = 8 inch (203 mm) diameter, 4 bolt

Prism
S = Standard prism
R = Reinforced prism

Beam Orientation
1 = Unidirectional

Toe-in
N = None

Color - Side 1 (Left)
Y = Yellow

Programming – Side 2 (Right)
0 = Flash-Off
1 = Flash-On

Power and Monitoring
S = 2.8 - 6.6 A, Non-Monitored — Autonomous[3]
R = 2.8 - 6.6 A, EQ Integrated LINC 360[4]

Connector and Cable
1 = 1 x Style 6 2-Pole Plug, 2 Individual Wires[4]
2 = 1 x Style 1 2-Pole Plug, Jacketed SO 2 Core Cable[4, 5]
5 = 1 x Flat 3-Pole Plug, 3 Individual Wires[4]

Options
0 = None
1 = Arctic Kit

Version
1 = Version 1

Ordering Code Notes

1. Required for USA FAA market.
2. 8"- 4 bolt top cover fixtures are not compatible with 8" shallow bases.
3. If market specific = 1 (BAP), side 2 will include a non-light producing window on the autonomous version which provides access to the internal optical sensor, allowing the local programming device to change flash programming (only Market specific = 1 has this possibility). All fixtures must be ordered as either flash-on or flash-off. Typically, it is a 50/50 split between the two options.
4. 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).
5. Style 1 SO cord-set not compatible with 8" shallow bases using side entry.
6. Includes standards NATO, EASA, STAC, CAP 168, TP 312, CAAC and MOS 139. ICAO version is only available with a 1-window top cover and not compatible with the IR remote.
7. If autonomous, it comes with a 2 window top cover for adjustable flashing through second window with IR remote. EQ always supplied with a 1-window top cover.
8. Only available for autonomous fixtures. The one-window top cover does not have an adjustable flash sequence.

Power Supply Options

- Non-monitored — power only
  Autonomous flash-on / flash off
- EQ with integrated ILCMS with OFDM technology for use with LINC 360 system. Use this option only for ILCMS installations.

IR Remote for Autonomous Fixtures (Only for FAA Market Specific = 1)

Use IR remote (part number 61A0458) to set each autonomous fixture to **Flash-ON** or **Flash-OFF**. You can also use a local programming device to set different start-up delays on long circuits. These delays reduce load changes on a CCR that supplies multiple RGL bars. The remote is **not compatible with the EQ, ICAO, or FAA Market Specific = 6 versions.** These versions have a one-window top cover and do not have a window for the IR sensor.

Installation and Maintenance

The light fixture can be installed in a 12-inch or an 8-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	203 mm (8 in)	304 mm (12 in)
Weight	3 kg / 6.6 lb (8 in)	6.8 kg / 15 lb (12 in)

ANNEX

8-inch and 12-inch light fixtures without Arctic Kit (heater)

Fixture type – 1 cord set[1]	**Fixture load**	**Isolation transformer**		**CCR load**
		Wattage	**Load**	
Runway guard light, L-852G(L), autonomous	26 VA	25 W	8 VA	34 VA
Runway guard light, L-852G(L), EQ / LINC 360	28 VA	45 W	10 VA	38 VA

8 and 12-inch light fixtures with Arctic Kit (heater)

Fixture type – 1 cord set[1]	**Fixture load**	**Isolation transformer**		**CCR load**
		Wattage	**Load**	
Runway guard light, L-852G(L), autonomous	43 VA	45 W	9 VA	52 VA
Runway guard light, L-852G(L), EQ / LINC 360	45 VA	45 W	9 VA	54 VA

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

Note:

- 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 user manual for cable loss formula and 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.