

TAXIWAY LIGHTING

IRGL-STB-L

LED In-pavement Runway Guard Light & Stop Bar

STYLE 3, MEDIUM-INTENSITY



Compliance with Standards

FAA: L-852G(L) and L-852S(L) AC 150/5345-46 (Current Edition) and the FAA Engineering Brief No. 67. Meets the requirements of Low-Visibility Taxiway Lighting Systems as specified by FAA AC 150/5340-30. ETL Certified.

T/C: AC 302-005 (Fig. 9) and TP312 – 5th Ed. Amendment 1 Para 5.3.26.11, Figure B-17 (L852G) Runway Guard Light configuration B. Meets or exceeds TP312 – 5th Ed. Amendment 1 – Figure B-12, and Appendix 5A, Figure A-1(b) (L-852S) Stop Bar

Uses

FAA L-852G/S(L) and T/C

- Stop Bar, controlled and uncontrolled -steady burning
- In-pavement Runway Guard Light - flashing
- Runway incursion prevention

Features

- FAA Style 3 (≤ 0.25 inch) provides a low protrusion above ground, which reduces vibrations in both the light fixture and the landing gear, increasing lamp life.
- Operates on either 3- or 5-step ferroresonant or thyristor CCRs that are designed in compliance with IEC or FAA requirements.
- Can be retrofit on existing 6.6 A or 20 A series circuits using existing CCRs and Local Control Devices. Requires the addition of a Y-Harness adapter. Adapter connects isolation transformer to both the input of the Local Control Device and the fixture. In electronically monitored applications, fixture opens existing Local Control Device output connection, providing an alarm signal in case of fixture failure.
- An autonomous version is available for applications where fixture failures 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. A simple, separate Remote Control Device is used to set the fixture to Initial ON or Initial OFF. The Remote Control Device can also be optionally used to program variable start up delays (for an entire RGL bar). This effectively reduces the load variation on a CCR that powers multiple RGL bars.
- Thermostatically controlled heater cycles on and off when temperature drops below freezing, reducing overall energy consumption.

- Light channel in front of prism windows protects prisms from damage and prevents rubber buildup thereby maintaining optimal light output.
- Use of LED light source eliminates filter replacement and color shifts when viewed at various angles or CCR step settings.
- LED photometric performance will be maintained longer due to a cleaner lens. The lower temperature of the lens prevents the “baking effect” that causes contaminants to stick to the surface of the lens.
- Fixture uses aluminum alloy cover and inner cover, stainless steel hardware, and aluminum alloy and stainless steel optical assembly
- Rugged lightning protection complies with ANSI/IEEE C62.41-1991 Location Category C2 given in FAA Eng. Brief 67. Category C2 is defined as a $1.2/50\mu\text{s} - 8/20 \mu\text{s}$ combination wave, with a peak voltage of 10,000 V and a peak current of 5,000 A.
- Includes a UL 467 rated ground lug, which accepts an AWG 6 earth ground wire

Control and Monitoring

For control and monitoring applications per AC 120-57 (Current Edition) and AC 150/5340-30 (Current Edition), see the following ADB SAFEGATE data sheets:

- RELIANCE Platform II - Individual Lamp Control and Monitoring, data sheet 3076
- RELIANCE Elite ALCMS - Airport lighting control and monitoring system, data sheet 1041

Operating Conditions

Temperature: -40°C to $+55^{\circ}\text{C}$ / -40°F to $+131^{\circ}\text{F}$
Altitude: Sea level to 10,000 feet / 3000 m
Relative Humidity: Up to 100%

TAXIWAY LIGHTING

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Ordering Code

IRGS - X X X 0 0

Power/Control

- 1 = Reliance Platform II Compatible¹
- 2 = Autonomous, Initial Flash ON²
- 3 = Autonomous, Initial Flash OFF²
- 4 = BRITE II Compatible¹

Frequency

- 1 = 60 Hz
- 2 = 50 Hz

Arctic Option (both G & S)

- 1 = No
- 2 = Yes

Notes

¹ Used on electronically monitored L-852G applications. Must be used with a RELIANCE Platform II or BRITE II remote device on new or retrofit applications. This configuration of the L-852G has two cord sets: one for power input and one to connect to the remote device. The remote device cord set receives the "flash" signal from the remote and opens to provide the monitoring feedback of a failed lamp. Requires use of Y-Harness Adapter.

² Used on non-electronically monitored L-852G applications. L-852G input of fixture is connected directly to L-830/L-831 isolation transformer.

Y-Harness Adapter **70A0761**

Remote Programming Device¹ **61A0458**

Note

¹ Required on autonomous fixtures to modify initial flash ON or OFF or to adjust CCR loading. One device required per installation.

Dimensions

Outside Diameter:	11.94 in / 30.33 cm
Bolt Circle Diameter (L-868B):	11.25 in / 28.58 cm
Max. Bottom Cover O.D. - 9.92 in / 25.20 cm <i>down to depth of 1.63 in / 4.14 cm</i> - 8.69 in / 22.07 cm <i>from depth of 1.63 in / 4.14 cm to 3.88 in / 9.86 cm</i>	
Compatible with L-868B Top Sections where the overall height of the Top Section is less than 4 in / 10.16 cm.	
Bottom Cover Depth:	3.88 in / 9.9 cm

Power Supply

6.6 A through an L-830 (for 60 Hz) or L-831 (for 50 Hz) isolation transformer.

Application ¹	Fixture Load ²	Isol. XF Size	Isolation XF Load ²	CCR Load ²
L-852G(L) without heater				
Unmonitored	28 VA	65 W	13 VA	41 VA
Monitored ³	59 VA	65 W	15 VA	74 VA
L-852G(L) with heater				
Unmonitored	88 VA	100 W	16 VA	104 VA
Monitored ³	109 VA	150 W	22 VA	131 VA
L-852S(L) without heater				
Unmonitored	20 VA	65 W	14 VA	34 VA
Monitored ³	48 VA	65 W	16 VA	64 VA
L-852S(L) with heater				
Unmonitored	87 VA	100 W	15 VA	102 VA
Monitored ³	107 VA	100 W	13 VA	120 VA

Notes

¹ Data is for a ferroresonant CCR only. Contact the ADB Safegate Sales Department for thyristor/SCR CCR data.

² All load data is average load per fixture for applications where the entire load alternately flashes.

³ Fixture load includes Local Control Device load.

Packaging

In cardboard box: 7 × 13 × 13 in / 17.8 × 33 × 33 cm
 Weight with packing: 20.55 lb / 9.32 kg
 Weight without packing: 17.55 lb / 7.96 kg

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