

# Runway Status Light (RWSL)

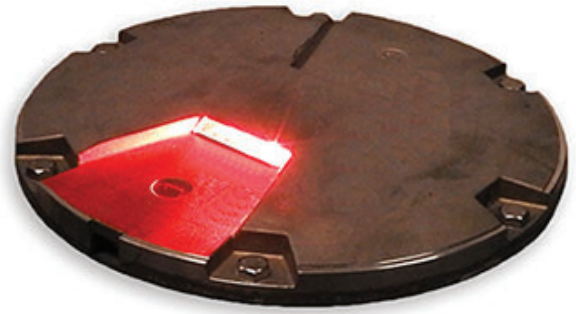
## DTH-LP/DRE-LP

LED In-pavement - Style 3

L-850T(L) Takeoff/Hold Light (THL)

L-850T(L) Runway Intersection Light (RIL)

L-852S(L) Runway Entrance Light (REL)



### Standards

**FAA:** FAA Runway Status Light System requirements in FAA AC 150/5340-30 Appendix 7 and FAA Engineering Brief No. 64 and 67

### Uses

#### RWSL THL

- Takeoff/HoldLight

#### RWSL RIL

- Runway Intersection Light

#### RWSL REL

- Runway Entrance Light

### Features

- The evolution of the most successful LED lights in the world, fully adapted to the characteristics of an LED lighting source
- Very low energy consumption
- Greatly reduced maintenance: calculated MTBF of 56,000 hours at 6.6A
- Style 3—Low protrusion above ground of  $\leq 0.25$  inch (6.35 mm) reduces vibrations caused by aircraft landing gear in both the light fixture and the landing gear, increasing fixture life
- Increased traffic efficiency and availability of the taxiways due to the reduction of maintenance
- Optimum and homogenous light distribution along the lights installed on the same taxiway
- High discrimination between functions thanks to the saturated colors, their stability at the different brightness steps and under all viewing angles
- Full compatibility with existing airfield lighting series circuits. No need to replace the CCRs, series transformers, or cables
- Fully dimmable lights, respecting the response curve of traditional halogen lights. Operates on the full range of 2.8 A to 6.6 A.

- Installation on the same L-868B bases as 12-inch tungsten-halogen lights for a straightforward replacement.
- Substantial investment reduction for new installations, resulting from a lower installed load
- When turned on, light rise time is low. The light is perfectly adapted for any incursion protection system.
- Very low working temperature, ensuring longer component life
- 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 $\mu$ S - 8/20  $\mu$ S combination wave, with a peak voltage of 10,000 V and a peak current of 5,000 A.
- Environment-friendly, precision-cast aluminum alloy top, intermediate and bottom covers
- Monitoring function of the individual light source. In case of a defect, the LED light automatically disconnects from the secondary side of the isolation transformer, resulting in an open circuit condition.
- Corrosion-resistant stainless steel hardware. Use of Torx screws ensures ease of maintenance.

### Reliability

- Additional watertightness barriers, protecting both the electronics and the LEDs in case of accidental water ingress, along the prism or the gaskets as well as along the cables
- Prisms of small dimensions installed in a deep optical channel with no negative window slope: optimal protection against rubber deposit, scratches and shocks

### Modularity

- High commonality of components between the various models. Stock management is easier
- Field customization according to the application is straightforward: a light can be transformed into another model by swapping components
- Same tools and same procedures to maintain the whole range, reducing the risk of mistakes and time loss

# RWSL Runway Status Light

## DTH-LP/DRE-LP

### Low protrusion without negative slope

- Limited height above pavement of 6.3 mm (0.25 in) reduces the risk of damage during winter operations or by towbarless tugs
- Despite the low protrusion, no part of the prism is below ground level, avoiding loss of photometry during rainfall and sedimentation on the bottom of the prism

### Maintenance Friendliness

- Maintenance-friendly: components subject to wear or damage like prisms and cables can easily be replaced. Neither sealing compounds nor resin are required
- Reduced number of components for maintenance simplicity
- Innovative design of the cable entry, permitting replacement without the need to open the light. This eliminates the risk of water leakage due to a pinched cable.
- Pressure-release plug for water-tightness testing of fixture after overhaul

### Operating Conditions

Temperature: -40 °C to +55 °C (-40 °F to +131 °F)  
 Altitude: Sea level to 10,000 feet (3000 m)  
 Relative Humidity: Up to 100%

### Power Supply

It is recommended that the DTH-LP and DRE-LP LED fixture be powered from a dedicated CCR and that separate remote controls are available. The LED lights have been designed to work with any FAA-compliant transformer up to 150 W without affecting the performance or lifetime of the light fixture or transformer. See data sheet 3033 for more details on recommended isolation transformers specified below.

| DTH-LP / DRE-LP      | Fixture Load | Isolation Transformer | Isol. XF Load | CCR Load <sup>1</sup> |
|----------------------|--------------|-----------------------|---------------|-----------------------|
| <b>L-850T(L) DTH</b> |              |                       |               |                       |
|                      | 11 VA        | 30/45 W               | 8 VA          | 19 VA                 |
| <b>L-852S(L) DRE</b> |              |                       |               |                       |
|                      | 21 VA        | 30/45 W               | 8 VA          | 29 VA                 |

### Notes

<sup>1</sup>Load does not include ADB Safegate LINC 360 Remote device. Remote adds 20 VA at start-up, 10 VA while in operation. Transformer (30/45 W) is sized to power fixture and remote.

### Ordering Code

**D X X J 2 R N 0 D M F 0 0 R 0**

D = AD light

### Application

TH = Takeoff/Hold Light  
 and Runway Intersection  
 RE = Runway Entrance Light

### Cord Set Style and Length

J = Style 1 SO Jacketed cable,  
 2-pin, 12" long

### Cable and Connector

2 = 1 plug (2-pin)

### LED Color 1 – Left

R = Red

### LED Color 2 – Right

N = Obscure/Blank (no light)

0

### Dimensions

D = 12" diameter, 1/4" protrusion

### Power Supply and Monitoring

M = 6.6 A, 50/60 Hz, with monitoring option<sup>1</sup>

### Specifications

F = FAA L-850T(L) or RWSL REL

### Winter Options

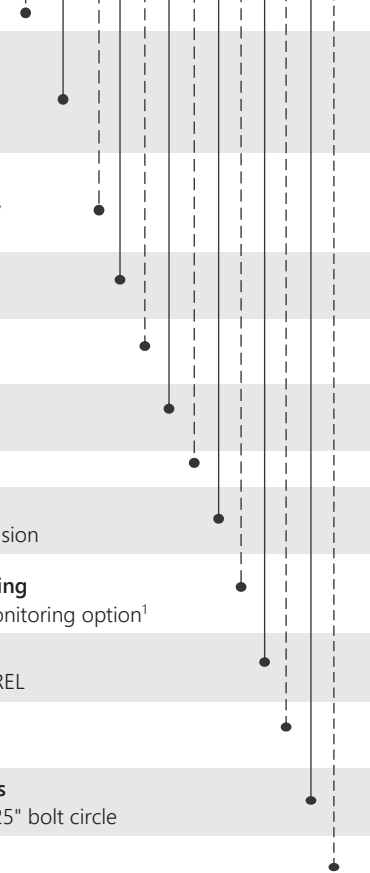
0 = None

### Bolt Holes/Fixation Options

0 = L-868B 12" diameter, 11.25" bolt circle

### Ground Lug Options

R = RWSL Grounding Screw



**Dimensions**

|  |                     |
|--|---------------------|
| Top cover outside diameter:              | 11.94 in (30.33 cm) |
| Top cover bolt-circle diameter (L-868B): | 11.25 in (28.58 cm) |
| Bottom cover outside diameter (max.):    | 9.94 in (25.25 cm)  |
| Depth <sup>1</sup>                       | 4 in (10.16 cm)     |

**Notes**

<sup>1</sup> From the bottom of the top cover to the bottom of fixture

**Packaging**

In cardboard box: 7 × 13 × 13 in (17.8 × 33 × 33 cm)  
Weight with packing: 22 lb (9.98 kg)  
Weight without packing: 17.75 lb (8.05 kg)

