

.....Dialight



SafeSite® LED Based Signaling
for Hazardous Locations



On when it matters most.

Products and solutions that protect your business





Features & Benefits

- 5 year full performance warranty
- Resistant to shock and vibration
- High impact polycarbonate lens, UV, scratch & chemical resistant lens coating
- Reduction in expensive tower climbs and maintenance costs/unplanned site visits
- Requires smaller gauge wire
- Smallest Flash Head in the Industry
- Community friendly lighting system

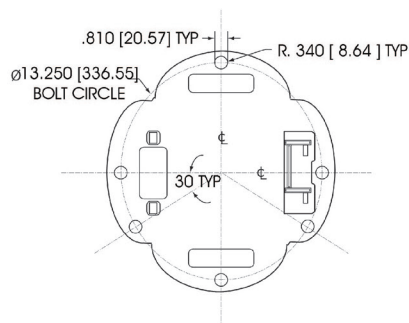
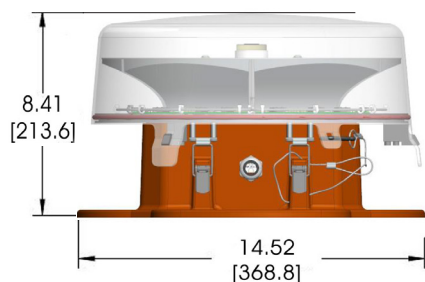
Dialight Timeline

- 1999** - First ever FAA certified LED L810
- 2001** - First ever FAA certified LED L864
- 2007** - First ever FAA certified LED L865 / L864
- 2011** - First ever FAA certified LED L856
- 2012** - First ever FAA certified LED L856 / L864

Dialight (LSE: DIA.L) is leading the energy efficient LED lighting revolution around the world for industrial and hazardous areas as well as transportation and infrastructure applications. For 40 years it has been committed to the development of LED lighting solutions that enable organizations to vastly reduce energy use and maintenance needs, improve safety, ease disposal and reduce CO2 emissions.

SafeSite® L-864 Red LED Beacon

Class I, Div 2 model



Certifications & Compliance

- FAA AC 150 / 5345-43G
- FAA EB No. 67D
- Class I, Div 2, Groups A, B, C, D
- UL1598
- UL844
- IP66
- NEMA 4X
- DGAC Mexico
- ICAO (Annex 14 - Fourth Edition, July 2004)
- Canadian aviation regulation CAR 621.9 (Transport Canada)

Features & Benefits

- ETL verified to FAA standards
- 5 year full performance warranty
- Uses 90% less energy than an incandescent
- Resistant to shock and vibration
- Drastically reduces maintenance costs
- Flash or steady burn

Mechanical Information:

Fixture weight:	20 lbs
Operating Voltage:	120 - 240V AC 50/60Hz power factor corrected supply
Supply Voltage Ranges:	Nominal +/- 10%
Effective Intensity:	Red Night 2,000 cd
Wattage:	Red Night 20W (Steady Burn) 3.3W (16.7% duty cycle) 20 flashes per minute with 0.5 second on time
Power Factor:	>0.9
Operating Temp:	-40°F to +131°F (-40°C to +55°C)
Synchronization:	Multiple unit sync from single controller (Operates with other manufacturers of GPS sync devices)

All values typical unless otherwise stated (tolerance +/- 10%)

US Patent # 7,281,821

Temperature Ratings

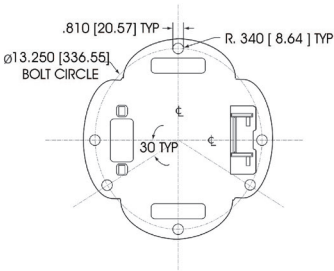
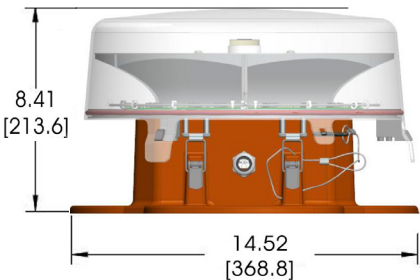
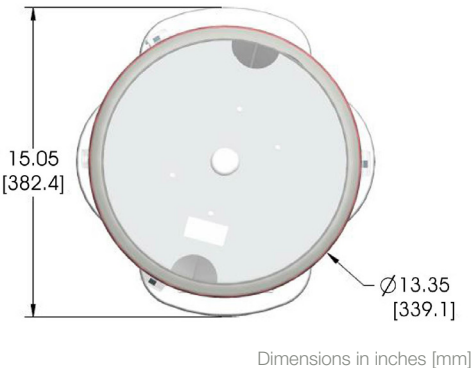
Ambient Temperature Range T4A

-40°F to +131°F (-40°C to +55°C)

Part Number	Description	Voltage	Certification / Compliance
D564-B13-001	Class I, Div. 2 Beacon	120-240V AC	FAA (TC) L-864

SafeSite® LED Based L-864 / L-865

Flashing Dual (White / Red) - Class I, Div. 2



Certifications & Compliance

- FAA approved (Check FAA Website for current certification)
- Class I, Div 2, Groups A, B, C, D
- Class II, Div 2, Groups F, G
- UL1598
- UL8750
- CSA C22.2
- IP66
- ICAO Annex 14, July 2009
- ICAO Aerodromes Design Manual, Chapter 18
- Canadian Aviation Regulation CAR 621 (Transport Canada)

Mechanical / Electrical Information:

Unit weight:	26 lbs (11.8 kg)
Operating voltage:	White - 150V DC (through Controller) Red - 75V DC (through Controller)
Effective intensity:	White Day - 20,000 cd White Night - 2,000 cd Red Night - 2,000 cd
Synchronization:	Multiple unit sync from single controller (operates with other units via RS485)
All values typical unless otherwise stated (tolerance +/- 10%)	

US Patents #7,208,881 #7,568,821 7,604,380 #7,777,424

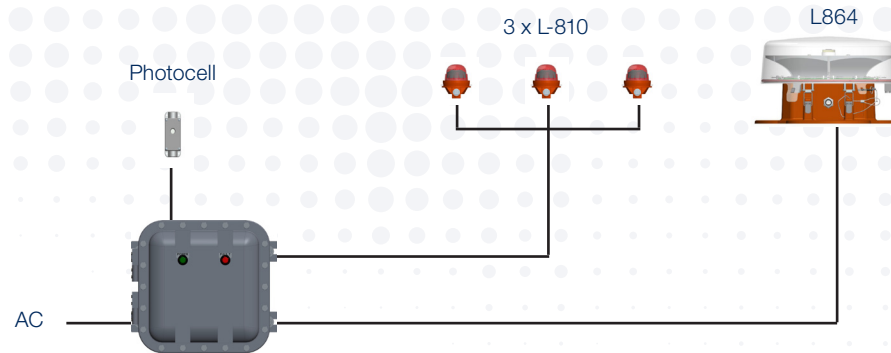
Temperature Ratings

Ambient Temperature Range T5
-40°F to +131°F (-40°C to +55°C)

Part Number	Description
DHZ-BFHD-4C	Red / White Flash Head

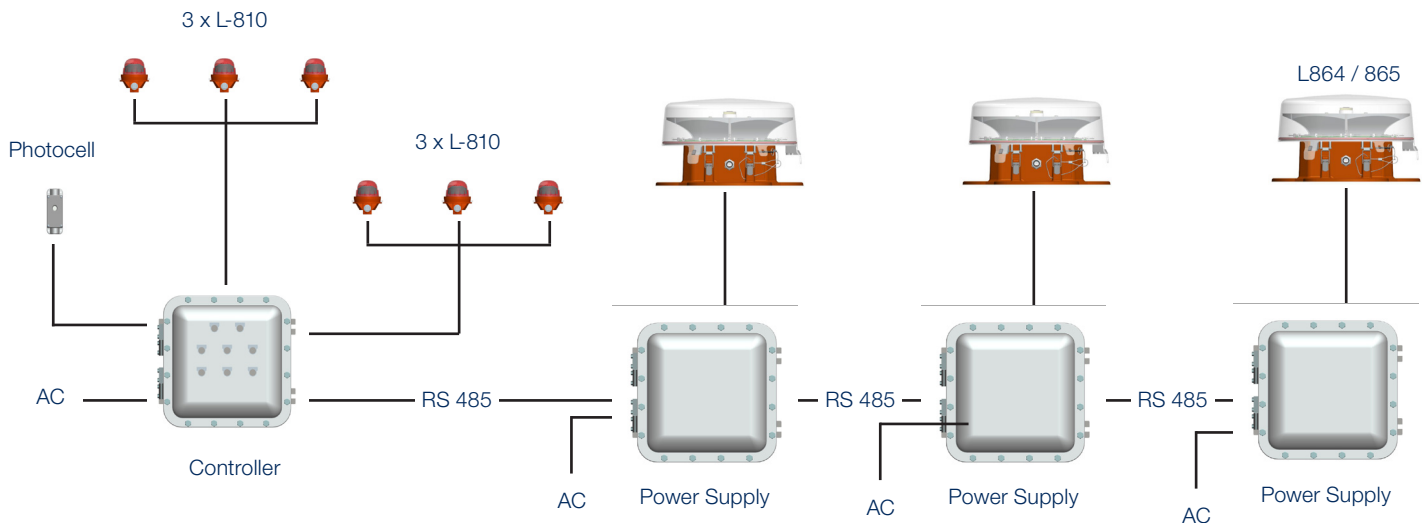
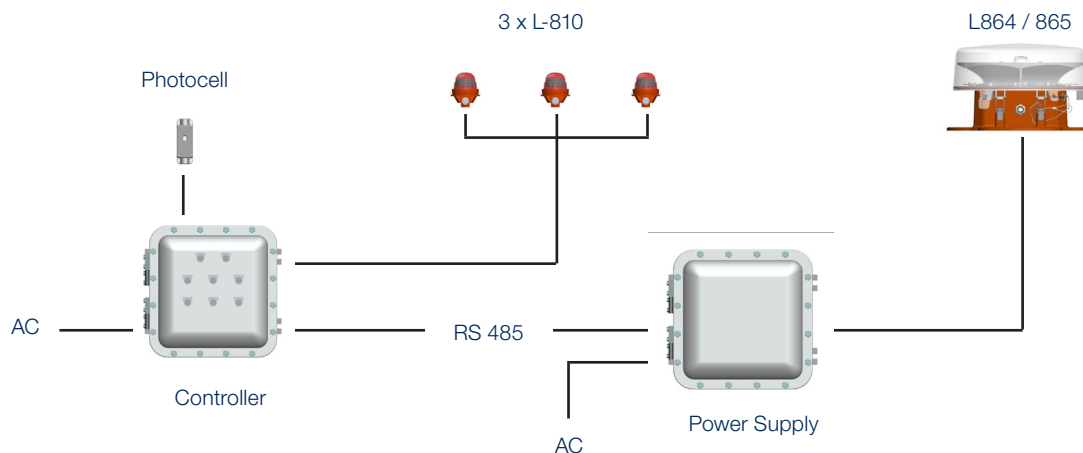
Class I, Div.2 rated L-864 Systems

Example layout



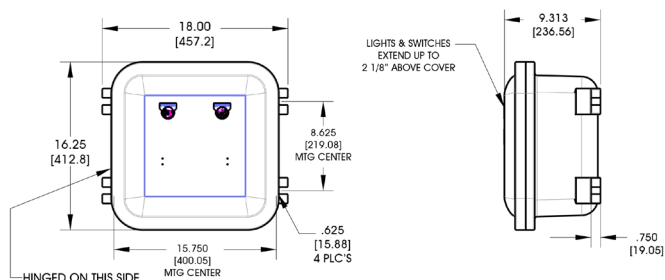
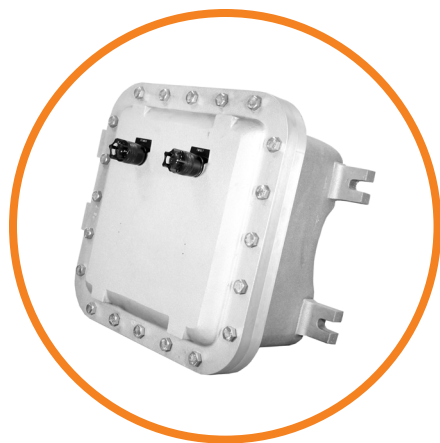
Class I, Div.2 rated L-864 / L-865 Systems

Example layouts



Vigilant® CID2 red L-864 / L-810 Controller

Class I, Div. 2



Certifications & Compliance

- Class 1, Division 2 Groups A,B,C,D
- IP66
- NEMA 4X
- UL 1203, 8750
- CSA C22.2 No 30, No. 250.13

Features & Benefits

- 5 year full performance warranty
- Flashing or steady operation
- 20, 30, or 40 flashes per minute
- Front panel indicators (power and alarm)
- Contact closures for alarms
- For use with Dialight's fixtures
 - L-864 Red Beacon (CID2) = D464-B13-001 - max 1 per port
 - L-810 Red Marker (CID2) = RTO-2R07-00X - max 4 per port
 - L-810 Red Marker (CID2) = 860-2R01-00X - max 2 per port
- Multiple controllers can be synchronized for larger systems
- Corrosion resistant
- Easy to install

Mechanical Information:

Fixture weight: 80 lbs (36 kg)

Electrical Specifications:

Operating Voltage: 120-240V AC 50/60Hz power factor corrected supply

Operating Temp: -40°F to +131°F (-40°C to +55°C)

Wattage: 5W

Temperature Rating: T4

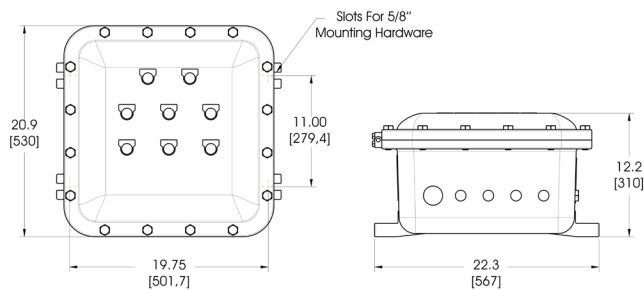
Power Factor: > 0.9

All values typical unless otherwise stated (tolerance +/- 10%)

Part Number	Description	Voltage
DHZA-CTR-2C8-000	Controller for L-864 / L-810 Red lights	120-240V AC, 50/60 Hz

Controller for L-864 / L-865

Class I, Div. 1 and Class I, Div. 2



Certifications & Compliance

- Class I, Div 1
- Class 1, Div 2 Groups B, C, D
- UL 8750
- UL 1203
- IP66
- T6 temperature rating
- NEMA 4X copper free aluminum enclosure

Mechanical / Electrical Information:

Unit weight:	180 lbs (86.6 kg)
Operating voltage:	120 - 277V AC 125V DC
Supply voltage ranges:	Nominal +/- 10%
Power supply wattage:	White Day - 85W White Night - 35W Red Night - 25W
Controller wattage:	15W

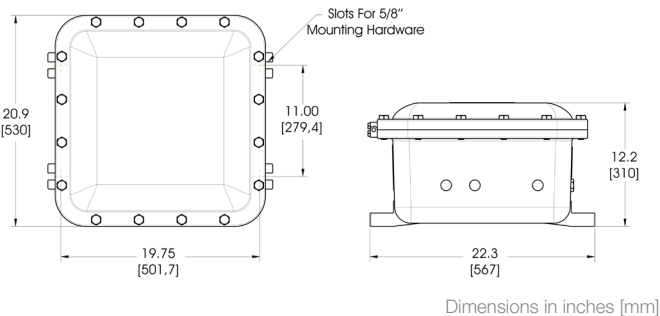
All values typical unless otherwise stated (tolerance +/- 10%)

The controller will be equipped with a green indicator light on front panel to show energized status as well as a red indicator light on the front panel for failure status.

Part Number	Description
DHZC - CTD - 8C8 - 030	Controller for up to 3 L-864 / L-865 lights
DHZC - CTD - 8C8 - 040	Controller for up to 4 L-864 / L-865 lights
DHZC - CTD - 8C8 - 060	Controller for up to 6 L-864 / L-865 lights
DHZC - CTD - 8C8 - 080	Controller for up to 8 L-864 / L-865 lights
DHZC-PSD-4C8	Power Supply (1 required per L-864 / L-865 light)

Power Supply for L-864 / L-865

Class I, Div. 1 and Class I, Div. 2



Certifications & Compliance

- Class I, Div 1
- Class 1, Div 2 Groups B, C, D
- UL 8750
- UL 1203
- IP66
- T6 temperature rating
- NEMA 4X copper free aluminum enclosure

Mechanical / Electrical Information:

- Unit weight:** 180 lbs (86.6 kg)
- Operating voltage:** 120 - 277V AC
125V DC
- Supply voltage ranges:** Nominal +/- 10%
- Power supply wattage:** White Day - 85W
White Night - 35W
Red Night - 25W
- Controller wattage:** 15W

All values typical unless otherwise stated (tolerance +/- 10%)

Part Number	Description
DHZC-PSD-4C8	Power Supply

Long Life Photocell

Class I, Div. 2



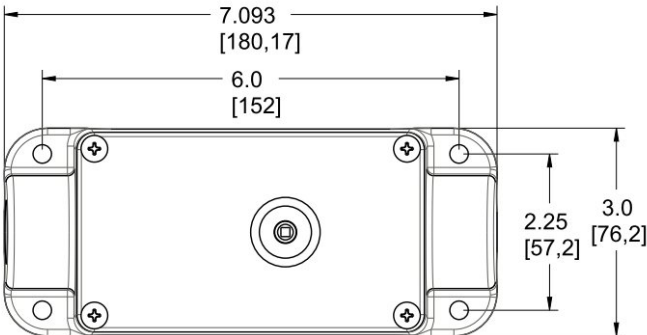
Certifications & Compliance

- Class I, Div 2 Groups B, C, D
- UL 773A
- ISA 12.12.01
- IP66
- T4A temperature rating
- NEMA 4X copper free aluminum enclosure

Mechanical / Electrical Information:

- Unit weight:** 2.00 lbs (0.91 kg)
- Operating voltage:** 12V DC (through Dialight Controller)
- Operating temperature:** -40°F to +131°F (-40°C to +55°C)

All values typical unless otherwise stated (tolerance +/- 10%)



Dimensions in inches [mm]

Part Number	Description
DHZB - 6000 - PEC	Long Life Photocell

SafeSite® L-810 Red LED Side Lights

Class I, Div. 2



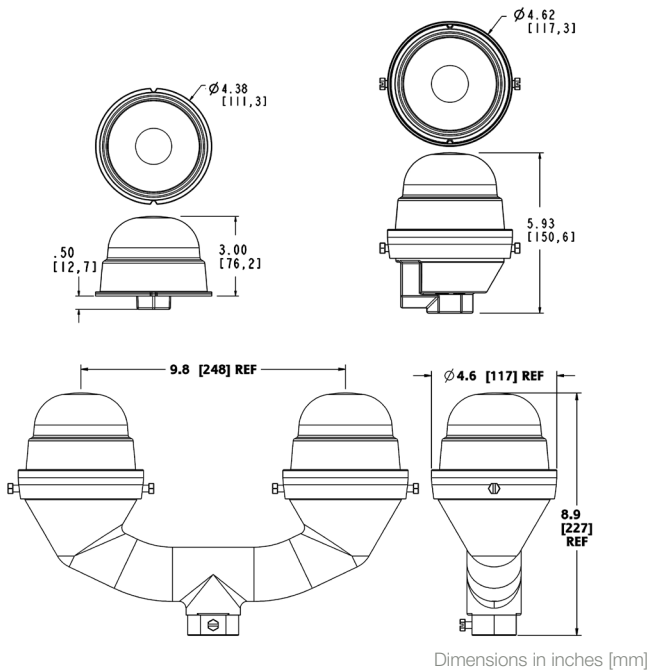
Certifications & Compliance

- Class I, Div 2 Groups B, C, D
- UL 1598
- UL 844
- IP66
- T3C temperature rating
- NEMA 4X copper free aluminum enclosure

Mechanical / Electrical Information:

- Unit weight:** 1.25 lbs (0.56 kg) (retro unit)
2.00 lbs (0.91 kg) (single unit)
4.60 lbs (2.09 kg) (dual unit)
- Operating voltage:** 48V DC (through Dialight Controller) or 120 - 480V AC
- Operating temperature:** -40°F to +131°F (-40°C to +55°C)

All values typical unless otherwise stated (tolerance +/- 10%)



US Patents #6,425,678

Part Number	Description	Description
For use with L-864 / L-865 Controller		
RTO - ER08 - 001	Single light - 3.5W (for use with L-864/L-865 systems)	12-48V DC
RTO - ER08 - 002	Dual light - 7W (for use with L-864/L-865 systems)	12-48V DC
For use with L-864 Controller		
RTO - 2R07 - 001	Single light - 6.5W (for use with L-864/L-865 systems)	120 - 240V AC
RTO - 2R07 - 002	Dual light - 13W (for use with L-864/L-865 systems)	120 - 240V AC

SafeSite® L-810 Red LED Obstruction Lights

Class I, Div. 2 and ATEX / IECEx - V AC models

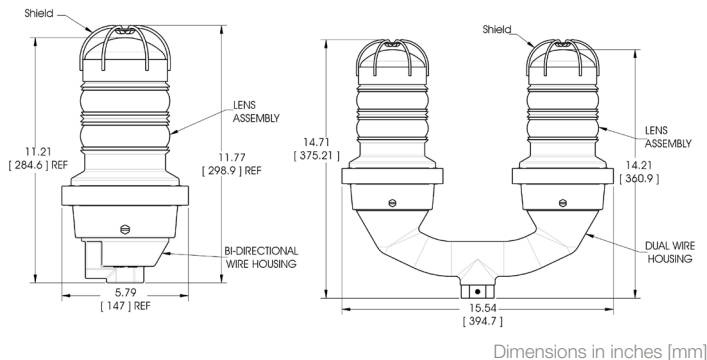


Certifications & Compliance

- FAA approved (Check FAA Website for current certification)
- Class I, Div 2, Groups A, B, C, D
- ATEX / IECEx Zone 2
- IECEx SIR 08.0018X
- Sira 06ATEX4372X
- UL1598
- UL844
- IP65 / 67
- NEMA 4X
- ICAO (Annex 14 - Fourth Edition, July 2004), DGAC Mexico
- Canadian Aviation Regulation CAR 621.9 (Transport Canada)

Features & Benefits

- 5 year full performance warranty
- Uses 90% less energy than an incandescent
- Weather/corrosion resistant lamp assembly and housing
- Resistant to shock and vibration
- Available as single or dual unit
- Flash models available
- Withstand wind in excess of 150 mph (240 kph), salt fog



Temperature Ratings

Class I Div. 2 models	ATEX / IECEx models
Ambient Temperature Range T4A	Ambient Temperature Range T4A
-67°F to +131°F (-55°C to +55°C)	-67°F to +131°F (-55°C to +55°C)

Mechanical Information

Single Units

Fixture weight: 7.14 lbs (3.24 kg)

Mounting: Threaded 1" NPT and 3/4" NPT bottom hub for mounting

Dual Units

Fixture weight: 16.06 lbs (7.28 kg)

Mounting: Threaded 1" NPT and 3/4" NPT bottom hub for mounting

Electrical specifications

Volt Amps: 44 VA (120V AC) -+10%
67 VA (230V AC Units) -+15%

Input Power: 14.5 W (120V AC Units)
16.0 W (230V AC Units)

Operating Temp: -67°F to +131°F (-55°C to +55°C)

Construction

Housing: Cast aluminum

Lens: Glass

Accessories (Hardware): Stainless steel

All values typical unless otherwise stated (tolerance +/- 10%)

US Patent # 6,425,678

SafeSite® L-810 Red LED Obstruction Lights

Class I, Div 2 and ATEX / IECEx - V AC models

Part Number	Description	Voltage
Class I, Div 2 Models		
860-2R01-001	Class I, Div 2, Single Unit	120V AC
860-2R02-001	Class I, Div 2, Single Unit	230V AC
860-2R01-002	Class I, Div 2, Dual Unit	120V AC
860-2R02-002	Class I, Div 2, Dual Unit	230V AC
ATEX / IECEx Models		
860-9R01-001	ATEX / IECEx, Single Unit	120V AC
860-9R02-001	ATEX / IECEx , Single Unit	230V AC
860-9R01-002	ATEX / IECEx, , Dual Unit	120V AC
860-9R02-002	ATEX / IECEx, Dual Unit	230V AC

*Steady Burn

SafeSite® LED Steady Burn Visual Signal Lights

Colored Visual Signal Lights - Class I, Div. 2 and ATEX / IECEx - V AC models

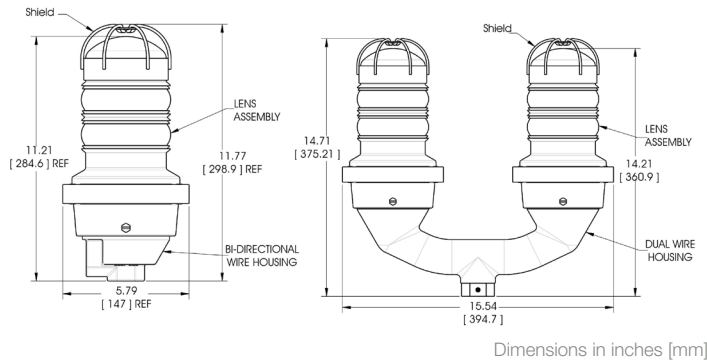


Certifications & Compliance

- FAA AC No. 150/5345-43G
- Class I, Div 2, Groups A, B, C, D
- ATEX / IECEx Zone 2
- IECEx SIR 08.0018X
- Sira 06ATEX4372X
- UL1598
- UL844
- IP 65 / 66
- NEMA 4X
- ICAO (Annex 14 - Fourth Edition, July 2004), DGAC Mexico
- Canadian Aviation Regulation CAR 621.9 (Transport Canada)

Features & Benefits

- 5 year full performance warranty
- Uses 90% less energy than an incandescent
- Weather/corrosion resistant lamp assembly and housing
- Resistant to shock and vibration
- Available as single or dual unit
- Flash models available
- Withstand wind in excess of 150 mph (240 kph), salt fog



Mechanical Information

Single Units

Fixture weight: 7.14 lbs (3.24 kg)

Mounting: Threaded 1" NPT and 3/4" NPT bottom hub for mounting

Dual Units

Fixture weight: 16.06 lbs (7.28 kg)

Mounting: Threaded 1" NPT and 3/4" NPT bottom hub for mounting

Electrical specifications

Volt amps: 44 VA (120V AC) $\pm 10\%$
67 VA (230V AC Units) $\pm 15\%$

Input power: 14.5 W (120V AC Units)
16.0 W (230V AC Units)

Operating temp: -67°F to +131°F (-55°C to +55°C)

On / off time: 100:900 ms

Construction

Housing: Cast aluminum

Lens: Glass

Accessories (Hardware): Stainless steel

All values typical unless otherwise stated (tolerance $\pm 10\%$)

US Patents #7,208,881 #7,568,821 7,604,380 #7,777,424

Temperature Ratings

Class I Div. 2 models	ATEX / IECEx models
Ambient Temperature Range T4A	Ambient Temperature Range T4A
-67°F to +131°F (-55°C to +55°C)	-67°F to +131°F (-55°C to +55°C)

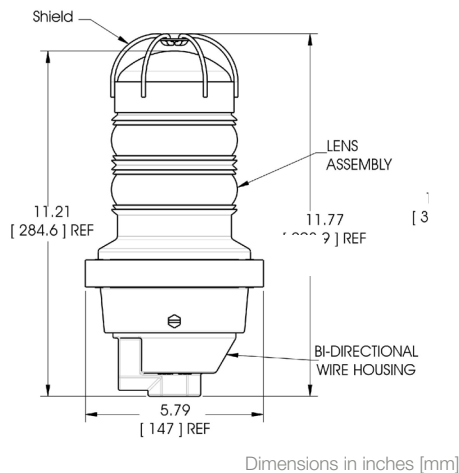
SafeSite® L-810 LED Steady Burn Visual Signal Lights

Colored Visual Signal Lights - Class I, Div. 2 and ATEX / IECEx - V AC models

Part Number	Description	Voltage	Color
Class I, Div 2 - Single Fixture Models			
860-2B01-001	Class I, Div 2, Single Unit	120V AC	Blue
860-2G01-001	Class I, Div 2, Single Unit	120V AC	Green
860-2Y01-001	Class I, Div 2, Single Unit	120V AC	Yellow
860-2W01-001	Class I, Div 2, Single Unit	120V AC	White
860-2B02-001	Class I, Div 2, Single Unit	230V AC	Blue
860-2G02-001	Class I, Div 2, Single Unit	230V AC	Green
860-2Y02-001	Class I, Div 2, Single Unit	230V AC	Yellow
860-2W02-001	Class I, Div 2, Single Unit	230V AC	White
Class I, Div 2 - Dual Fixture Models			
860-2B01-002	Class I, Div 2, Dual Unit	120V AC	Blue
860-2G01-002	Class I, Div 2, Dual Unit	120V AC	Green
860-2Y01-002	Class I, Div 2, Dual Unit	120V AC	Yellow
860-2W01-002	Class I, Div 2, Dual Unit	120V AC	White
860-2B02-002	Class I, Div 2, Dual Unit	230V AC	Blue
860-2G02-002	Class I, Div 2, Dual Unit	230V AC	Green
860-2Y02-002	Class I, Div 2, Dual Unit	230V AC	Yellow
860-2W02-002	Class I, Div 2, Dual Unit	230V AC	White
ATEX / IECEx - Single Fixture Models			
8609B02001	ATEX / IECEx, Single Unit	230V AC	Blue
8609G02001	ATEX / IECEx , Single Unit	230V AC	Green
8609Y02001	ATEX / IECEx, Single Unit	230V AC	Yellow
8609W02001	ATEX / IECEx , Single Unit	230V AC	White

SafeSite® FLS LED Flashing Visual Signal Lights

Colored Visual Signal Lights - Class I, Div. 2 - V AC models



Temperature Ratings

Ambient Temperature Range T4	Ambient Temperature Range T3C
-67°F to +131°F (-55°C to +55°C)	-67°F to +149°F (-55°C to +65°C)

Certifications & Compliance

- Class I, Div 2, Groups A, B, C, D
- UL1598
- UL844
- IP66
- NEMA 4X

Features & Benefits

- 5 year full performance warranty
- Uses 90% less energy than an incandescent
- Weather/corrosion resistant lamp assembly and housing
- Resistant to shock and vibration
- Available as a single unit
- Unique optically designed lens to enhance LED operation and provide 360° visibility

Mechanical Information

Fixture weight:	7.14 lbs (3.24 kg)
Mounting:	Threaded 1" NPT and 3/4" NPT bottom hub for mounting

Electrical specifications

Volt Amps:	44 VA (120V AC) ~+10% 67 VA (230V AC Units) ~+15%
Input Power:	14.5 W (120V AC Units) 16.0 W (230V AC Units)
Operating Temp:	-67°F to +131°F (-55°C to +55°C)
On / off time:	100:900 ms

Construction

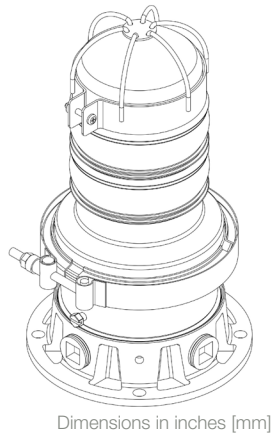
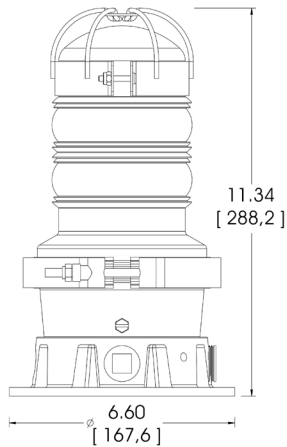
Housing:	Cast aluminum
Lens:	Glass
Accessories (Hardware):	Stainless steel
All values typical unless otherwise stated (tolerance +/- 10%)	

US Patent # 6,425,678

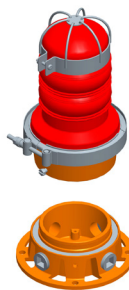
Part Number	Description	Voltage	Color
120V AC Models			
FLS-2B01-001	Class I, Div 2, Single Unit	120V AC	Blue
FLS-2G01-001	Class I, Div 2, Single Unit	120V AC	Green
FLS-2R01-001	Class I, Div 2, Single Unit	120V AC	Red
FLS-2Y01-001	Class I, Div 2, Single Unit	120V AC	Yellow
FLS-2W01-001	Class I, Div 2, Single Unit	120V AC	White
230V AC Dual Fixture Models			
FLS-2B02-001	Class I, Div 2, Single Unit	230V AC	Blue
FLS-2G02-001	Class I, Div 2, Single Unit	230V AC	Green
FLS-2R02-001	Class I, Div 2, Single Unit	230V AC	Red
FLS-2Y02-001	Class I, Div 2, Single Unit	230V AC	Yellow
FLS-2W02-001	Class I, Div 2, Single Unit	230V AC	White

SafeSite® FLS LED Flashing Signal Lights

With Flat Base Junction Box - Class I, Div. 2 - V AC models



Dimensions in inches [mm]



Certifications & Compliance

- Class I, Div 2, Groups A, B, C, D
- UL1598
- UL844
- IP65 / 66
- NEMA 4X

Features & Benefits

- 5 year full performance warranty
- Uses 90% less energy than an incandescent
- Weather/corrosion resistant lamp assembly and housing
- Resistant to shock and vibration
- Available as a single unit
- Unique optically designed lens to enhance LED operation and provide 360° visibility

Mechanical Information

Fixture weight:	7.14 lbs (3.24 kg)
Mounting:	Threaded 1" NPT on 4 sides and 1 on bottom

Electrical specifications

Volt Amps:	44 VA (120V AC Units)
Input Power:	14.5 W (120V AC Units)
Operating Temp:	-67°F to +131°F (-55°C to +55°C)
On/Off Time:	100:900ms

Construction

Housing:	Cast aluminum
Lens:	Glass
Accessories (Hardware):	Threaded 3/4" NPT reducer Threaded 1" NPT plug Stainless steel cage

All values typical unless otherwise stated (tolerance +/- 10%)

Temperature Ratings

Ambient Temperature Range T4	Ambient Temperature Range T3C
-67°F to +131°F (-55°C to +55°C)	-67°F to +149°F (-55°C to +65°C)

Part Number	Description	Voltage	Color
FLS-2B01-005	Class I, Div 2, Flat Base	120V AC	Blue
FLS-2R01-005	Class I, Div 2, Flat Base	120V AC	Red
FLS-2Y01-005	Class I, Div 2, Flat Base	120V AC	Yellow
FLS-2G01-005	Class I, Div 2, Flat Base	120V AC	Green

SafeSite® L-810 LED Visual Signal Lights

With Flat Base Junction Box - Class I, Div. 2 models



Certifications & Compliance

- Class I, Div 2, Groups A, B, C, D
- UL1598
- UL844
- IP65 / 66
- NEMA 4X

Features & Benefits

- 5 year full performance warranty
- Uses 90% less energy than an incandescent
- Weather/corrosion resistant lamp assembly and housing
- Resistant to shock and vibration
- Available as a single unit
- Unique optically designed lens to enhance LED operation and provide 360° visibility

Mechanical Information

- Fixture weight:** 7.14 lbs (3.24 kg)
- Mounting:** Threaded 1" NPT on 4 sides and 1 on bottom

Electrical specifications

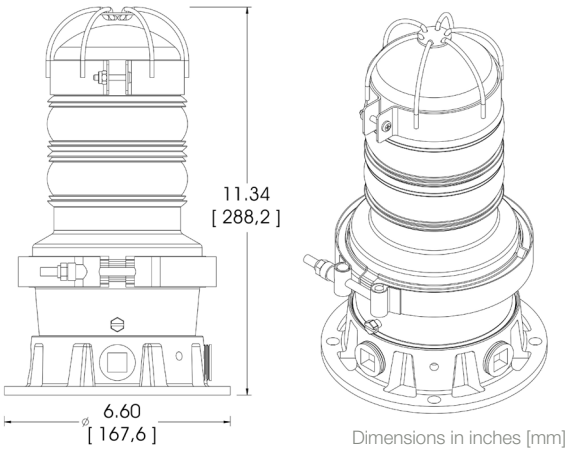
- Volt Amps:** 44 VA (120V AC Units)
- Input Power:** 14.5 W (120V AC Units)
- Operating Temp:** -67°F to +131°F (-55°C to +55°C)
- On/Off Time:** 100:900ms

Construction

- Housing:** Cast aluminum
- Lens:** Glass
- Accessories (Hardware):** Stainless steel
- All values typical unless otherwise stated (tolerance +/- 10%)

Temperature Ratings

Ambient Temperature Range T4	Ambient Temperature Range T3C
-67°F to +131°F (-55°C to +55°C)	-67°F to +149°F (-55°C to +65°C)



Dimensions in inches [mm]

Part Number	Description	Voltage	Color
860-2B01-005	Class I, Div 2, Flat Base	120V AC	Blue
860-2R01-005	Class I, Div 2, Flat Base	120V AC	Red
860-2Y01-005	Class I, Div 2, Flat Base	120V AC	Yellow

North American HQ

1501 Route 34 South
Farmingdale, NJ 07727
Tel: 732-919-3119
Fax: 732-751-5778
info@dialight.com

EMEA Technical Centre

Tel: +44 1638 666541 (UK)
Tel: +49 89 12089 5713 (Germany)
Tel: +33 3 23 22 62 58 (France)
sales-europe@dialight.com

Houston

16830 Barker Springs Rd
Ste 407
Houston, TX 77084
Tel: 732-919-3119
Fax: 281-492-1531
info@dialight.com

Middle East

Level 42
Emirates Towers (Office Tower)
Sheikh Zayed Road
Dubai, United Arab Emirates
Fax: +971 (0) 4319 7686
Tel: +971 (0) 4319 7686

Australia

108 Howe Street
Osborne Park, Perth 6017
Australia
Tel: +61 (0) 8 9244 7600
Fax: +61 (0) 8 9244 7601
info@dialight.com.au

Southeast Asia

33 Ubi Avenue 3
#07-72 Vertex (Tower A)
Singapore 408868
Tel: +65 6578 7157
Fax: +65 6578 7150
enquiry@dialight.com.sg

Brazil

Alameda Mercurio,
225 – American Park Empresarial NR
Indaiatuba – SP – 13347– 662
Tel: +55 (19) 3113-4300
Fax: +55 (19) 3113-4300
brasil@dialight.com

Dialight reserves the right to make changes at any time in order to supply the best product possible. The most current models of this document will always be available at: www.dialight.com

Warranty Statement: EXCEPT FOR THE WARRANTY EXPRESSLY PROVIDED FOR [HEREIN/ABOVE/BELOW], DIALIGHT DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND NONINFRINGEMENT.