

# Dialight

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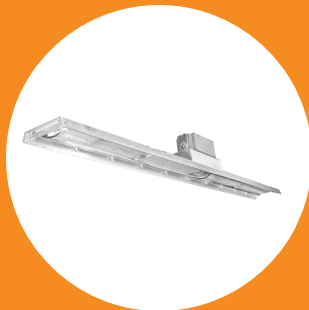
**SafeSite<sup>®</sup> LED Based Signaling**  
for Hazardous Locations



# On when it matters most.

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Products and solutions that protect your business







## Features & Benefits

- 5 year 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

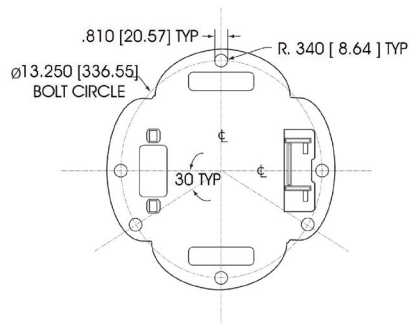
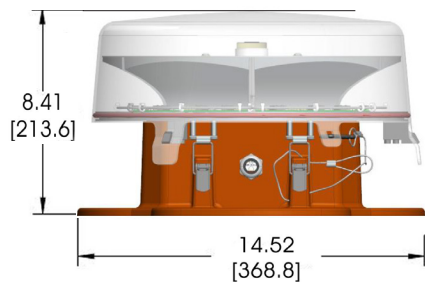
## Dialight Timeline

- 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 warranty
- Uses 90% less energy than an incandescent
- Resistant to shock and vibration
- Drastically reduces maintenance costs

- Flash or steady burn

### Fixture weight information 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

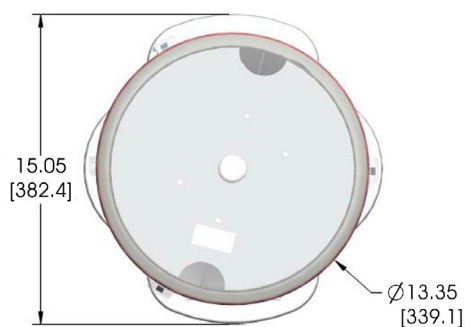
Ambient Temperature Range T4A

-40°F to +131°F (-40°C to +55°C)

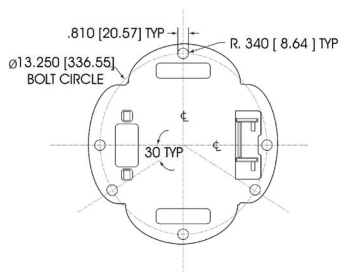
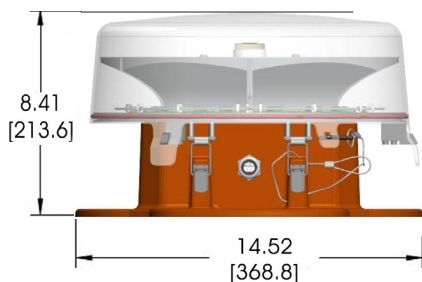
Part Number	Description	Voltage	Certification / Compliance
D564-B13-001	Class I, Div. 2 Beacon	120 - 240V AC	FAA (TC) L-864

# SafeSite® LED Based L-864 / L-865

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



Dimensions in inches [mm]



### 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

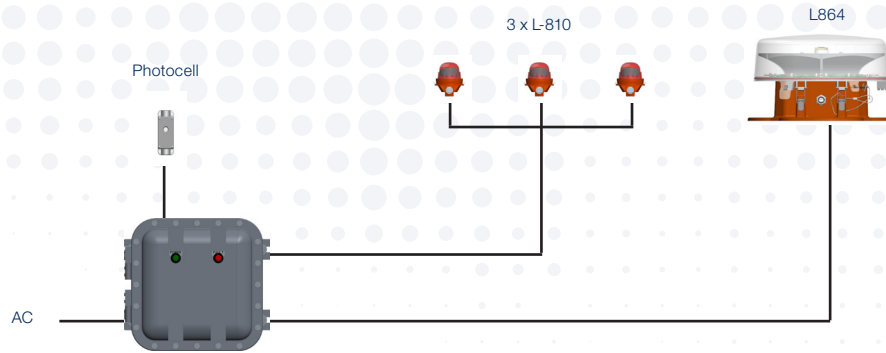
### Temperature Ratings

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

Part Number	Description
DHZ-BFHD-4C	Red / White Flashhead

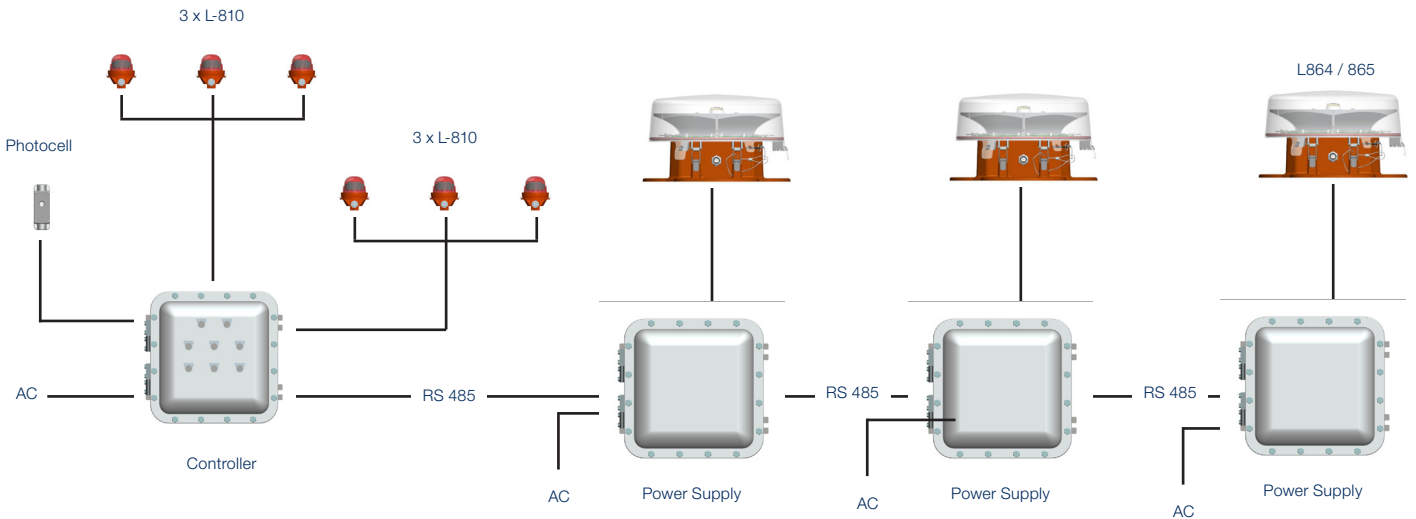
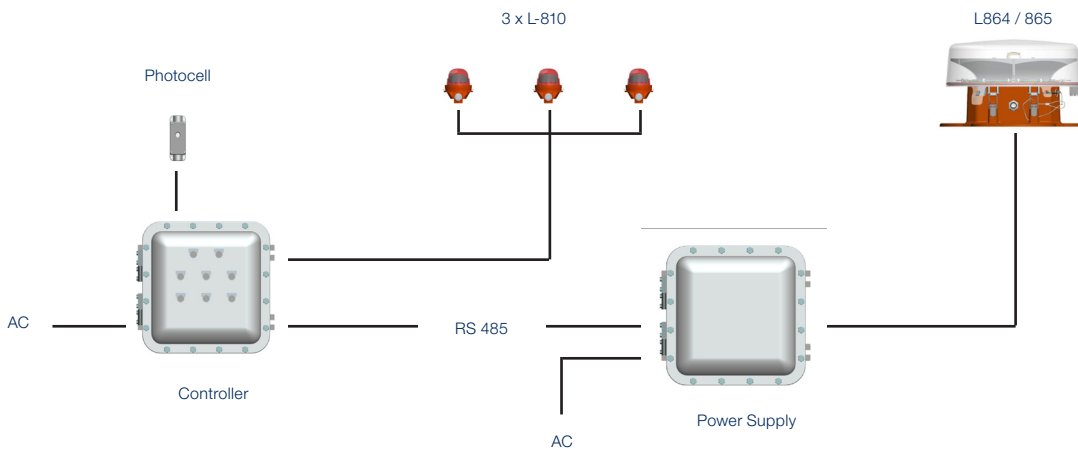
# Class I, Div.2 rated L-864 Systems

## Example layout



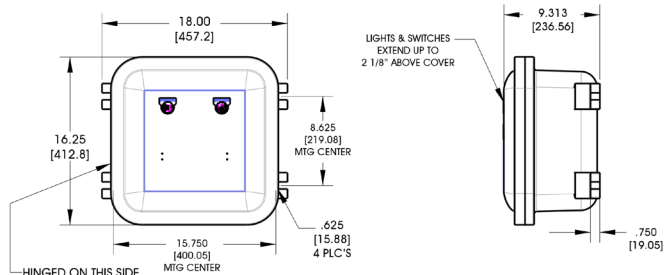
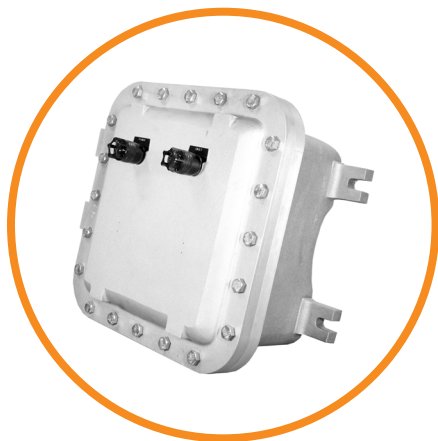
# Class I, Div.2 rated L-864 / L-865 Systems

## 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

## Certifications & Ratings

- 5 year 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 2 per port
  - L-810 Red Marker (CID2) = RTO-2R07-00X - max 8 per port
  - L-810 Red Marker (CID2) = 860-2R01-00X - max 4 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

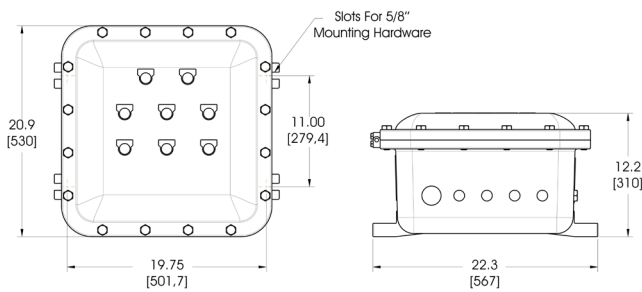
All values typical unless otherwise stated (tolerance +/- 10%)

Part Number	Description	Voltage
DHZC-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%)

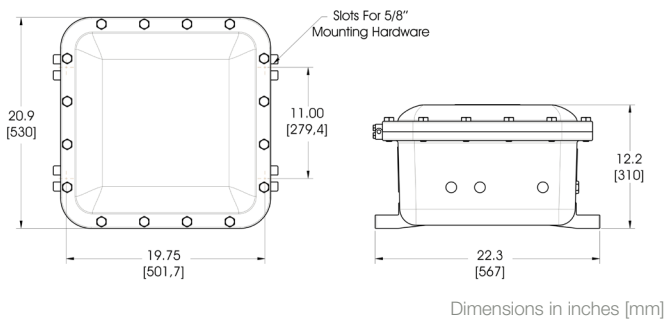
The controller will be equipped with a green indicator light on front panel to show energized status as well as a red indicator light on the front panel for failure status.

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:

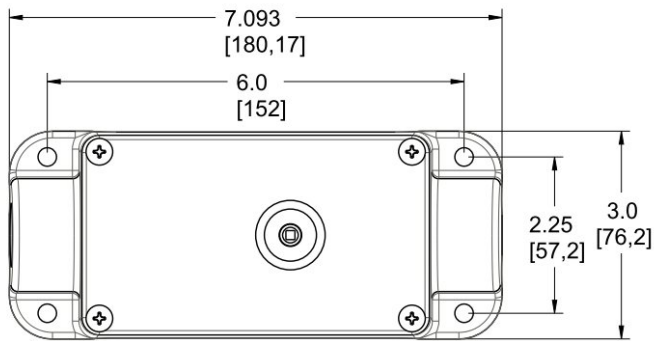
<b>Unit weight:</b>	180 lbs (86.6 kg)
<b>Operating voltage:</b>	120 - 277V AC 125V DC
<b>Supply voltage ranges:</b>	Nominal +/- 10%
<b>Power supply wattage:</b>	White Day - 85W White Night - 35W Red Night - 25W
<b>Controller wattage:</b>	15W

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

Part Number	Description
DH2C-PSD-4C8	Power Supply

# Long Life Photocell

Class I, Div. 2



Dimensions in inches [mm]

### 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%)

Part Number	Description
DHZB - 6000 - PEC	Long Life Photocell

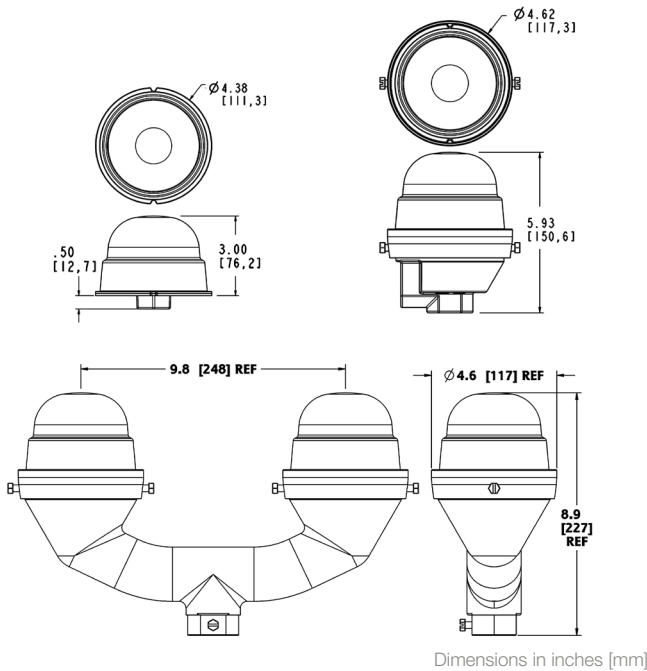
# SafeSite<sup>®</sup> L-810 Red LED Side Lights

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

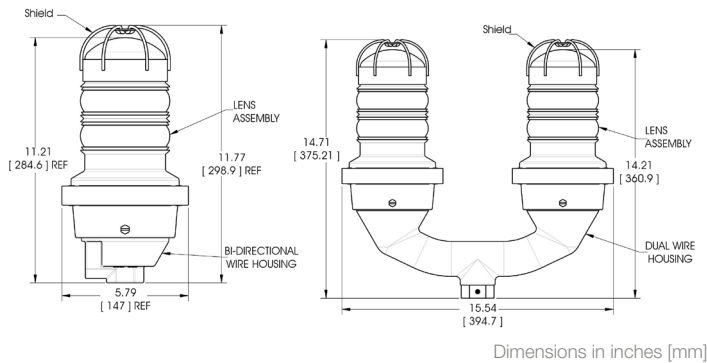


### Certifications & Compliance

- 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)

### Certifications & Ratings

- 5 year 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
<b>Class I, Div 2 Models</b>		
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
<b>ATEX / IECEx Models</b>		
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)

### Certifications & Ratings

- 5 year 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

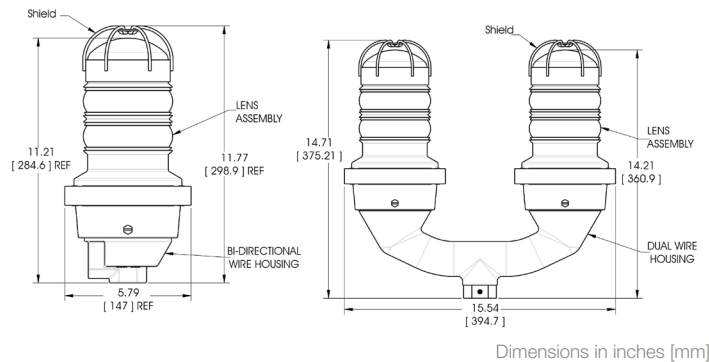
- Volt amps:** 44 VA (120V AC) -+10%  
67 VA (230V AC Units) -+15%
- Input power:** 14.5 W (120V AC Units)  
16.0 W (230V AC Units)
- Operating temp:** -67°F to +131°F (-55°C to +55°C)
- On / off time:** 100:900 ms

### Construction

- Housing:** Cast aluminum
- Lens:** Glass
- Accessories (Hardware):** Stainless steel

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

US 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)

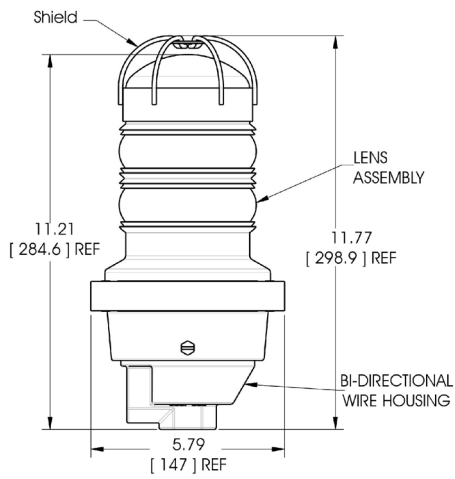
# SafeSite® L-810 LED Steady Burn Visual Signal Lights

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

Part Number	Description	Voltage	Color
<b>Class I, Div 2 - Single Fixture Models</b>			
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
<b>Class I, Div 2 - Dual Fixture Models</b>			
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
<b>ATEX / IECEx - Single Fixture Models</b>			
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 DC models



Dimensions in inches [mm]

### 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

### Certifications & Ratings

- 5 year 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%)

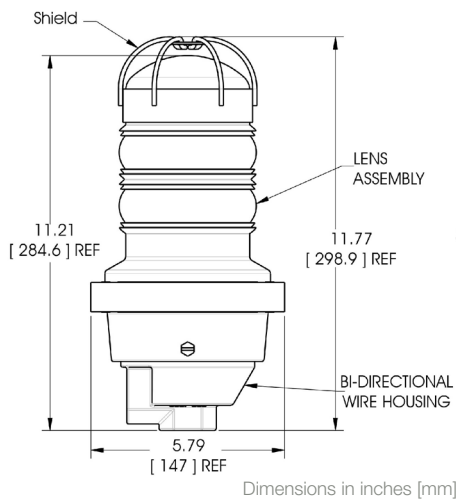
US Patent # 6,425,678

Part Number	Description	Voltage	Color
<b>120V AC Models</b>			
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
<b>230V AC Dual Fixture Models</b>			
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 Visual Signal Lights

## Colored Visual Signal Lights - Class I, Div 2. - V DC 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

### Certifications & Ratings

- 5 year 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

### Electrical specifications

**Operating Voltage::** 12-48V DC (nom) +- 10%

**Input Power:** 1.5 W

**Operating Temp:** 40°F to +149°F (-40°C to +65°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%)

US Patent # 6,425,678

Part Number	Description	Voltage	Color
FLS-2B09-001	Class I, Div 2, Single Unit	12 - 48V DC	Blue
FLS-2G09-001	Class I, Div 2, Single Unit	12 - 48V DC	Green
FLS-2Y09-001	Class I, Div 2, Single Unit	12 - 48V DC	Yellow
FLS-2R09-001	Class I, Div 2, Single Unit	12 - 48V DC	Red
FLS-2W09-001	Class I, Div 2, Single Unit	12 - 48V DC	White

# SafeSite® FLS LED Flashing Signal Lights

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

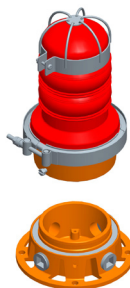
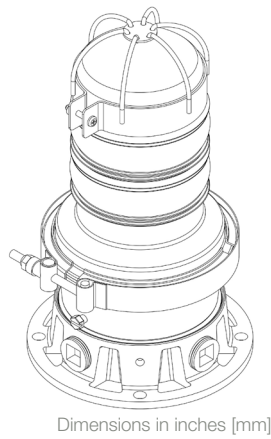
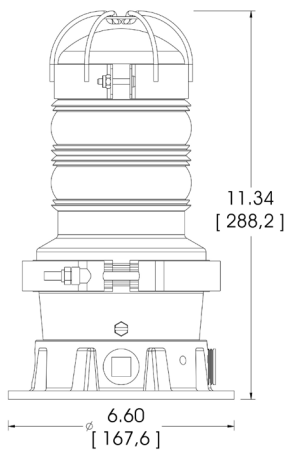


### Certifications & Compliance

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

### Certifications & Ratings

- 5 year 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%)

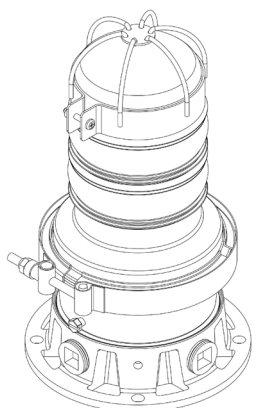
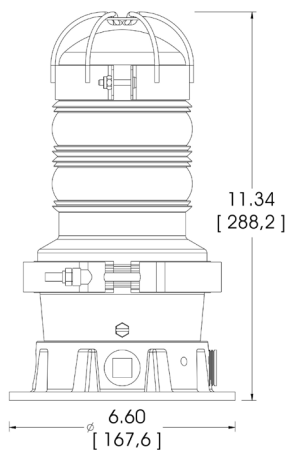
### Temperature Ratings

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)

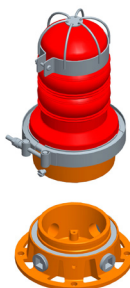
Part Number	Description	Voltage	Color
FLS-2B01-005	Class I, Div 2, Flat Base	120V AC	Blue
FLS-2R01-005	Class I, Div 2, Flat Base	120V AC	Red
FLS-2Y01-005	Class I, Div 2, Flat Base	120V AC	Yellow
FLS-2G01-005	Class I, Div 2, Flat Base	120V AC	Green

# SafeSite® L-810 LED Visual Signal Lights

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



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 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)

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

