

**Hazardous Area LED Lighting**  
HPLN LED lighting

**CROUSE-HINDS**  
SERIES

**HPLN**  
LED lighting for hazardous areas



**EATON**

*Powering Business Worldwide*



# Safe. Reliable. Efficient.

Featuring the industry's broadest range of LED luminaires for harsh and hazardous environments, Eaton's Crouse-Hinds can deliver a lighting solution that performs reliably in even the worst operating conditions. All the while reducing your energy, maintenance and manpower costs.

## Why LED?

### Useful life

Rated life of 60,000 hours of maintenance-free and safe operation

### Energy efficiency

LED average energy consumption is 50% less than HID and 85% less than incandescent

### Start/restart time

Instant illumination compared to 10 minute restrike time for HID

### Light quality

Higher color rendering and color temperature compared to fluorescent

### Environmental benefits

Mercury-free LED eliminates disposal costs and lower energy consumption for a smaller carbon footprint

## Why Crouse-Hinds?

### Industry-best reliability

Built to withstand extreme temperatures, vibration, water and dust

### Thermal management

Effective heat sinking ensures longer life

### Quality of light

Custom optics designed to maximize light distribution and intensity

### Retrofit compatibility

LED fixtures are compatible with Crouse-Hinds' HID installed base

# HPLN LED features

**Designed for hazardous areas.** Featuring a broad range of LED luminaires for harsh, hazardous and industrial environments, Zone 1 HPLN products series delivers lighting solutions that perform reliably in even the worst operating conditions. This reduces energy, maintenance and manpower costs.

- A**
- **AC/DC universal input** to anti volt drop of long cable system and fit for CBS system
  - **Surge protection device (SPD):** Up to 10kv surge protection for offshore application (standard 4Kv, 10Kv for option)

- B**
- Rugged design**
- Copper free aluminum housing, tempered and impact resistant glass globe
  - Outstanding corrosion proof capability (C5M-IEC, UL1598A-UL) and anti vibration design
  - Light but rugged zone 1 IIC pendant LED

- C**
- Robust heat sink**
- Robust and innovative heat sink design ensures long life in extreme environments

- D**
- Mounting style**
- IEC (trunnion indirect cable system) and NEC (direct conduit system) mounting style available
  - Stanchion, pendant, ceiling, wall and trunnion mounting



- E**
- Frosted lens option to remove glare**
- Perfect optical performance**
- Cold white 5700K & warm white 3000K as standard; optional: 2700K, 4000K, 5000K
  - Narrow (25°) / medium (60°) / wide (120°) beam optics available
  - Lumen efficiency up to 130 lm/w to save more energy

## Why choose HPLN LED lighting?

**Multiple versions** of the HPLN LED are available, providing ideal solutions for a wide range of applications.

3~11L

15L

21L/25L



**Reliable LED.** HPLN LED are engineered to deliver high lumen output and maintenance-free long life in the toughest conditions.

### HPLN 7L vs. 175 watt HID

**70%**  
ENERGY EFFICIENCY

**65%**  
TOTAL COST OF OWNERSHIP

**100%**  
MAINTENANCE REDUCTION

Assumptions: Calculations based on overall life of the LED system. Energy cost of \$.09 per kilowatt; 24 hour per day operation; labor rate of \$75 each for 2 workers; average time for fixture maintenance of 1 hour

# Features & specifications

## HPLN LED luminaires

The hazardous rated HPLN LED luminaire is used for general lighting in areas where flammable or explosive vapors or gases are present.

The HPLN features a compact, high-efficacy design with custom optics to ensure maximum efficiency and mounting flexibility. It is designed for both pendant and floodlight application.

Model	Nominal* lumens	Wattage	HID Equivalent
HPLN-3L	3483	26	70W-100W
HPLN-5L	5323	40	100W-150W
HPLN-7L	6684	50	150W-175W
HPLN-9L	9574	70	175W-250W
HPLN-11L	11466	85	250W-450W
HPLN-15L	14783	110	400W
HPLN-21L	21128	163	600W
HPLN-25L	24229	190	600W-1000W

\*tolerance±10%, nominal lumen data for 5700K, clear glass, wide beam angle

## Application:

- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Areas requiring frequent on-and-off of lights
- Where flammable vapors, gases, ignitable dusts, fibers or flyings are present; indoors or outdoors
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- Marine, wet locations and hose-down environments
- Manufacturing plants, heavy industrial, chemical, petrochemical or pharmaceutical facilities, platforms, loading docks and tunnels etc.

## Fixture life:

Fixture life and years of maintenance-free operation

Ambient temperature	No. of years at 24 hours usage	No. of years at 12 hours usage
25°C	10	20
30°C	10	20
35°C	10	20
40°C	10	20
45°C	10	20
50°C	7	14
55°C	5	10



## HPLN LED benefits:

- Instant illumination and strike
- Cold temperature operation/no warm up requirement
- Multiple mounting flexibility and easy maintenance
- Contains no mercury or other hazardous substance
- Shock-and vibration-resistant
- 5-year warranty
- IP66 protection
- Ambient temperature: -40°C to +55°C

## Standard materials:

- Body and mounting modules – copper-free aluminum with C5M coating
- Lens-tempered and impact resistant glass globe
- Gaskets – silicone
- Guard – stainless steel

## LED system:

- Cold white 5700K, CRI70 & warm white 3000K, CRI80 as standard, optional: 2700K, 4000K, 5000K
- Narrow (25°C) / medium (60 °C) / wide (120 °C) beam optics available

# Specifications

## Electrical rating:

	3L	5L	7L	9L	11L	15L	21L	25L
<b>Voltage range VAC</b>	100-240	100-240	100-240	100-240	100-240	100-240	100-240	100-240
<b>Frequency</b>	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
<b>Input power (watts)</b>	26	40	50	70	85	110	163	190
<b>Input amps at 100~240 VAC</b>	0.8A max@100VAC 0.35A max@240VAC		1.3A max@100VAC 0.6A max@240VAC		1.6A max@100VAC 0.7A max@240VAC		2.6A max@100VAC 1.2A max@240VAC	
<b>Power factor</b>	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95
<b>Voltage range VDC</b>	127-250	127-250	127-250	127-250	127-250	127-250	127-250	127-250
<b>THD</b>	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%

## Certifications and compliances:

- Marking accd.to IECEx:  
Ex db eb mb op is IIC T4 Gb  
Ex tb op is IIIC T95°C Db
- Marking accd.to 2014/34/EU:  
II 2 G Ex db eb mb op is IIC T4 Gb  
II 2 D Ex tb op is IIIC T95°C Db
- Certificate No.  
IECEX PRE 19.0058X  
Presafe 19 ATEX 09286X

## Weight:

Model	Appr. kg
3L-11L	11kg
15L	14kg
21/25L	15kg

## Ordering information:

Part no.	Product type	T.amb	T code
CCL1753627	HPLN-3L-C3-20C-W	-40°C~+55°C	T4
CCL1753755	HPLN-5L-C3-20C-W		
CCL1753883	HPLN-7L-C3-20C-W		
CCL1754139	HPLN-11L-C3-20C-W		
CCL1754267	HPLN-15L-C3-20C-W		
CCL1754395	HPLN-21L-C3-20C-W		
CCL1754523	HPLN-25L-C3-20C-W		



# Ordering information

## HPLN

**-9L\***

Total lm	
3L	3483
5L	5323
7L	6684
9L	9574
11L	11466
15L	14783
21L	21128
25L	24229

**Color Temp.**

W2	3000K**
C3	5700K**

**Mounting type**

Blank	no cover
J***	1-1/2" Stanchion, 25°Angled
P***	1-1/2" Stanchion, Straight
20A	20mm Pendant
25A	25mm Pendant
20C	20mm Ceiling
25C	25mm Ceiling
20TW	20mm Wall
25TW	25mm Wall

**Beam angle**

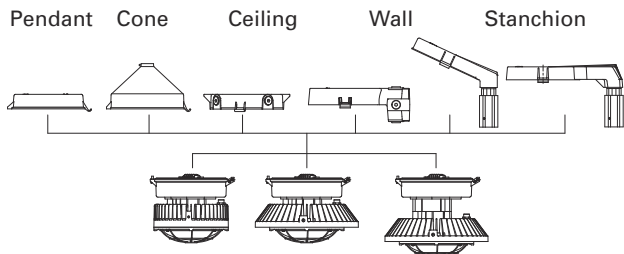
W	Wide(120°)
M	Medium(60°)
N	Narrow(25°)

**Glass**

Default	Clear Glass
F	Foggy Glass

**Guard**

Default	without guard
G	with guard



Trunnion

Stanchion mounting type



\*tolerance±10%, nominal lumen data for 5700K,clear glass,wide beam angle  
 \*\*5700K and 3000K are standard version, if other option, pls contact Crouse-Hinds sales for details.  
 \*\*\*with J and P stanchion mounting type, need to tell internal entry size

## Accessories (ordered separately)

Mounting accessories	Part no.	Description
Ceiling cover	CHLAS2084-13	20C = 20mm ceiling
	CHLAS2084-14	25C = 25mm ceiling
Wall cover	CHLAS1230-13	20TW = 20mm wall
	CHLAS1230-14	25TW = 25mm wall
Pendant	CHLAS1231-13	20A = 20mm pendant
	CHLAS1231-14	25A = 25mm pendant
Stanchion-J 25°	CHLAS1234-09	1-1/2 "/M20 stanchion
	CHLAS1234-10	1-1/2 "/M25 stanchion
Stanchion-P 90°	CHLAS1370-09	1-1/2 "/M20 stanchion
	CHLAS1370-10	1-1/2 "/M25 stanchion

## Safety cable

Mounting type	Config	Part no
Ceiling with U bracket	3L-25L	CHR6196
		CCL1625591
Other mounting	3L-11L	CHR7005
	15L-25L	CCL1622490

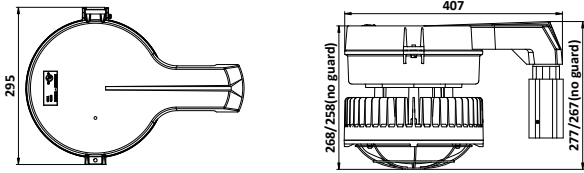
## Trunnion mounting bracket(for ceiling mounting only)

Part no	Config
CHLAS2182-06	Trunnion bracket for 3L-11L
CHLAS2183-06	Trunnion bracket for 15L
CHLAS2184-06	Trunnion bracket for 21L-25L

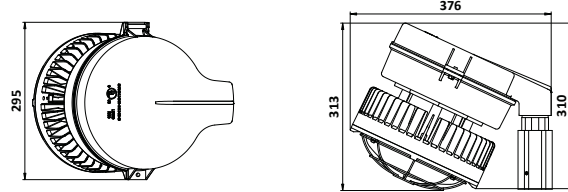
# Mounting options and dimensions

## 3- 11L

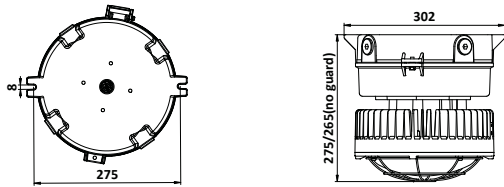
### Stanchion – straight



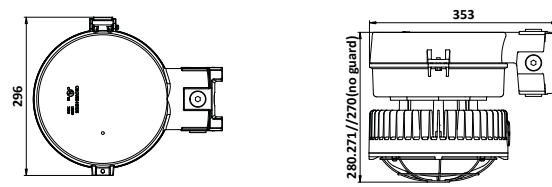
### Stanchion – 25° angled



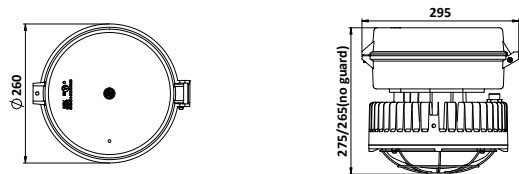
### Ceiling



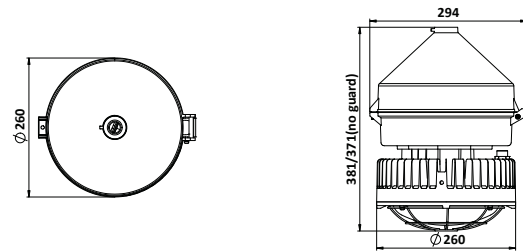
### Wall



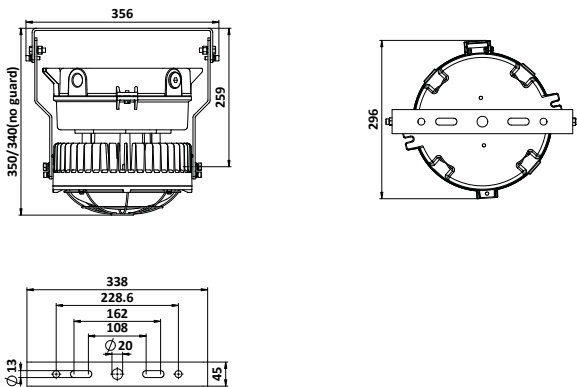
### Pendant



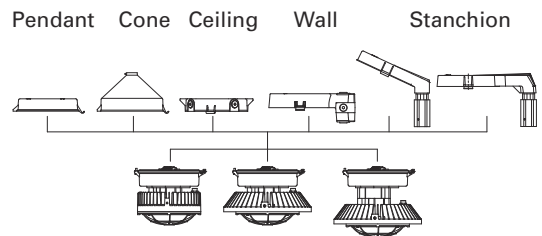
### Cone pendant



### Trunnion

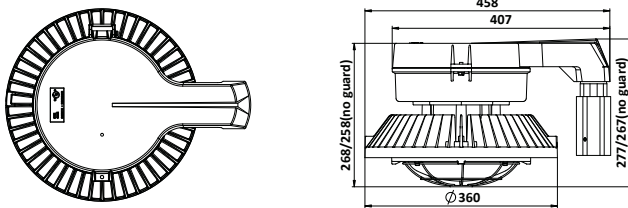


### Mounting module series

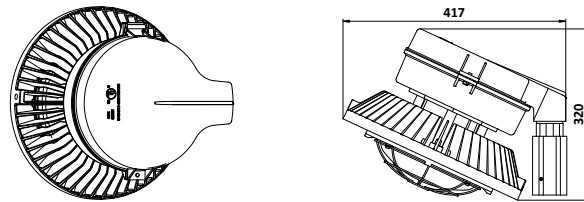


# Mounting options and dimensions 15L

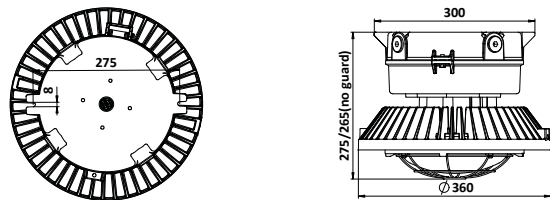
## Stanchion – straight



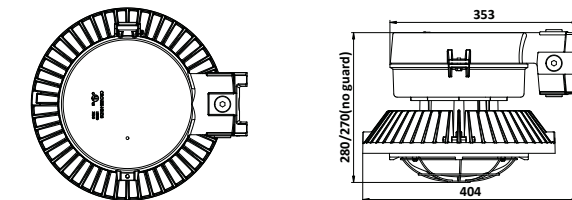
## Stanchion – 25° angled



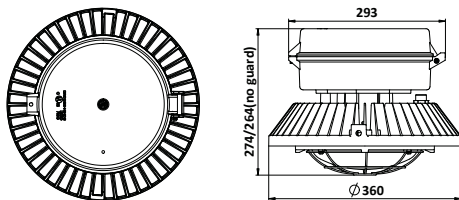
## Ceiling



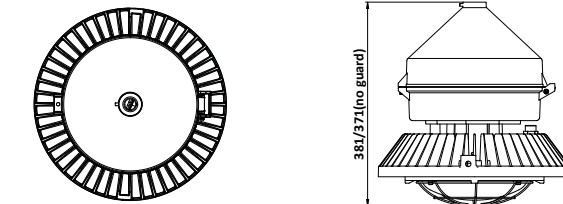
## Wall



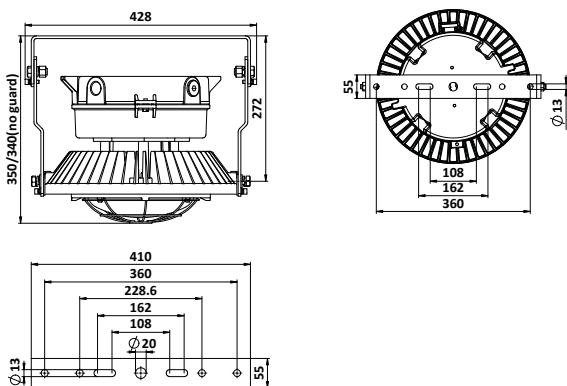
## Pendant



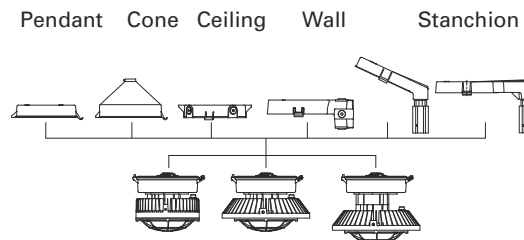
## Cone pendant



## Trunnion

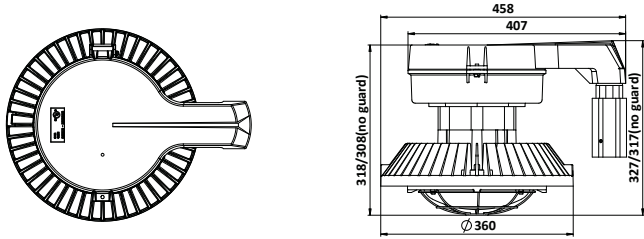


## Mounting module series

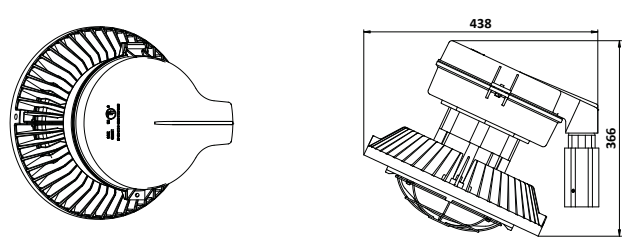


# Mounting options and dimensions 21L/25L

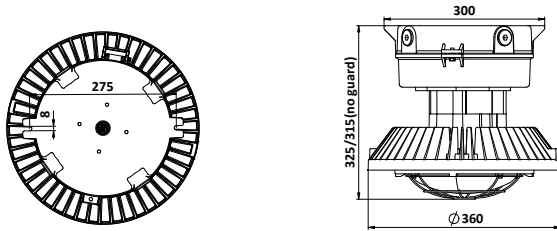
## Stanchion – straight



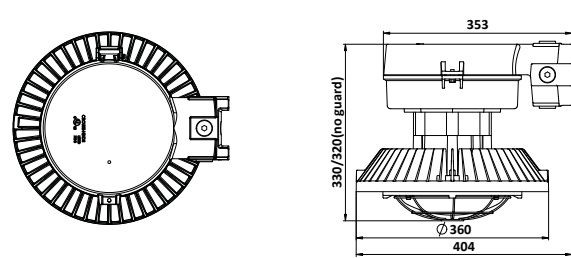
## Stanchion – 25° angled



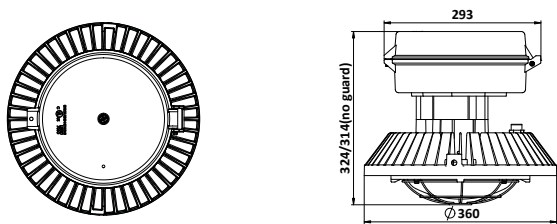
## Ceiling



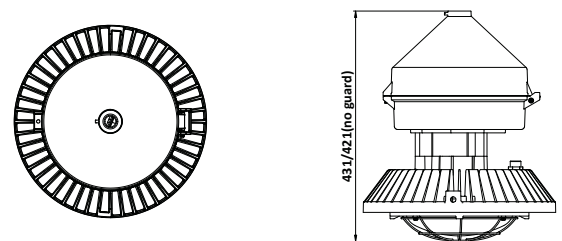
## Wall



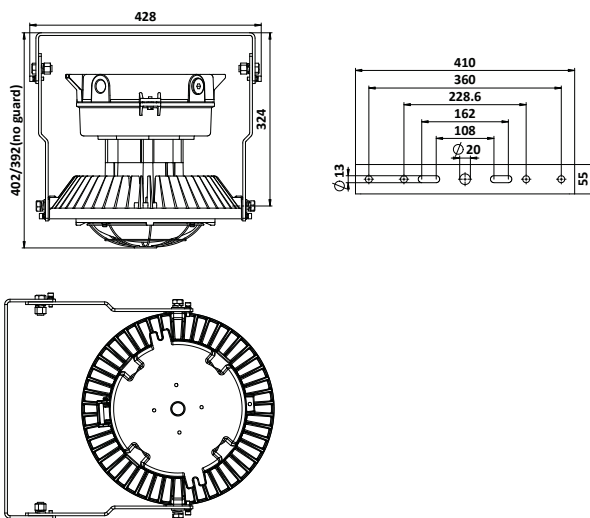
## Pendant



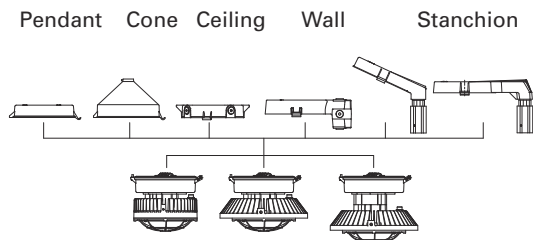
## Cone pendant



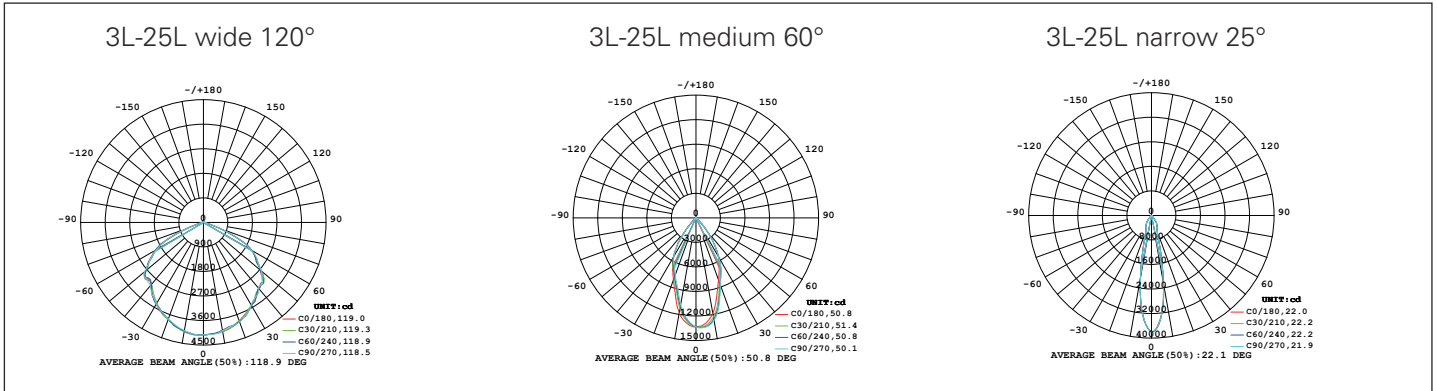
## Trunnion



## Mounting module series



## Polar Curves



### For more information:

If further assistance is required, please contact an authorized Eaton Distributor, Sales Office, or Customer Service Department.