

# Pauluhn ZPLA explosionproof LED luminaires

For drilling and marine applications

Cl. I, Div. 1, Groups C, D  
Cl. II, Div. 1, Groups E, F, G  
Cl. III

UL Listed  
CSA Certified  
Marine & Wet Locations  
NEMA 4X; IP66

2L

2L

Pauluhn™ ZPLA explosionproof linear LEDs are designed to replace fluorescent T12, T8 and T5HO lighting on marine vessels and land-based and offshore drilling platforms. The rugged and durable design features the industry's most versatile and flexible mounting options. The ZPLA is the ideal solution for high vibration, impact and hose down in drilling applications.

| Model | Typical lumens   | Watts | Lumens per watt | Equivalent HID luminaire | Typical energy savings / lifetime |
|-------|------------------|-------|-----------------|--------------------------|-----------------------------------|
| ZPLA2 | 3,800<br>+/- 10% | 28.4  | 135             | T12HO                    | Up to 62%                         |
|       |                  |       |                 | T8HO                     | Up to 57%                         |
|       |                  |       |                 | T5HO                     | Up to 45%                         |
|       |                  |       |                 | T12                      | Up to 34%                         |
|       |                  |       |                 | T8                       | Up to 22%                         |
|       |                  |       |                 | T5                       | Up to 6%                          |
| ZPLA4 | 8,300<br>+/- 10% | 59.8  | 139             | T12HO                    | Up to 58%                         |
|       |                  |       |                 | T8HO                     | Up to 43%                         |
|       |                  |       |                 | T5HO                     | Up to 53%                         |
|       |                  |       |                 | T12                      | Up to 37%                         |
|       |                  |       |                 | T8                       | Up to 21%                         |
|       |                  |       |                 | T5                       | Up to 10%                         |



## Applications:

- Marine vessels, land-based and offshore rigs; areas include: mud room, derrick, mast, SCR house, top drive, operator's house, power and pump stations

## Features:

- High efficacy: up to 139 LPW (ZPLA4 UNV34)
- 5000K CCT, 72 CRI
- 25°C to +55°C ambient operating temperature (standard fixture only)
- Low profile fixture (<5" height)
- Flush and swivel mount options
- Wide optics for uniform illumination
- Four points of secondary retention and loop feed wiring
- 2,000 PSI high pressure hose rated
- 5G 3-axis vibration
- 4kV line to line, 6kV line to earth surge protection
- 5 year fixture warranty

## Standard materials:

- Housing – copper-free aluminum; Corro-free epoxy powder coat (optional)
- Lens – glass; diffused glass (optional)

## Mounting (ordered separately):

Versatile mounting options:

- Flush mount
- Swivel/surface mount
- Pole mount

## Certifications and compliances:

### NEC/CEC:

- Class I, Division 1, Groups C, D
- Class II, Division 1, Groups E, F, G
- Class III
- NEMA 4X, IP66
- Marine and wet locations
- Paint spray rated

### UL standards:

- UL50E – Enclosures for Electrical Equipment, Environmental Considerations
- UL844 – Electrical Fixture Hangers for Hazardous Locations
- UL924 – Emergency Lighting and Power Equipment
- UL1598 – Luminaire
- UL1598A – Luminaire for Installation on Marine Vessels
- UL8750 – Standard for Light Emitting Diode (LED) Equipment for use in Lighting Products

### CSA standard:

- C22.2 Nos. 137, 250

## Photometrics:

- Complete photometrics can be found at [www.crouse-hinds.com/photometrics](http://www.crouse-hinds.com/photometrics)

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## Electrical ratings:

| UNV1  | Input power (watts) | Input amps at 120-277 VAC |
|-------|---------------------|---------------------------|
| ZPLA2 | 28.3                | 0.23 - 0.11               |
| ZPLA4 | 59.8                | 0.24 - 0.11               |

### UNV1

|                    |                      |
|--------------------|----------------------|
| Voltage range, VAC | 120-277V at 50/60 Hz |
| Voltage range, VDC | 127-300V             |

| UNV34 <sup>A</sup> | Input power (watts) | Input amps at 347-480 VAC |
|--------------------|---------------------|---------------------------|
| ZPLA4              | 45.1                | 0.096 - 0.127             |

### UNV34

|                    |                      |
|--------------------|----------------------|
| Voltage range, VAC | 347-480V at 50/60 Hz |
|--------------------|----------------------|

### All models

|              |       |
|--------------|-------|
| Power factor | ≥0.90 |
| THD          | ≤15%  |

## Temperature performance data:

| Ambient temp. °C | Supply wire °C | Class I, Division 1 | Class II, Division 1 | Simultaneous presence | Paint spray |
|------------------|----------------|---------------------|----------------------|-----------------------|-------------|
| 40 <sup>B</sup>  | 75             | T6                  | T5                   | T6                    | T5          |
| 55               | 75             | T6                  | T5                   | T5                    | T5          |
| 65               | 90             | T5                  | T4A                  | T4A                   | T5          |

## Weights:

| Model     | Lbs. | Kg.  |
|-----------|------|------|
| ZPLA2     | 18.0 | 8.2  |
| ZPLA4     | 27.0 | 12.2 |
| Emergency | 37.8 | 17.1 |

<sup>A</sup> ZPLA2 model not available with UNV34.

<sup>B</sup> EIM rated to +40°C only.

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**Designed for drilling.** Pauluhn ZPLA linear LED luminaires are engineered to stand up to the demanding conditions faced on land-based drilling rigs. The ZPLA stands up to high vibration, hose down, shock and impact, while delivering long life and high lumen performance for up to 10 years.



## Custom optics

- 120° beam spread maximizes illumination on wall panels

## Comprehensive certification

- Single model certified for use in Class I, Division 1 and Class II, Division 1 harsh and hazardous applications

## Quick and easy installation

- Easy access to drivers and wiring
- No custom brackets or hardware needed
- Two mounting options available

## Slim profile

- Less than 5" fixture height (excluding mounting brackets)
- Perfect for mounting in confined spaces or low height areas



## Built to last

- Ingress protection from hose down water or diesel fuel in harsh operational conditions – passed 2,000 PSI high pressure test
- Vibration-, impact- and shock-resistant – passed 5G, 3-axis vibration test
- 60,000 hour lifetime at 55°C ambient
- 100,000+ hour lifetime at 40°C and below

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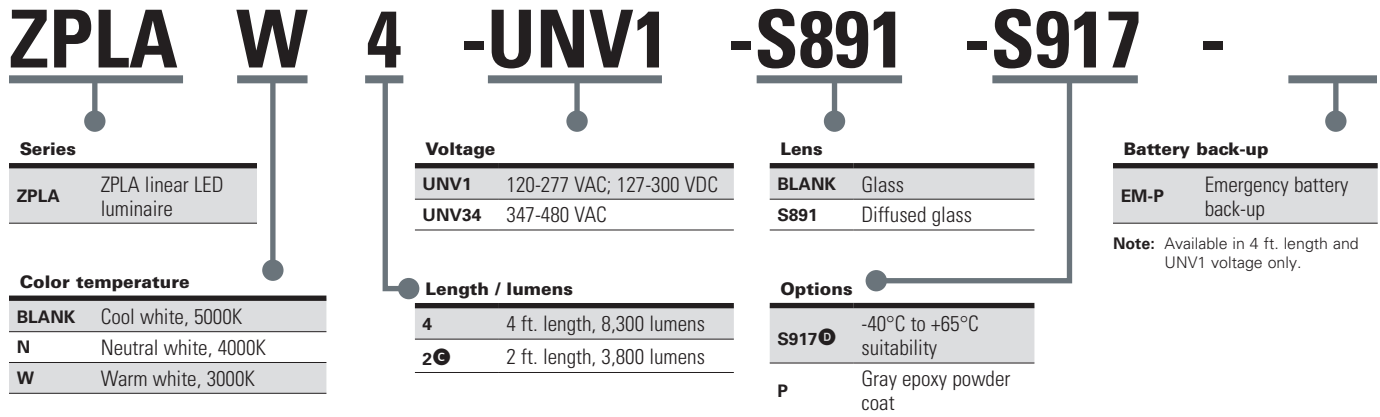
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## Ordering information:

Part number example

**ZPLAW4-UNV1-S891-S917**



## Options:

| Description                        | Suffix                  |
|------------------------------------|-------------------------|
| • Diffused glass lens .....        | <b>S891</b>             |
| • -40°C to +65°C suitability ..... | <b>S917<sup>ⓓ</sup></b> |
| • Gray epoxy powder coat .....     | <b>P</b>                |

## Accessories (ordered separately):

|                    |                                                           |
|--------------------|-----------------------------------------------------------|
| <b>ZP1057MTK</b>   | Flush/back mount back plate                               |
| <b>ZP1050MTK</b>   | Ceiling/swivel mount                                      |
| <b>PM KIT 1.25</b> | 1 1/4" pole mount kit                                     |
| <b>PM KIT 1.5</b>  | 1 1/2" pole mount kit                                     |
| <b>PM KIT 2.0</b>  | 2" pole mount kit                                         |
| <b>SS KIT</b>      | Safety chain kit (two cables)                             |
| <b>XPL PS2</b>     | Polycarbonate paint spray lens shield kit (2 ft. fixture) |
| <b>XPL PS4</b>     | Polycarbonate paint spray lens shield kit (4 ft. fixture) |

## Replacement driver kits (ordered separately)

|                               |                                                      |
|-------------------------------|------------------------------------------------------|
| <b>ZPLA2-UNV1-DRIVER KIT</b>  | 120-277 VAC driver replacement for 2 ft. linear      |
| <b>ZPLA4-UNV1-DRIVER KIT</b>  | 120-277 VAC driver replacement for 4 ft. linear      |
| <b>ZPLA4-UNV34-DRIVER KIT</b> | 347-480 VAC driver replacement for 4 ft. linear      |
| <b>XPLA EM BATTERY KIT</b>    | Replacement battery pack for emergency back-up model |

<sup>Ⓒ</sup> 2 ft. model not available with UNV34 voltage option.

<sup>Ⓓ</sup> One year warranty.

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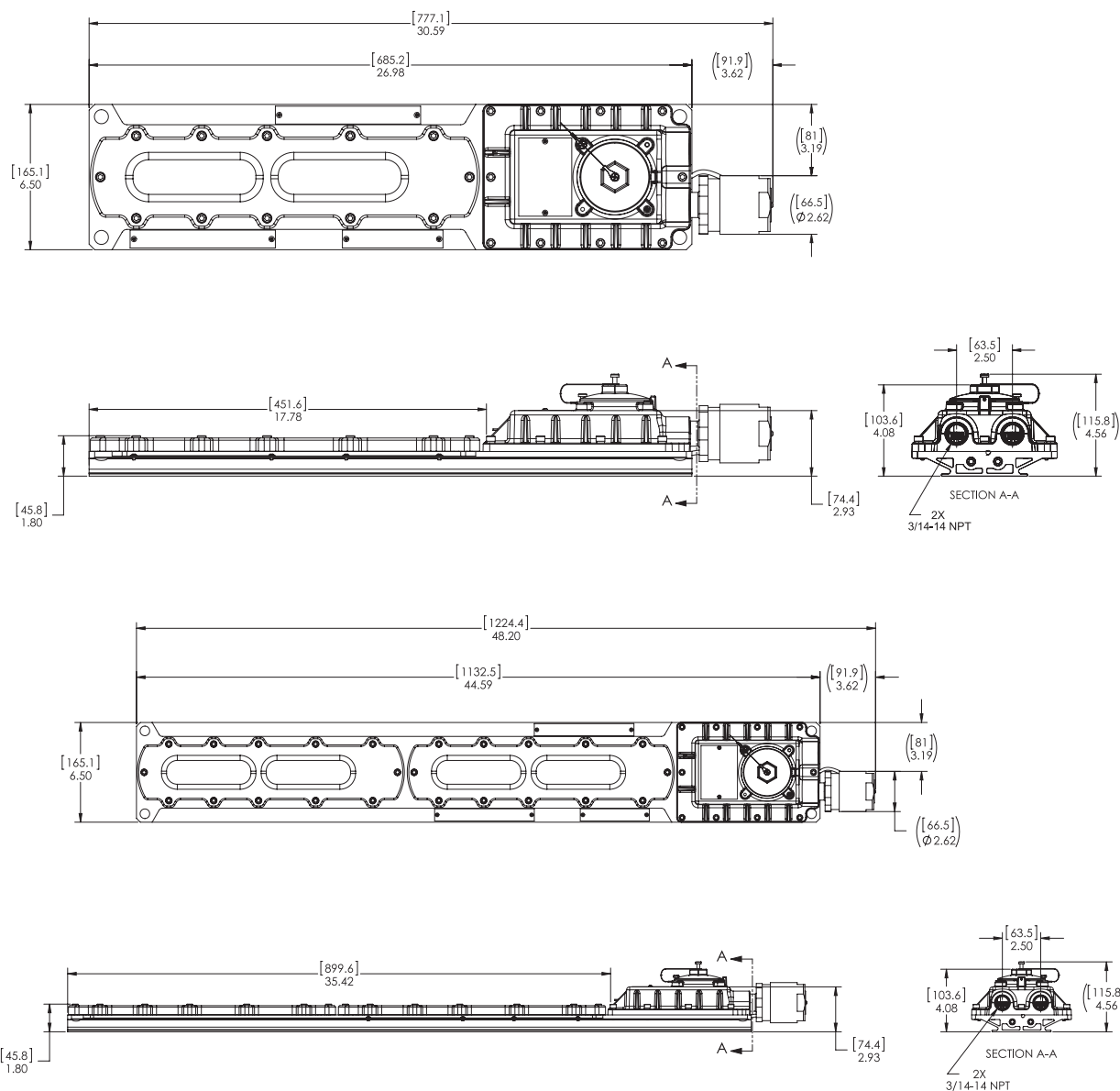
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## Dimensions:



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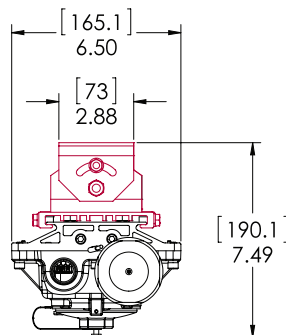
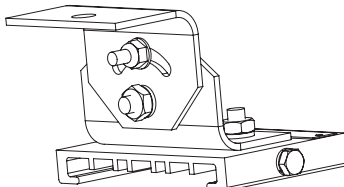
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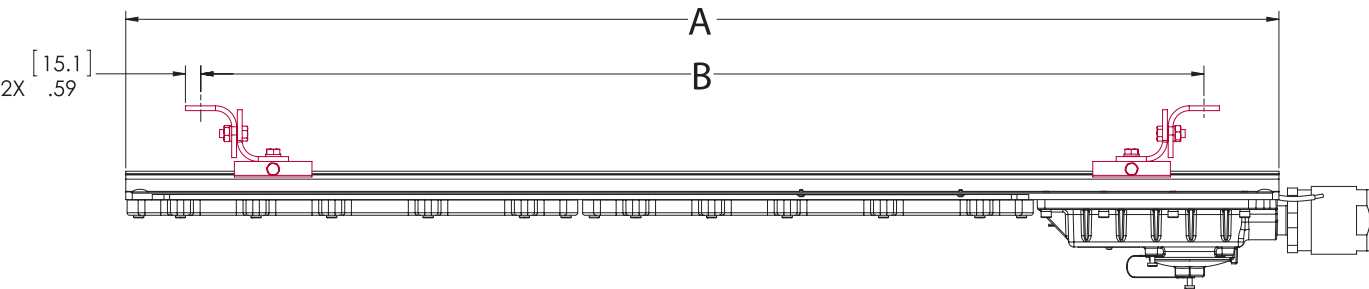
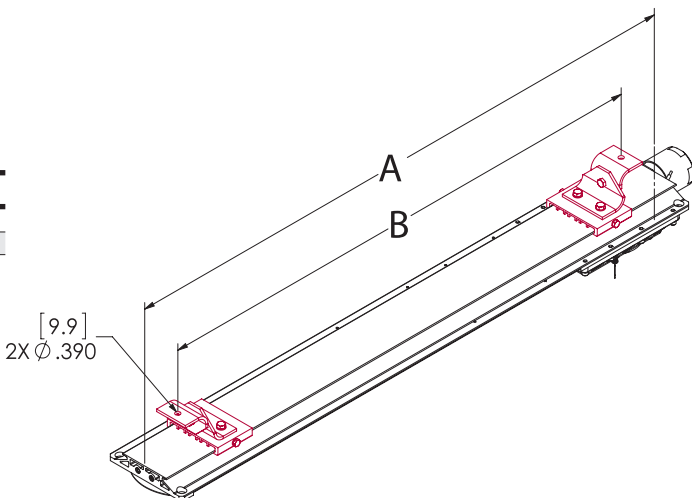
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## Mounting options:

Ceiling/swivel mount  
ZP1050MTK



| Length | ZPLA2 |         | ZPLA4 |          |
|--------|-------|---------|-------|----------|
|        | in.   | mm.     | in.   | mm.      |
| A      | 27.0  | 685.0   | 44.6  | 1133.0   |
| B      | 12-29 | 222-750 | 18-47 | 222-1194 |



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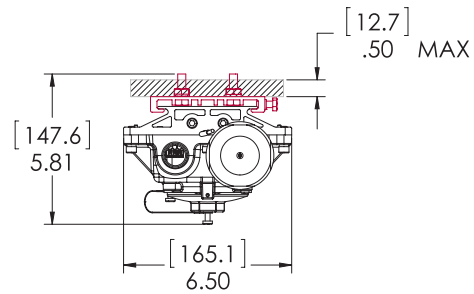
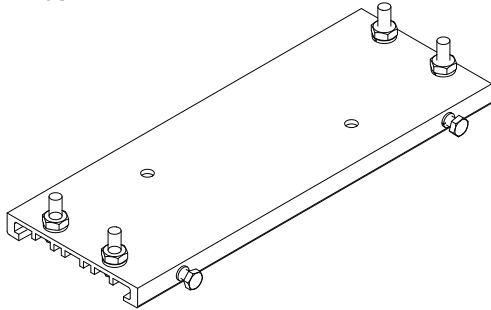
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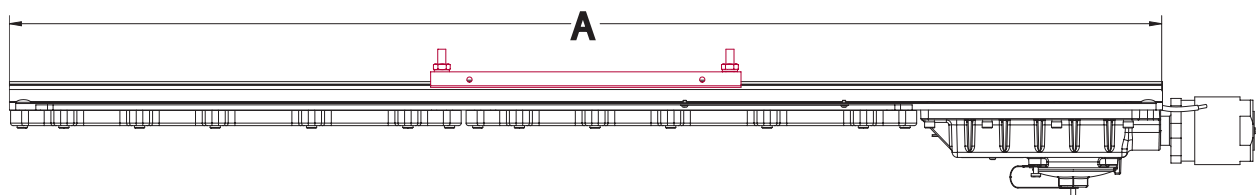
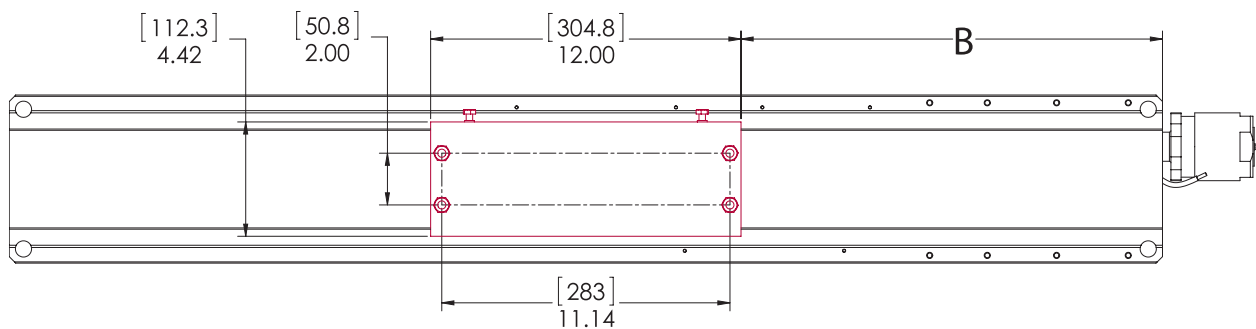
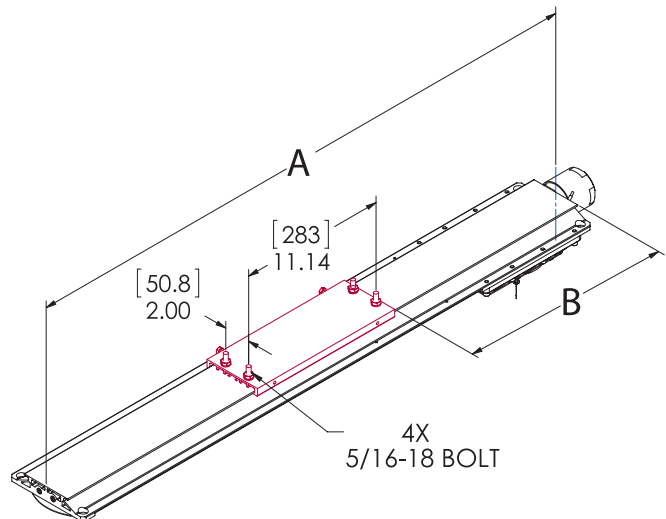
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## Mounting options (continued):

Flush ceiling  
ZP1057MTK



| Length | ZPLA2 |       | ZPLA4 |        |
|--------|-------|-------|-------|--------|
|        | in.   | mm.   | in.   | mm.    |
| A      | 27.0  | 685.0 | 44.6  | 1133.0 |
| B      | 7.5   | 190.0 | 16.3  | 414.0  |



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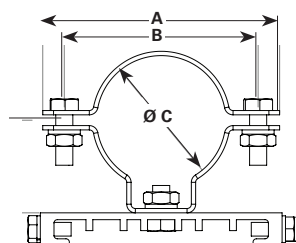
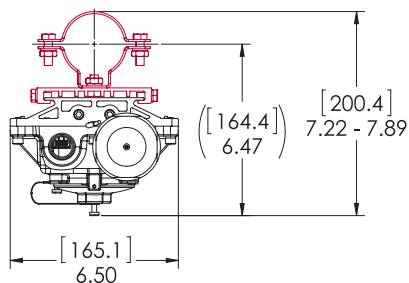
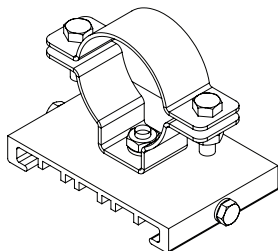
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## Mounting options (continued):

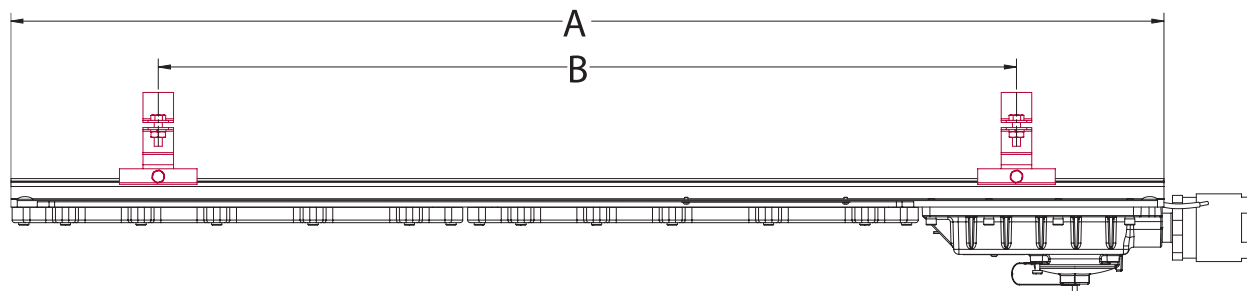
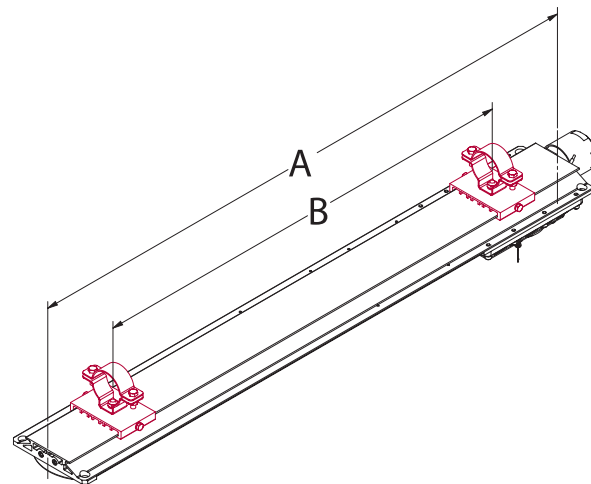
### Pole mount

PM KIT 1.25/1.5/2.0



| ALL MEASUREMENTS IN INCHES |       |       |       |       |
|----------------------------|-------|-------|-------|-------|
| Configuration              | A     | B     | C     | D     |
| PM KIT 1.25                | 4.331 | 3.543 | 1.680 | 1.693 |
| PM KIT 1.5                 | 3.740 | 2.953 | 2.000 | 1.535 |
| PM KIT 2.0                 | 3.386 | 2.598 | 2.360 | 1.378 |

| Length | ZPLA2       |               | ZPLA4       |                |
|--------|-------------|---------------|-------------|----------------|
|        | in.         | mm.           | in.         | mm.            |
| A      | 27.0        | 685.0         | 44.6        | 1133.0         |
| B      | 12.0 - 24.0 | 305.0 - 610.0 | 18.0 - 41.6 | 610.0 - 1056.0 |



# Pauluhn ZPLA

## explosionproof LED luminaires

### with battery back-up

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Cl. III

UL Listed  
CSA Certified  
Wet Locations  
Type 4X; IP66

2L

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### Applications:

- Explosionproof rated indoor and outdoor egress and emergency lighting for areas requiring uninterrupted lighting during power failure

### Features:

- Operating ambient: -20°C to +40°C
- 90-minute minimum run time in emergency mode
- 7,513 lumen output (784 in emergency mode)
- 60,000 hours rated life at 40°C
- IP66 rated enclosure with NiCad batteries
- Provision of LED indicator and manual test switch to check battery operation
- Epoxy painted powder coated housing
- 1 year warranty

### Certifications and compliances:

#### NEC/CEC:

- Class I, Division 1, Groups C, D
- Class II, Division 1, Groups E, F, G
- Class III
- Wet locations, Type 4X, IP66

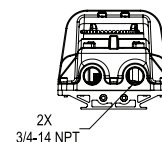
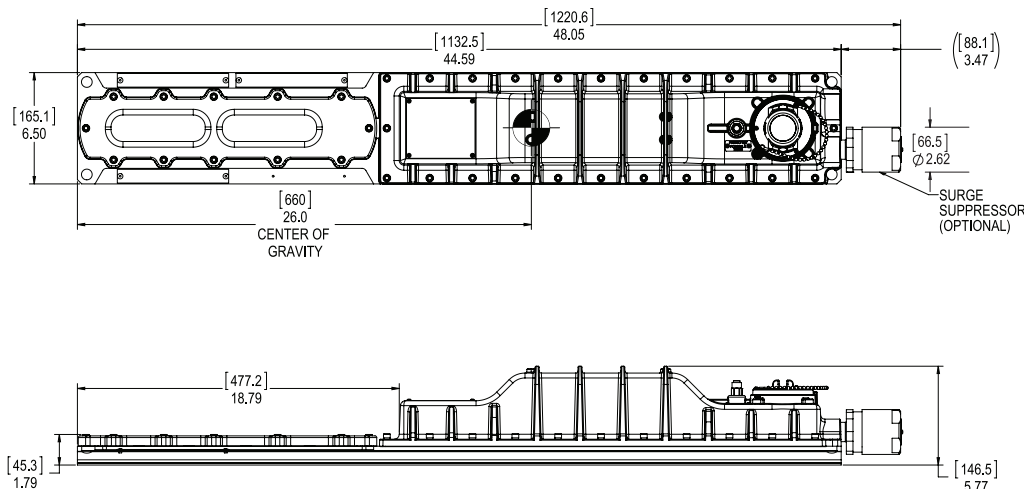
#### UL standards:

- UL50E – Enclosures for Electrical Equipment, Environmental Considerations
- UL844 – Electrical Fixture Hangers for Hazardous Locations
- UL924 – Emergency Lighting and Power Equipment
- UL1598 – Luminaires
- UL1598A – Luminaire for Installation on Marine Vessels
- UL8750 – Standard for Light Emitting Diode (LED) Equipment for use in Lighting Products

#### CSA standard:

- CSA C22.2 Nos. 137, 141

### Dimensions:



### Ordering information:

| Model           | EM output  | Normal output    | Weight (lbs.) |
|-----------------|------------|------------------|---------------|
| ZPLA4-UNV1-EM-P | 784 lumens | 7,513 (100-277V) | 37.8          |

### Electrical ratings:

| UNV1       | Input power (watts) | Input amps at 120-277 VAC |
|------------|---------------------|---------------------------|
| ZPLA4 EM P | 73.2                | 0.61 - 0.73               |

|                    |                      |
|--------------------|----------------------|
| Voltage range, VAC | 120-277V at 50/60 Hz |
| Power factor       | ≥0.90                |
| THD                | ≤15%                 |