

# TPLN Series LED Luminaires

## User Manual



### Applications:

- Wastewater treatment, oil and gas refineries, drilling rigs, petrochemical facilities, food and beverage facilities, tunnels, outdoor wall and stanchion mounted general area lighting, and where flammable vapors, gases, ignitable dusts, fibers or flyings are present.
- Applies to hazardous locations of Zone 1 and Zone2 with explosive gas atmosphere.
- Applies to hazardous locations of Zone 21 and Zone22 with explosive dust atmosphere.

### Features:

- Industry-leading efficacy: up to 140 LPW;
- CTT: 3000K-6500K;
- CRI:  $\geq 70$ ;
- $-40^{\circ}\text{C}$  to  $+45^{\circ}\text{C}$  /  $50^{\circ}\text{C}$  /  $55^{\circ}\text{C}$  ambient operating temperature;
- Low profile fixture;
- Flush, swivel and pole mount options;
- Wide optics for uniform illumination;
- Fixture warranty;
- Entry Size: M26X1.5 or M25X1.5;
- Beam angle:  $8^{\circ}$ ,  $15^{\circ}$ ,  $35^{\circ}$ ,  $60^{\circ}$ ,  $90^{\circ}$ ,  $120^{\circ}$ .

### Standard Materials:

- Housing –Aluminum alloy (ADC12 and 6063);
- Lens –tempered glass;

### Mounting (ordered separately):

Versatile mounting options:

- Flush mount
- Swivel/surface mount
- Pole mount

Mounting Angle:  $0^{\circ}$  to  $\pm 90^{\circ}$ ;

### Certifications and compliances:

#### IECEx:

- Ex db op is IIC T5...T6 Gb;
- Ex tb op is IIIC T94°C...T89°C ...T84°C Db;
- IP66;
- Certificate No: IECEx SEV 19.0039X

#### ATEX:

- $\text{Ex II 2G Ex db op is IIC T5...T6 Gb}$ ;
- $\text{Ex II 2D Ex tb op is IIIC T94}^{\circ}\text{C...T89}^{\circ}\text{C ...T84}^{\circ}\text{C Db}$ ;
- IP66;
- Certificate No: SEV 19 ATEX 0332 X

### T-Class(Gas):

Model: \ Ta:	$-40^{\circ}\text{C} \sim 45^{\circ}\text{C}$	$-40^{\circ}\text{C} \sim 50^{\circ}\text{C}$	$-40^{\circ}\text{C} \sim 55^{\circ}\text{C}$
CES-EX-LN-50	T6	T5	T5
CES-EX-LN-60	T6	T5	T5
CES-EX-LN-80	T6	T6	T5
CES-EX-LN-100	T6	T6	T5
CES-EX-LN-120	T6	T6	T5
CES-EX-LN-150	T6	T6	T5
CES-EX-LN-185	T6	T6	T5
CES-EX-LN-200	T6	T6	T5
CES-EX-LN-240	T6	T6	T5

### T-Class(Dust):

Model: \ Ta:	$-40^{\circ}\text{C} \sim 45^{\circ}\text{C}$	$-40^{\circ}\text{C} \sim 50^{\circ}\text{C}$	$-40^{\circ}\text{C} \sim 55^{\circ}\text{C}$
CES-EX-LN Series	T84°C	T89°C	T94°C

### Standard :

ATEX: EN IEC 60079-0-2018 ; EN 60079-1-2014;  
EN 60079-28-2015; EN 60079-31-2014;  
IECEx: IEC 60079-0-2017; IEC 60079-1-2014;  
IEC 60079-28-2015; IEC 60079-31-2013;

### Warning:

#### IECEx & ATEX :

- “CAUTION-USE FASTENER WITH YIELD STRESS  $\geq 640$  MPa”
- “WARNING – DO NOT OPEN WHEN ENERGIZED”
- “WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT”
- “WARNING – ONLY USE CABLES SUITABLE FOR  $85^{\circ}\text{C}$ ”
- “WARNING - DETAILED TEMPERATURE CLASS - SEE INSTRUCTIONS”
- “THE FLAMEPROOF JOINTS ARE NOT INTENDED TO BE REPAIRED.”
- End user shall use certified cable gland or conduit with suitable type of protection for final installation purpose.
- External earthing wire shall be connected when used and the cross-sectional area shall be more than  $4\text{mm}^2$  or
- 10AWG. Under rating condition, maximum temperature on the luminaire's shell shall not be higher than  $95^{\circ}\text{C}$  for T5. Temperature at cable inlet shall not be higher than allowable limit of the cable applied, to ensure the cable operation normally. The branch point is  $87.9^{\circ}\text{C}$  and cable entry point is  $69.2^{\circ}\text{C}$

Technical table:

Model	Power (W)	Input voltage: AC100V-277V; Frequency: 50/60Hz;					
		Output voltage: 33V~40Vdc;					
		CCT: 3000K-6500K					
		Power factor:0.97					
		Luminous flux (LM)	Light efficiency (lm/W)	LEDs Chip	LEDs Type (3V)	Weights (kg)	Size (mm) L x W x H
CES-EX-LN-50	50	≥5500	110-140	72PCS	3030	11.4	617x 155x 148
CES-EX-LN-60	60	≥6600	110-140	72PCS	3030		
CES-EX-LN-80	80	≥8800	110-140	72PCS	3535		
CES-EX-LN-100	100	≥11000	110-140	72PCS	3535	19.4	1235x 155x 148
CES-EX-LN-120	120	≥13200	110-140	144PCS	3030		
CES-EX-LN-150	150	≥16500	110-140	144PCS	3030		
CES-EX-LN-185	185	≥20350	110-140	144PCS	3535		
CES-EX-LN-200	200	≥22000	110-140	144PCS	3535		
CES-EX-LN-240	240	≥26400	110-140	144PCS	3535		

Dimensions:

Figure 1 applies to CES-EX-LN-50, CES-EX-LN-60, CES-EX-LN-80, CES-EX-LN-100.

L x W x H: 617mm x 155mm x 148mm

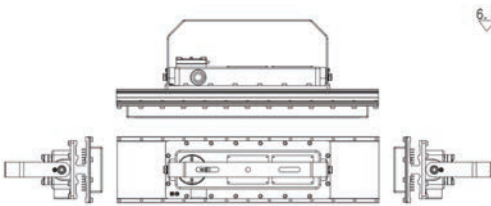


Figure 1

Figure 2 applies to CES-EX-LN-120, CES-EX-LN-150, CES-EX-LN-185, CES-EX-LN-200, CES-EX-LN-240.

L x W x H: 1235mm x 155mm x 148mm

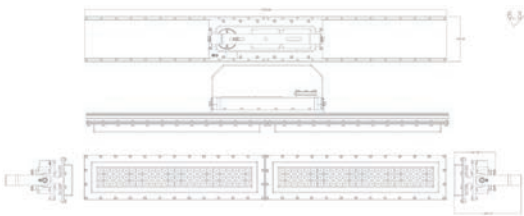
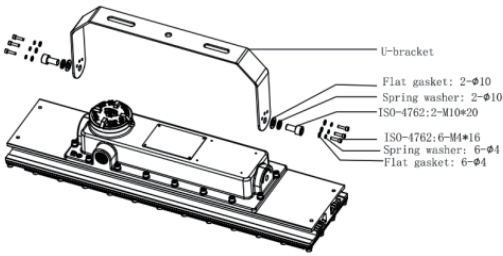
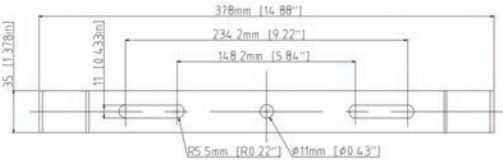


Figure 2

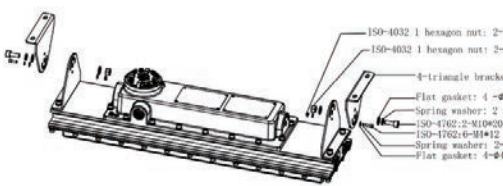
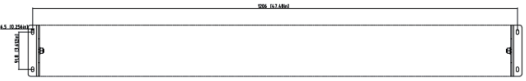
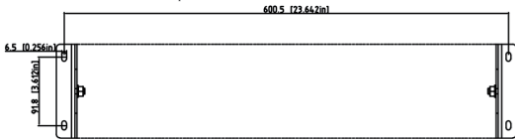
Mounting:

The product can be mounted as shown in Figure3 below.

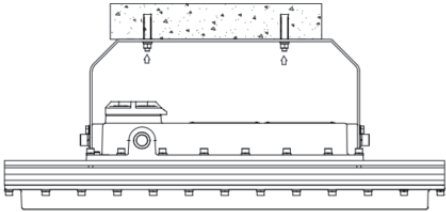
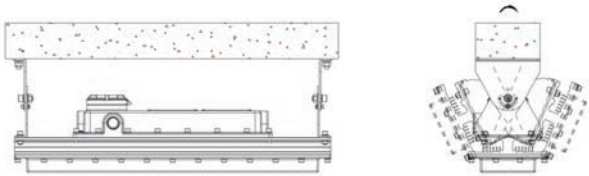
U-Bracket Size:



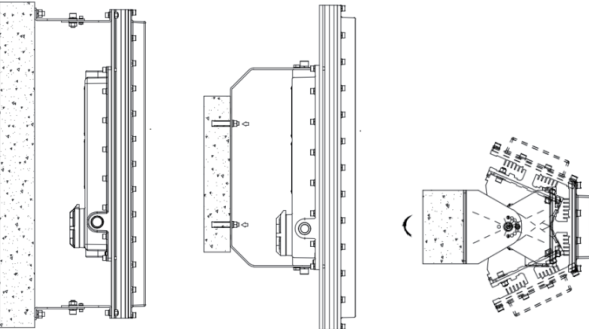
Triangle bracket size:



Ceiling mount:

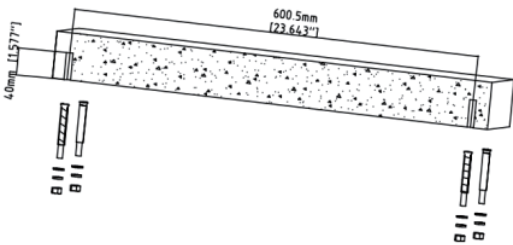


Wall mount:

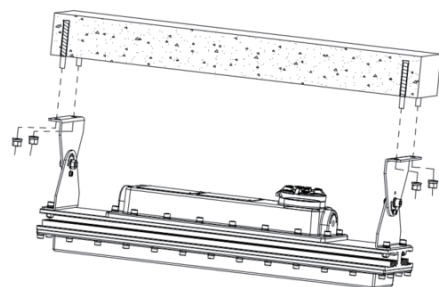


Installation steps( Ceiling mount、 Wall mount):

Use four M6x60 expansion screws to fix on the ceiling or wall, and install it with a triangular bracket, See Steps.

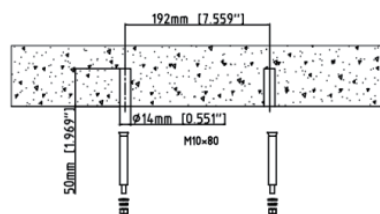


Step1: Open four holes in the wall, the hole's size is diameter of 10mm and depth of 40mm.

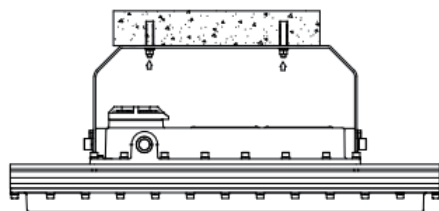


Step2: Align the mounting holes of the CES-EX-LN triangular bracket with the holes of the expansion screw.

Use two M10x80 expansion screws to fix on the ceiling or wall, and install it with a U- bracket, See Steps.

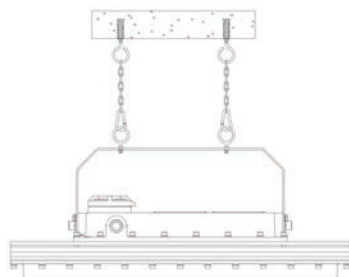


Step1: Open two holes in the wall according to the size in the picture.



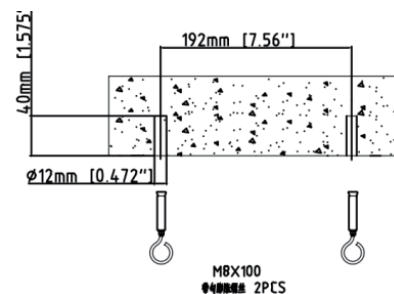
Step2: Align the mounting holes of the CES-EX-LN U-bracket with the holes of the expansion screw.

Drop mount:

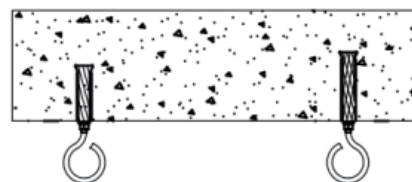


## Installation steps (Drop mount):

Use two M8x100 expansion screws with hooks to fix on the ceiling, and connect the U bracket through the iron chain, See Steps.



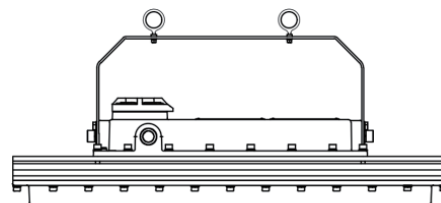
Step1: Open two holes in the wall according to the size in the picture.



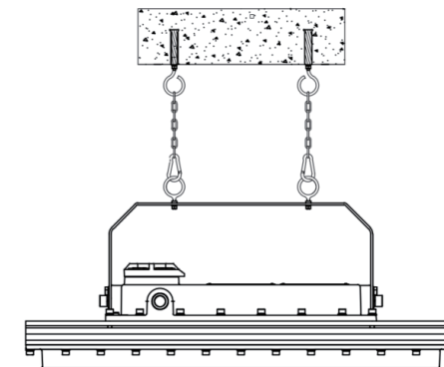
Step2: Install the expansion screws with hooks in the holes.



Step3: Install Φ4 size stainless steel circular chain on the hooks.



Step4: Use M8 size lifting eye to install on U-bracket.



Step5: Hang the lamp on the stainless steel chain Figure3- Mounting.

## Ordering information:

CES-EX-LN-W-A-B-C-D-E

CES- SHENZHEN CESP;  
EX-Explosion proof;  
LN-Linear;  
W-Power;  
A-Configuration, 01:Line; 02:Roundness; 03:Square.....;  
B- CCT, 01:3000K; 02: 4000K;03: 6500K; 04: 5000K; 05: 5700K.....;  
C- Mounting, 01: Ceiling/swivel mount; 02: U bracket mount; 03:Pole mount.....;  
D-Color, 01: Yellow; 02: Gray; 03: White; 04: Green; 05: Blue; 06: Orange red...;  
E-Other;

Part number example: CES-EX-LN-100-01-03-02-06; That means 100W, Line, CCT 6500K, U bracket mount, Orange red.