

# T-XTREME

## TUNNEL



  
**HOLOPHANE®**

## OVERVIEW

Holophane's new T-XTREME luminaire is specially designed to adapt to all types of tunnels and absorb the vibrations of passing vehicles.

It can work at temperatures ranging between -40° and 50° depending on the power chosen and is specially designed to provide correct lighting throughout the life of the project.

It uses Zhaga components to minimize and facilitate maintenance tasks. The driver is accessible from the front and requires no tools.

### features

- Robust projector to withstand decades of operation in tunnel environments.
- Modular design in 3 sizes with different fixing solutions.
- Easy maintenance: front tool-free access to drivers and quick connectors.
- TUNNEL-FIX system: for easy installation and alignment of the luminaire in the mounting bracket.
- Different mounting systems (from top, side, separated box, attached box, etc.)
- High lighting performance with reduced consumption.
- Separate compartment for LED and gear.
- Latest generation LEDs with high brightness, efficiency and reliability
- Possible inclines (alignment every 5° with swivel joint)
- Ready for connection: Zhaga base, Nema, Dali or dedicated cable entry and communication nodes (ZD4i).
- Energy Efficient: up to 165 lm/W.
- Sturdiness: IP66 + IP69K + IK10.
- L90B10 useful life: 100,000h (Ta) 25°C.
- Smart Ready: Designed to house both indoor and outdoor communications nodes.
- **TXR S:** c.4,000lm - 23,000lm  
**TXR M:** c.25,000lm - c.38,000lm  
**TXR L:** c.40,000lm - c.75,000lm

### standards / certificates

- |                          |                          |
|--------------------------|--------------------------|
| • UKCA                   | • UNE-EN 55015:2013      |
| • RoHS                   | • UNE-EN 61547:2009      |
| • UNE-EN 60598-1:2009    | • UNE-EN 62031:2009      |
| • UNE-EN 60598-2-5:2003  | • UNE-EN 61347-2-13:2009 |
| • UNE-EN 62471:2009      | • UNE-EN 62384:2007      |
| • UNE-EN 61000-3-2:2006  | • UNE-EN 13032-4         |
| • UNE-EN 61000-3-3 :2013 | • UNE EN ISO 9227        |



3000K  
CRI>70

4000K  
CRI>70

T-XTREME S



T-XTREME M

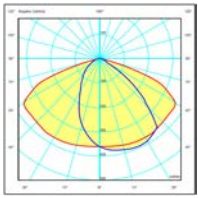


T-XTREME L

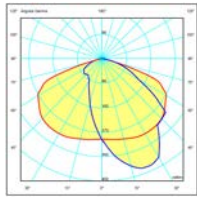
# T-XTREME

## photometric distributions

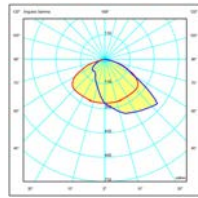
12 photometric configurations are available for use in the various environments where this type of luminaire might be installed, meaning it can be adapted to suit all situations:



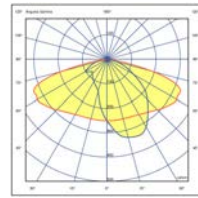
ACE3



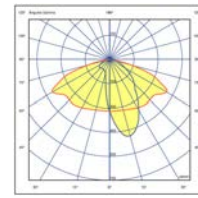
ACE4



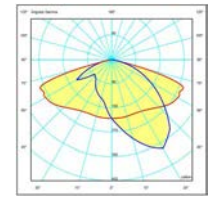
ACM4



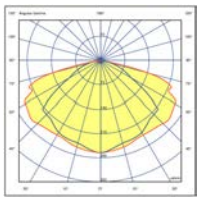
ALA3



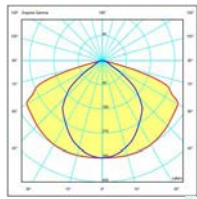
AME5



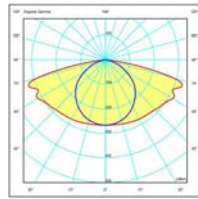
AMM6



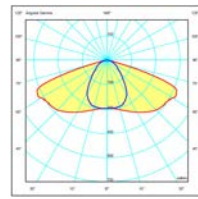
SCA1



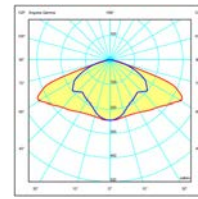
SCE6



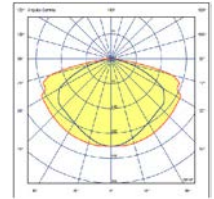
SME2



SME3



SME4



SMM1

## sizes



T-XTREME S



T-XTREME M



T-XTREME L

## applications

Tunnels, Underpasses, Roundabouts, Car parks, Sports facilities, Sports centres, Industrial warehouses, Loading docks.





# T-XTREME

## maintenance

Easy maintenance: front tool-free access to drivers and quick connectors.



## fixtures

### T-XTREME S

SP0: Side bracket adjustable  $-30^\circ/+90^\circ$ .  
 SC0: Cenital bracket adjustable  $-20^\circ/+20^\circ$ .  
 ST0: Ceiling bracket adjustable  $-20^\circ/+90^\circ$ .



### T-XTREME M

MP4: Side bracket adjustable  $-30^\circ/+90^\circ$  with GBOX attached.



MC9: Cenital bracket adjustable  $-40^\circ/+40^\circ$  with GBOX separated from the wall - 90cm cable.  
 MD9: Cenital bracket adjustable  $-40^\circ/+40^\circ$  with GBOX separated from the ceiling - 90cm cable.



MT4: Ceiling bracket adjustable  $0^\circ/+90^\circ$  with GBOX attached.



MP9: Side bracket adjustable  $-45^\circ/+90^\circ$  with GBOX separated from the wall - 90cm cable.  
 MQ9: Side bracket adjustable  $-45^\circ/+90^\circ$  with GBOX separate from the ceiling - 90cm cable.



MF9: Fixing zenithal fixation with GBOX separate to wall - 90cm cable.  
 MG9: Fixing zenithal fixation with GBOX separate to ceiling - 90cm cable.



MT9: Ceiling bracket adjustable  $0^\circ/+90^\circ$  with separate box - 90 cm cable.  
 MS9: Ceiling bracket adjustable  $0^\circ/+90^\circ$  with separate GBOX to ceiling - 90 cm cable.



# T-XTREME

## fixtures

### T-XTREME L

LP4: Side bracket adjustable  $-30^{\circ}/+90^{\circ}$  with GBOX attached.



LP9: Side bracket adjustable  $-45^{\circ}/+90^{\circ}$  with GBOX separated from the wall - 90cm cable.

LQ9: Side bracket adjustable  $-45^{\circ}/+90^{\circ}$  with GBOX separated from the ceiling - 90cm cable.



LC9: Cenital bracket adjustable  $-25^{\circ}/+25^{\circ}$  with GBOX separated from the wall - 90cm cable.

LD9: Cenital bracket adjustable  $-25^{\circ}/+25^{\circ}$  with GBOX separate from the ceiling - 90cm cable.



LF9: Fixing zenithal fixed with GBOX separate to wall - 90cm cable.

LG9: Fixing zenithal fixed with GBOX separate from ceiling - 90cm cable.



LT4: Ceiling bracket adjustable  $0^{\circ}/+90^{\circ}$  with GBOX attached.



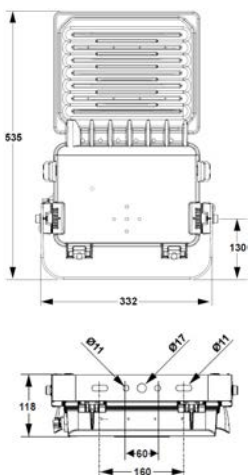
LT9: Ceiling bracket adjustable  $0^{\circ}/+90^{\circ}$  with GBOX separated from the wall - 90cm cable.

LS9: Ceiling bracket adjustable  $0^{\circ}/+90^{\circ}$  with GBOX separated from the ceiling - 90cm cable.

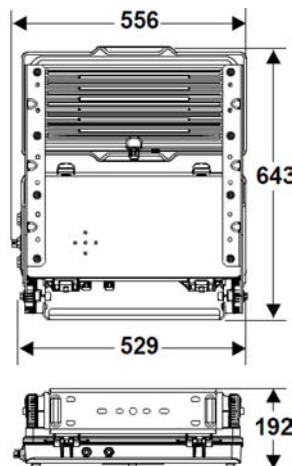


## dimensions

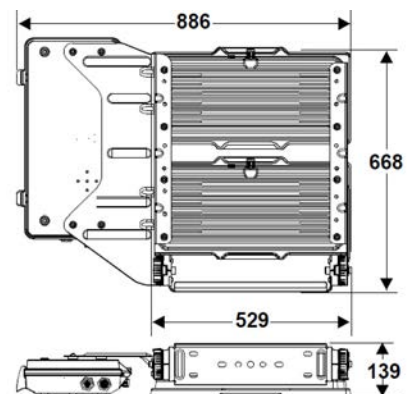
### T-XTREME S



### T-XTREME M



### T-XTREME L



## detailed specification

<b>side covers</b>	Die-cast aluminium EN AC 44100. Low Cu content <0,15%
<b>closure</b>	High transmittance tempered flat glass, 5mm thick.
<b>mounts</b>	Painted steel with anti-corrosion treatment.
<b>finish</b>	Slate grey polyester powder paint RAL 7015 textured (7015T).
<b>type of finishes</b>	Standard polyester powder coating (C2-C3 according to ISO 9223-2012 standard). Optional: Optional anodised polyester powder coating (C5-CX according to ISO 9223-2012 standard).
<b>fixings</b>	A4 stainless steel (AISI 316)
<b>galvanic isolation</b>	To prevent galvanic corrosion, incorporates molded technical polymer insulators at the joints of LED and GBOX modules with the metal supports.
<b>IP rating</b>	According to EN 60598-1 and EN 60529:Level of luminaire ingress protection IP66. Level of GBOX ingress protection IP66. Level of protection against high-pressure water jet IP69K (Luminaire and GBOX). Connector and cable gland IP68/IP69K.
<b>IK rating</b>	IK10 (EN 62262).
<b>operating temperature</b>	Ta -40°C to +50°C According to luminaire configuration
<b>lifespan</b>	L90B10 100,000 h at Ta 25°C. Light maintenance values at 25°C. Calculated by TM-21 based on LM-80 data.

## electrical characteristics

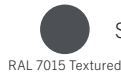
<b>electrical class</b>	Class I (For AC220-240V and AC120-277V driver) Class II (For AC220-240V driver)
<b>input voltage</b>	220 V - 240 V / 50 Hz - 60 Hz Optional 100 V- 277 V
<b>power factor (at full load)</b>	> 0.9
<b>surge protection</b>	Surge protection device (1.2 / 50) 10 kV. Maximum current (8/20) 10 kA. Maximum service voltage (L-N) 320 V. Maximum service voltage (L/N-GND) 400 V. Optional overvoltage protection: 20 kA, 20 kV

## lighting characteristics

<b>Lumen output</b>	TXR M1: c.4,000-23,000lm TXR M2: c.25,000-38,000lm TXR M3: c.40,000-75,000lm
<b>LED color temperature</b>	4,000 K (Neutral White, nw). 3,000 K (Warm White, ww). Other colour temperatures, upon request.
<b>ULR / ULR</b>	0.00 - 0.02%
<b>Optics</b>	Acrylic PMMA lenses especially designed for LEDs.
<b>LED thermal control</b>	Temperature dissipation by the 3 principles of heat transfer (conduction, convection and radiation), through design modularity, body ventilation channels and leveraging the Venturi effect of the tunnel.
<b>Photometric distributions</b>	ACE3: Throw angle 50° spread angle 60° (Type II) ACE4: Throw angle 50°/60° spread angle 70°(Type II) ACM4: Throw angle 50° spread angle 65° (Type II) ALA3: Throw angle 30°/60° spread angle 70° (Type III) AME5: Throw angle 15°/45° spread angle 60° (Type II) AMM6: Throw angle 30°/60° spread angle 70° (Type III) SCA1: Throw angle 50° spread angle 70° (Type III) SCE6: Throw angle 50° spread angle 60° (Type II) SME2: Throw angle 60° spread angle 75° (Type II) SME3: Throw angle 30° spread angle 65° (Type I) SME4: Throw angle 50° spread angle 65° (Type III) SMM1: Throw angle 60° spread angle 75° (Type III)

## finishes

Corrosion protection



Slate grey polyester powder paint RAL 7015 textured

Predefined luminaire colour



Marine Finish (1.000h) (Optional)

## maintenance

**maintenance and installation**

Tool-free opening from the front for easy maintenance Mechanical lens mounting with bolts (no adhesives).

**orientation**

Rotatable Brackets (alignment every 5° with swivel joint).

### TUNNEL FIX

Different mounting systems (from top, side, separated box, attached box, etc.)

### TXR S:

SP0: TXR S\_Side bracket adjustable -30°/+90°.

SC0: TXR S\_Cenital bracket adjustable -20°/+20°.

ST0: TXR S\_Ceiling bracket adjustable -20°/+90°.

### TXR M:

MP4: TXR M\_Side bracket adjustable 30°/+90° with GBOX attached.

MP9: TXR M\_Side bracket adjustable -45°/+90° with GBOX separated from the wall - 90cm cable.

MQ9: TXR M\_Side bracket adjustable -45°/+90° with GBOX separate from the ceiling - 90cm cable.

MC9: TXR M\_Cenital bracket adjustable -40°/+40° with GBOX separated from the wall - 90cm cable.

MD9: TXR M\_Cenital bracket adjustable -40°/+40° with GBOX separated from the ceiling - 90cm cable.

MF9: TXR M\_Fixing zenithal fixation with GBOX separate to wall - 90cm cable.

MG9: TXR M\_Fixing zenithal fixation with GBOX separate to ceiling - 90cm cable.

MT4: TXR M\_Ceiling bracket adjustable 0°/+90° with GBOX attached.

MT9: Ceiling bracket adjustable 0°/+90° with separate box - 90 cm cable.

MS9: Ceiling bracket adjustable 0°/+90° with separate GBOX to ceiling - 90 cm cable.

### TXR L:

LP4: TXR L\_Side bracket adjustable -30°/+90° with GBOX attached.

LP9: TXR L\_Side bracket adjustable -45°/+90° with GBOX separated from the wall - 90cm cable.

LQ9: TXR L\_Side bracket adjustable -45°/+90° with GBOX separated from the ceiling - 90cm cable.

LC9: TXR L\_Cenital bracket adjustable -25°/+25° with GBOX separated from the wall - 90cm cable.

LD9: TXR L\_Cenital bracket adjustable -25°/+25° with GBOX separate from the ceiling - 90cm cable.

LF9: TXR L\_Fixing zenithal fixed with GBOX separate to wall - 90cm cable.

LG9: TXR L\_Fixing zenithal fixed with GBOX separate from ceiling - 90cm cable.

LT4: TXR L\_Ceiling bracket adjustable 0°/+90° with GBOX attached.

LT9: TXR L\_Ceiling bracket adjustable 0°/+90° with GBOX separated from the wall - 90cm cable.

LS9: TXR L\_Ceiling bracket adjustable 0°/+90° with GBOX separated from the ceiling - 90cm cable.

**mechanical resistance**

The application of wind pressure is carried out according to UNE-EN 60598-2-3:2003:

The wind speed above ground level must be 150 km/h (41.67m/s). Over the projection surface of the floodlight assembly without excessive deviations.

**windage**

S: 0.136m<sup>2</sup> M: 0.296m<sup>2</sup> L: 0.528 m<sup>2</sup>

**weight**

S: 7.80kg M: 20kg L: 30kg

**cables**

Standard power wire from separate equipment box to LED module: 1m. Optional 2.5m and 5m accessory wires.

## ordering

Code	<b>Luminaire</b> (required)								
TXR	T-EXTREME								
Code	<b>Series</b> (required)								
.1	Series 1								
Code	<b>Operation Package</b> (required)								
.M1	Small Single Module								
.M2	Medium Single Module								
.M3	Large Double Module								
Code	<b>Lamp Type</b> (required)								
.LA044	LED light engine producing c.4,000 lm with a nominal 4000K colour temperature				M1 Size				
.LA234	LED light engine producing c.23,000 lm with a nominal 4000K colour temperature								
.LA254	LED light engine producing c.18,000 lm with a nominal 4000K colour temperature				M2 Size				
.LA384	LED light engine producing c.38,000 lm with a nominal 4000K colour temperature								
.LA404	LED light engine producing c.36,000 lm with a nominal 4000K colour temperature				M3 Size				
.LA754	LED light engine producing c.75,000 lm with a nominal 4000K colour temperature								
.LA043	LED light engine producing c.4,000 lm with a nominal 3000K colour temperature				M1 Size				
.LA223	LED light engine producing c.22,000 lm with a nominal 3000K colour temperature								
.LA243	LED light engine producing c.17,000 lm with a nominal 3000K colour temperature				M2 Size				
.LA373	LED light engine producing c.37,000 lm with a nominal 3000K colour temperature								
.LA403	LED light engine producing c.35,000 lm with a nominal 3000K colour temperature				M3 Size				
.LA723	LED light engine producing c.72,000 lm with a nominal 3000K colour temperature								
Code	<b>Optical Distribution</b> (required)								
.ACE3	Throw angle 50° spread angle 60° (Type II)								
.ACE4	Throw angle 50°/60° spread angle 70° (Type II)								
.ACM4	Throw angle 50° spread angle 65° (Type II)								
.ALA3	Throw angle 30°/60° spread angle 70° (Type III)								
.AME5	Throw angle 15°/45° spread angle 60° (Type II)								
.AMM6	Throw angle 30°/60° spread angle 70° (Type III)								
.SCA1	Throw angle 50° spread angle 70° (Type III)								
.SCE6	Throw angle 50° spread angle 60° (Type II)								
.SME2	Throw angle 60° spread angle 75° (Type II)								
.SME3	Throw angle 30° spread angle 65° (Type I)								
.SME4	Throw angle 50° spread angle 65° (Type III)								
.SMM1	Throw angle 60° spread angle 75° (Type III)								
Code	<b>Fixing Method</b> (required)								
.SPO	Side bracket adjustable -30°/+90° (M1 - Single single module)								
.SCO	Cenital bracket adjustable -20°/+20° (M1 - Single single module)								
.STO	Ceiling bracket adjustable -20°/+90° (M1 - Single single module)								
.MP4	Side bracket adjustable -30°/+90° with GBOX attached (M2 - Medium single module)								
.LP4	Side bracket adjustable -30°/+90° with GBOX attached (M3 - Large double module)								
.MP9	Side bracket adjustable -45°/+90° with GBOX separated from the wall - 90cm cable (M2 - Medium single module)								
.MQ9	Side bracket adjustable -45°/+90° with GBOX separate from the ceiling - 90cm cable (M2 - Medium single module)								
.LP9	Side bracket adjustable -45°/+90° with GBOX separated from the wall - 90cm cable (M3 - Large double module)								
.LQ9	Side bracket adjustable -45°/+90° with GBOX separated from the ceiling - 90cm cable (M3 - Large double module)								
.MC9	Cenital bracket adjustable -40°/+40° with GBOX separated from the wall - 90cm cable (M2 - Medium single module)								
.MD9	Cenital bracket adjustable -40°/+40° with GBOX separated from the ceiling - 90cm cable (M2 - Medium single module)								
.LC9	Cenital bracket adjustable -25°/+25° with GBOX separated from the wall - 90cm cable (M3 - Large double module)								
.LD9	Cenital bracket adjustable -25°/+25° with GBOX separate from the ceiling - 90cm cable (M3 - Large double module)								
.MF9	Fixing zenithal fixation with GBOX separate to wall - 90cm cable (M2 - Medium single module)								
.MG9	Fixing zenithal fixation with GBOX separate to ceiling - 90cm cable (M2 - Medium single module)								
.LF9	Fixing zenithal fixed with GBOX separate to wall - 90cm cable (M3 - Large double module)								
.LG9	Fixing zenithal fixed with GBOX separate from ceiling - 90cm cable (M3 - Large double module)								
.MT4	Ceiling bracket adjustable 0°/+90° with GBOX attached (M2 - Medium single module)								
.LT4	Ceiling bracket adjustable 0°/+90° with GBOX attached (M3 - Large double module)								
.MT9	Ceiling bracket adjustable 0°/+90° with separate box - 90 cm cable (M2 - Medium single module)								
.MS9	Ceiling bracket adjustable 0°/+90° with separate GBOX to ceiling - 90 cm cable (M2 - Medium single module)								
.LT9	Ceiling bracket adjustable 0°/+90° with GBOX separated from the wall - 90cm cable (M3 - Large double module)								
.LS9	Ceiling bracket adjustable 0°/+90° with GBOX separated from the ceiling - 90cm cable (M3 - Large double module)								
Code	<b>Colour</b> (required)								
.C6	Textured Grey (RAL7015)								
.RAL****	RAL Colour (Customer choice)								
Code	<b>Dimming Outputs</b> (option)								
.LRD	DALI								
Code	<b>Photocells</b> (option)								
.T5	Complete with 5-pin dimming NEMA ANSI C136.41 socket (photocell/node supplied by others) without locking top								
.T7	Complete with 7-pin dimming NEMA ANSI C136.41 socket (photocell/node supplied by others) without locking top								
.T5T	Complete with 5-pin dimming NEMA ANSI C136.41 socket (photocell/node supplied by others) with weather proof locking top								
.T7T	Complete with 7-pin dimming NEMA ANSI C136.41 socket (photocell/node supplied by others) with weather proof locking top								
.TZ01	Complete with 4-Pin Zhaga Socket - 'Top' (suitable photocell/node supplied by others) with weather proof locking cap								
.TZ02	Complete with 4-Pin Zhaga Socket - 'Bottom' (suitable photocell/node supplied by others) with weather proof locking cap								
.TZ03	Complete with 4-Pin Zhaga Socket - 'Top & bottom' (suitable photocell/node supplied by others) with weather proof locking cap								
Code	<b>Voltage</b> (option)								
.CII	Class II								
Code	<b>Auxiliary Circuits</b> (option)								
.KV	With 10KV surge protection								
TXR	.M1	.LA044	.ACE3	.SPO	.C6	.LRD	.T5	.CII	.KV

Example



# TUNNEL T-XTRME



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**AcuityBrands.**

