



# T-Xtreme Tunnel



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







T-XTREME S



T-XTREME M



T-XTREME L









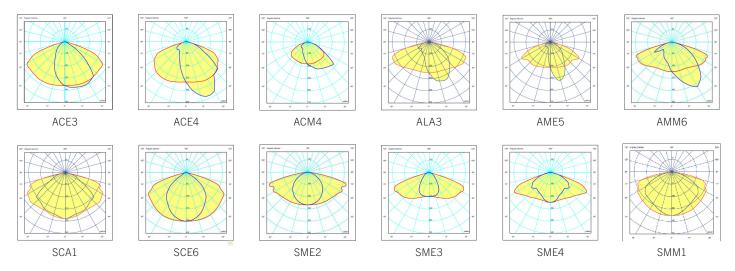






### photometric distributions

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:



### sizes





T-XTREME S





T-XTREME M





T-XTREME L

### applications

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





### maintenance

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



T-XTREME S



T-XTREME L



T-XTREME M



Electrical disconnection of modules without tools

### 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°/ +90° with GBOX attached.



 $\mbox{MC9:}$  Cenital bracket adjustable -40°/+40° with GBOX separated from the wall -90cm cable.

MD9: Cenital bracket adjustable -40°/+40° with GBOX separated from the ceiling - 90cm cable.



MT4: Ceiling bracket adjustable 0°/+90° with GBOX attached.



MP9: Side bracket adjustable -45°/+90° with GBOX separated from the wall- 90cm cable. MQ9: Side bracket adjustable -45°/+90° 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 -  $90^{\circ}$  cm cable. MS9: Ceiling bracket adjustable  $0^{\circ}$  /  $+90^{\circ}$  with separate GBOX to ceiling -  $90^{\circ}$  cm cable.





### fixtures

### T-XTREME L

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



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

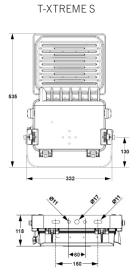
LD9: Cenital bracket adjustable -25°/ +25° with GBOX separate from the ceiling - 90cm cable.



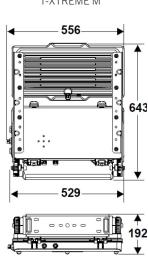
LT4: Ceiling bracket adjustable  $0^{\circ}$  /  $+90^{\circ}$  with GBOX attached.



### dimensions



T-XTREME M



LP9: Side bracket adjustable -45°/ +90° with GBOX separated from the wall - 90cm cable. LQ9: Side bracket adjustable -45°/ +90° with GBOX



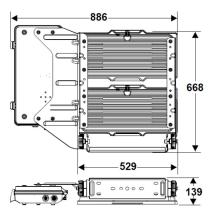
LF9: Fixing zenithal fixed with GBOX separate to wall - 90cm cable. LG9: Fixing zenithal fixed with GBOX separate from ceiling - 90cm cable.



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



### T-XTREME L



### detailed specification

side covers Die-cast aluminium EN AC 44100. Low Cu content <0,15%

**closure** High transmittance tempered flat glass, 5mm thick.

**mounts** Painted steel with anti-corrosion treatment.

**finish** Slate grey polyester powder paint RAL 7015 textured (7015T).

**type of finishes** 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).

fixings A4 stainless steel (AISI 316)

galvanic isolation To prevent galvanic corrosion, incorporates molded technical polymer insulators at the joints of LED and GBOX modules

with the metal supports.

IP rating 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.

**IK** rating IK10 (EN 62262).

**operating temperature** Ta -40°C to +50°C According to luminaire configuration

lifespan 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

electrical class Class I (For AC220-240V and AC120-277V driver) Class II (For AC220-240V driver)

**input voltage** 220 V - 240 V / 50 Hz - 60 Hz Optional 100 V- 277 V

power factor (at full load) > 0.9

surge protection 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

**Lumen output** TXR M1: c.4,000-23,000lm

TXR M2: c.25,000-38,000lm TXR M3: c.40,000-75,000lm

LED color temperature 4,000 K (Neutral White, nw). 3,000 K (Warm White, ww). Other colour temperatures, upon request.

**ULR / ULR** 0.00 - 0.02%

**Optics** Acrylic PMMA lenses especially designed for LEDs.

**LED thermal control**Temperature dissipation by the 3 principles of heat transfer (conduction, convection and radiation), through design

modularity, body ventilation channels and levera-ging the Venturi effect of the tunnel.

**Photometric distributions** 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 III)
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

RAL 7015 Texture

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 sepa-rate 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  $0^{\circ}$  / +90° with separate GBOX to ceiling - 90 cm cable.

### TXR L:

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

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

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

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

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

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  $0^{\circ}$  / +90° with GBOX separated from the ceiling - 90cm cable.

### mechanical resistance

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

The wind speed above ground level must be 150 km/h (41.67 m/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



# **T-Xtreme Tunnel**



### Speak to the Holophane experts today

Get in touch to discover how, together, we can ensure your lighting space works for you and the planet.

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