

ORBIX 360

Vandal-resistant circular luminaires

ORBIX 360

Intelligent, compact, vandal-resistant luminaires

The Orbix 360 is a compact vandal-resistant circular bulkhead with a high efficiency satin polycarbonate cover and strong high-pressure die-cast aluminium body. With photocell, Lumi-LinQ and wireless emergency versions the Orbix 360 is suitable for a wide range of external applications.

IP66

IK11

UK
CA

CE

LED



Two design options. **Plain or eyelid.**

The Orbix 360 is available in two versions, both featuring a homogeneously lit diffuser.

The plain version, for wall or external ceiling /canopy mounting, provides a 360° light distribution. This version can be semi-recessed using an optional recessing bezel which may be preferable for aesthetics where a shallower install is required, or to match an existing style.

The wall mounted eyelid version is designed to reduce obtrusive and nuisance light in residential applications.



93mm

280mm

Small but mighty

Everything you need in a compact body

Due to advancements in LED technology the Orbix 360 is small whilst still offering the output and benefits you would expect from a TRT external bulkhead including; Lumi-LinQ (with or without emergency lighting feature), photocell and conduit entry.

Designed for tough environments

Every aspect of the Orbix 360 has been designed to be resilient. Protection by Lux Guard, TRT patented current sharing technology, means that if an LED fails, the neighbouring LEDs increase in brightness slightly to compensate.



Tamper-resistant retaining screw

Prevents the bezel being easily removed.



Cover bezel

A strong high-pressure die-cast LM6 aluminium bezel hides cover screws and deters curious vandalism.

Impact-resistant cover

Shallow depth 3mm thick UV stabilised satin polycarbonate cover rated IK11.





LED PCB

Replaceable LED PCBs and TRT patented Lux Guard LED protection technology.

Control gear

Fully replaceable control gear with an option for Lumi-LinQ wireless emergency to operate for three hours in the event of power failure.

Die-cast aluminium body

A strong high-pressure die-cast LM6 aluminium body which is deep enough to accept conduit entry. Full polyester powder coated for a durable long lasting finish.

Silicone gasket

Long life thermally stable silicone gasket which will maintain the IP rating for the life of the luminaire.



Hidden cover screws

The aluminium bezel fixes over the cover screws creating a clean screw free appearance as well as reducing the potential for vandalism. The bezel twists and locks into place and is retained by a T10 pin Torx security screw.

Removable LED module

The Orbix 360 is supplied with a one piece LED module which simplifies installation and maintenance. The module is a pre-assembled unit which includes the LED PCB, control gear and any emergency or control components and a polycarbonate cover.

During installation, the cast aluminium body is mounted during 'first fix' and the LED module added during 'second fix' by simply plugging in the mains connector and securing the four captive T25 pin Torx security screws.

No weak points here IK11 presence detection

Lumi-LinQ sensors are located inside the luminaire and therefore protected by the 3mm thick polycarbonate cover.

This makes them particularly suited to areas where vandalism is likely but Lumi-LinQ features are still desired.

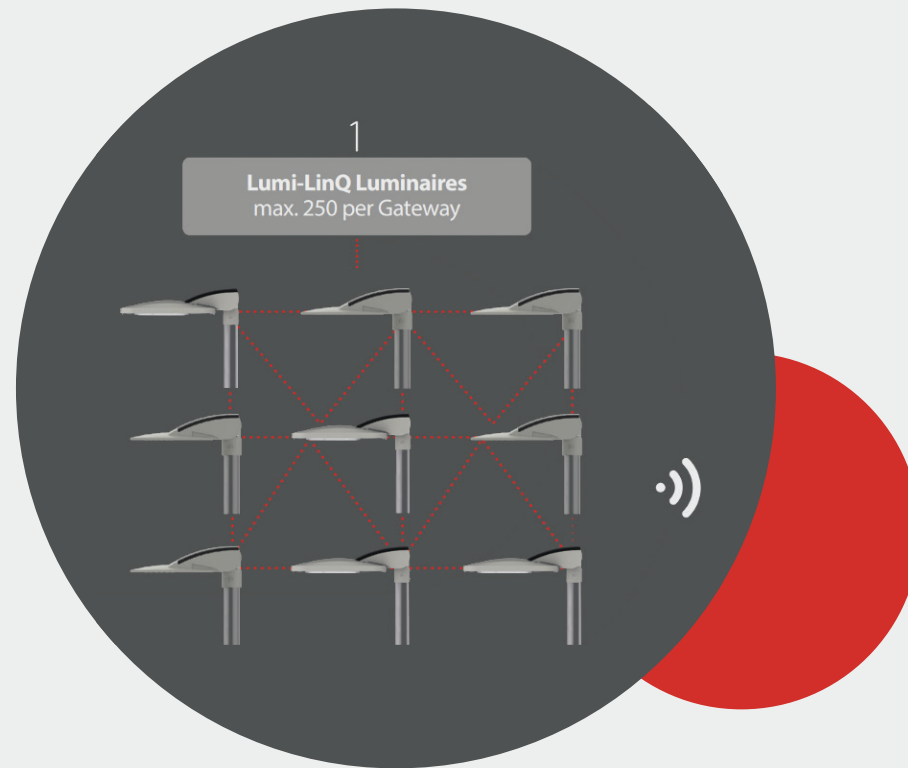




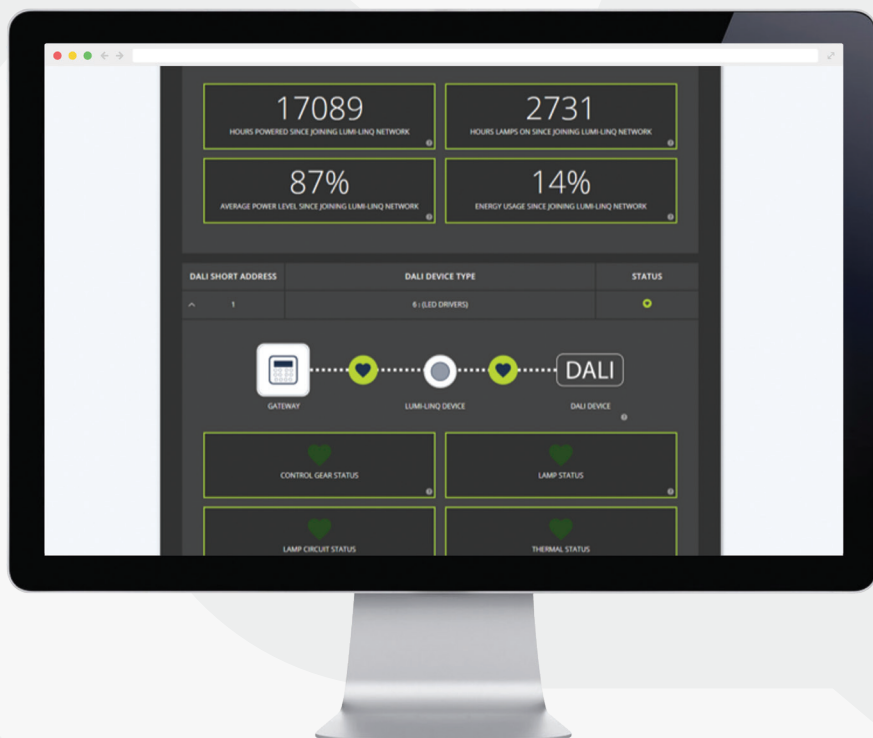
Take control of your lighting

Lumi-LinQ is an innovative wireless lighting control system that allows users to monitor their energy performance data and complete operational status information for all Lumi-LinQ standard and emergency luminaires. Information is displayed on the Lumi-LinQ website which can be accessed from anywhere using a computer, laptop, tablet or smart-phone.

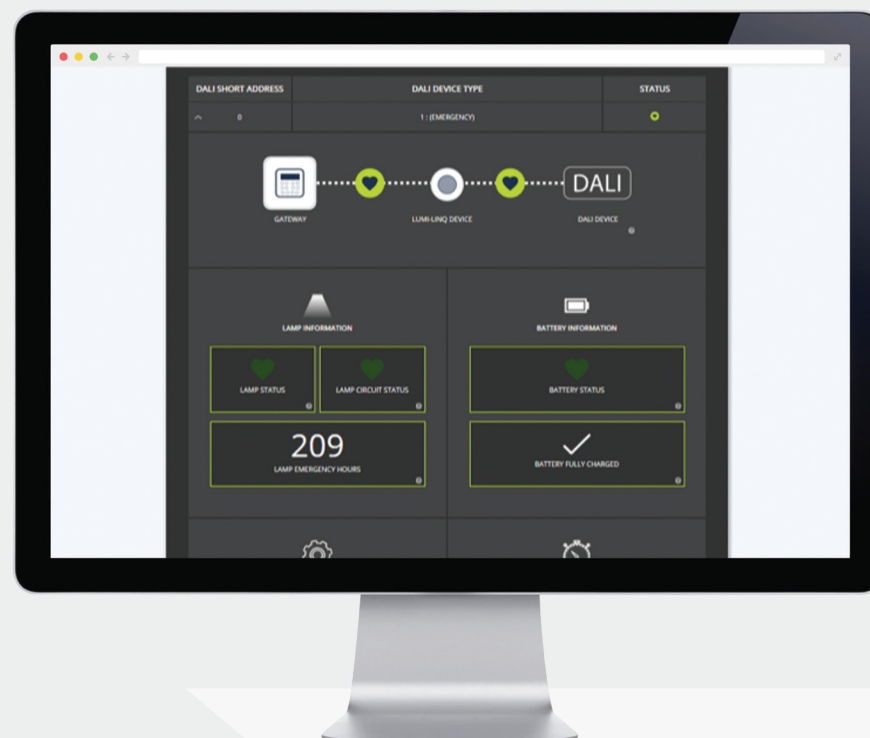
The clear graphical user interface provides an overview of the whole site, through to the performance and operation of an individual luminaire.



- 1 Lumi-LinQ luminaires wirelessly communicate with each other and the Gateway through the mesh network.
- 2 The Gateway transmits energy performance and status reports for both standard and emergency luminaires to the Lumi-LinQ web server.
- 3 Users employ their chosen device to view system information.



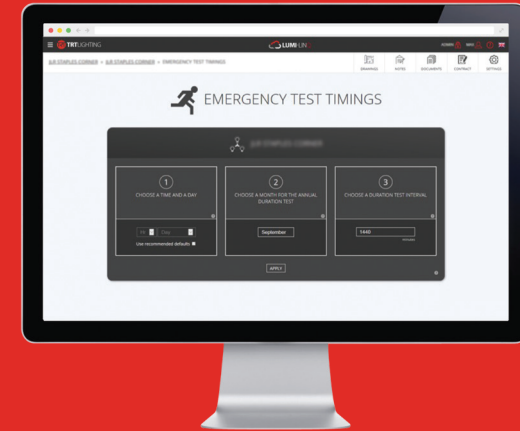
Lumi-LinQ
Status Reporting



Lumi-LinQ Emergency
Status Reporting

Lum-LinQ Emergency

Lumi-LinQ incorporates an emergency lighting system with centralised testing and reporting options. By automating the testing process, the time taken for inspection is eliminated significantly reducing costs.



Platform 1

At Platform 1 all Lumi-LinQ emergency luminaires are stand-alone and each luminaire will self-test to the schedule specified in BS EN 50172:2004. The operational status of each luminaire is displayed by the status LED and operational status information can be retrieved using the Lumi-LinQ Programmer. Manual tests can also be initiated at each luminaire using the Lumi-LinQ Programmer. The user, legally, will need to inspect each luminaire at prescribed intervals to monitor test status and annually log the results.

Platform 2

At Platform 2, all luminaires are monitored by a central Gateway. The Lumi-LinQ Gateway provides daily uploads of the system status to the website. Secure access allows the user to view full luminaire status monitoring, down to individual control gear items within a luminaire. The website provides an easy to read visual reference displaying the following for Lumi-LinQ Emergency Luminaires:

- LED status in emergency operation
- Number of hours that a LED has operated from the battery
- Integral battery is connected and charging
- Result of the last monthly function test and the date of the next scheduled test
- Result of the last annual duration test and the date of the next scheduled test
- Emergency lighting testing schedules are configured via the website

Find out more about Lumi-LinQ Emergency at www.trtlighting.co.uk/product/lumi-linq

Built to last Designed to stand the test of time

Orbix 360 uses the highest quality components to ensure that along with excellent performance the product offers a long and reliable service life, an important consideration in residential applications where a failed luminaire can increase the risk of a trip or fall.

In a typical residential application where the lighting is switched on for 12 hours a day, the operational life of Orbix 360 would be in excess of 20 years.

Operating hours per day **vs** LED lifetime *

24
HOURS

10 Years +

12
HOURS

20 Years +

6
HOURS

40 Years +

* Lifetimes may vary depending on the operating conditions

Engineered for fast installation

4 simple steps

1



Fix body to mounting surface and install mains connector.

2



Connect mains connector to mains socket on the LED module.

3



Fix LED module using four captive screws.

4



Twist and lock bezel into place and secure with the locking screw.



Conduit made simple

Pre-marked drill points

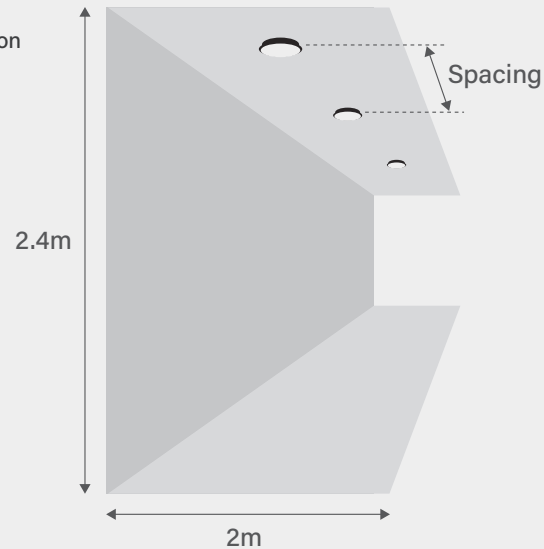
Orbix 360 installations may require conduit to offer additional safety and protection to cabling. The Orbix 360 die-cast aluminium body is strong and long lasting and supplied with pre-marked drill points on the top, bottom and sides to simplify installation.

Performance Guide

Photometric Performance - 19W plain version - Internal ceiling application

SPACING	AVERAGE ILLUMINANCE	UNIFORMITY (min/av)
2.4m mounting height		
2m ctrs	157 lux	0.904
2.5m ctrs	126 lux	0.892
3m ctrs	104 lux	0.864
3.5m ctrs	90 lux	0.824
4m ctrs	79 lux	0.773
4.5m ctrs	71 lux	0.71
5m ctrs	63 lux	0.66
5.5m ctrs	55 lux	0.633
6m ctrs	55 lux	0.522

FIGURES ARE BASED ON INITIAL LUMENS



e.g. At 2.4m mounting height and 5m centres:
63 lux average horizontal illuminance at ground level

Photometric Performance - 10W eyelid version - External wall application

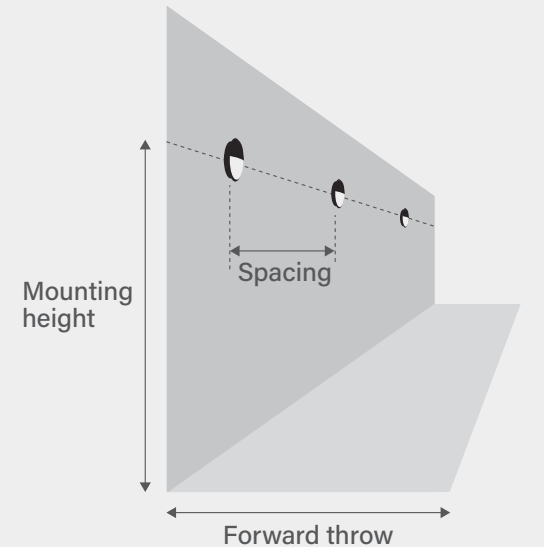
SPACING	AVERAGE ILLUMINANCE	UNIFORMITY (min/av)
2m mounting height - 2m forward throw		
5m ctrs	19 lux	0.227
6m ctrs	16 lux	0.177
7m ctrs	14 lux	0.136
8m ctrs	12 lux	0.107

3m mounting height - 3m forward throw		
5m ctrs	18 lux	0.232
6m ctrs	15 lux	0.191
7m ctrs	13 lux	0.152
8m ctrs	11 lux	0.120

4m mounting height - 3m forward throw		
5m ctrs	16 lux	0.269
6m ctrs	13 lux	0.208
7m ctrs	12 lux	0.161
8m ctrs	10 lux	0.127

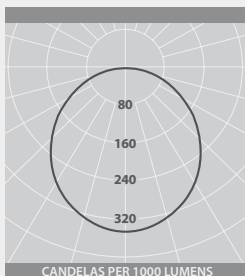
5m mounting height - 3m forward throw		
5m ctrs	14 lux	0.286
6m ctrs	12 lux	0.242
7m ctrs	10 lux	0.186
6m ctrs	9 lux	0.146

FIGURES ARE BASED ON INITIAL LUMENS



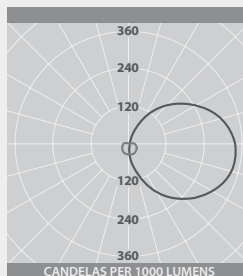
e.g. At 3m mounting height and 6m centres:
15 lux average horizontal illuminance at ground level

PHOTOMETRIC GUIDE



PLAIN

Luminaire Lumen Output:
19W = 2245 lm



EYELID

Luminaire Lumen Output:
10W = 1135 lm

Range

IP66

IK11

UKCA

CE

LED

SPECIFICATION

- Strong high-pressure die-cast LM6 aluminium body and bezel
- Polyester powder coat finish in dark grey or a bespoke colour
- High efficiency fire-retardant satin polycarbonate diffuser
- Plain or eyelid version options
- Bezel and cover secured using tamper-resistant pin Torx screws (requires T10 and T25 tool – see accessories table)
- Optional photocell control
- Bezel trim for semi-recessed mounting
- Complies with M.O.D. JSP482 Chapter 8 Document for ‘Category C’ areas
- Lumi-LinQ versions with sensor discretely hidden behind the cover
- Fitted with 4000K LEDs

DIMENSIONS

LED CHARACTERISTICS

CRI	80+
COLOUR TEMPERATURE	4000K
RATED LIFE (HOURS)	100K - L80/B10
PROTECTION	LUX GUARD
DRIVER EFFICIENCY	>70%
REPLACEABLE	YES
POWER FACTOR	>0.9
LL/CW	118.2

ACCESSORIES

DESCRIPTION	CAT. NO.
M20 sealing washer kit	83KIT73256
Tamper-resistant pin Torx bit set (T25 and T10)	83KIT73272
Bezel for semi-recessed mounting - graphite	81CVR73273G2

WEIGHTS

VERSION	APPROX. kg	LUMI-LINQ
Plain	2.2	Add 0.3kg to weight listed.
Eyelid	2.4	



TRT Lighting Ltd (Thorlux Road and Tunnel Lighting) is one of ten companies within the FW Thorpe Plc group, and evolved from parent company Thorlux Lighting. Building on more than 85 years of experience, TRT designs, manufactures and supplies energy efficient, environmentally friendly performance lighting products for the road, tunnel and exterior lighting markets

LED lighting solutions bring another dimension to how roads, tunnels and general exterior spaces are illuminated. At TRT, our ability to understand and adapt to our customers' needs ensures that we develop products that are technically and mechanically sound and provide energy efficient, long lasting lighting solutions with excellent returns on investment.

As well as being subjected to our own in house rigorous testing facilities, all of our products are externally third party tested and verified against all relevant global and regional standards and requirements.

We are proud to manufacture our products in Britain.

TRT Lighting Ltd
Heming Point
Claybrook Drive
Washford Ind Est
Redditch
Worcestershire
B98 0FH
England

T +44 (0)1527 521 162
E info@trtlighting.co.uk
W www.trtlighting.co.uk

The information given in this catalogue is typical and must not be interpreted as a guarantee of individual product performance and/or characteristics. We reserve the right to alter specifications and designs without prior notice.

