

OPTIO MICRO

Designed specifically for the residential street lighting market



Discover more.

INNOVATE | INTEGRATE | ILLUMINATE

Discover more.

TRT are proud to introduce the latest innovation in our product range.

Designed with the real world in mind, the new Optio Micro lantern offers workable on-site solutions. Our designers were led by how this lantern and its features could be used in situ and what benefits it could bring.

Optio Micro has been created to provide for multiple stakeholders with easy fit shields to address light spill, and multiple CCTs to suit the requirements of ecologists and ecologically sensitive areas.

Discover more in each of our sections



What is Optio Micro?



Product Features



Technical Specifications



Ordering





What is Optio Micro?

The latest in our range of Residential Street Lighting LED lanterns; providing a long-term installation with **tool free access** and **easy gear and light engine replacement** combined with **ultimate upgradability**.

Designed specifically for residential street lighting applications, the Optio Micro LED lantern has been developed by TRT to not only embrace the latest technologies available but to also take into consideration the feedback and input from our valued and knowledgeable customers.

With unrivalled levels of flexibility, adaptability and choice, the Optio Micro provides effective and efficient solutions for installation today, whilst also considering the circular economy of the future.

Product features >

What is Optio Micro?



Product Features



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Product Features.

Light Shield fixing points
(front & sides)

**Reliable and durable
closed cell silicone gaskets**

Light Shield fixing points
(back & sides)

Product Features

Technical Specifications

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Removable LED module

- Highly transparent toughened glass
- Exposed lens option available
- Built-in pressure equalization (glass only)

**Coloured optical
distribution identifier**

Levelling Indicator
on top

**High quality
LM6 aluminium
alloy body**

Polyester powder coat achieving 1000
hour salt spray resistance

**Universal mounting utilising
MountSet (patent pending)**



Product Features.

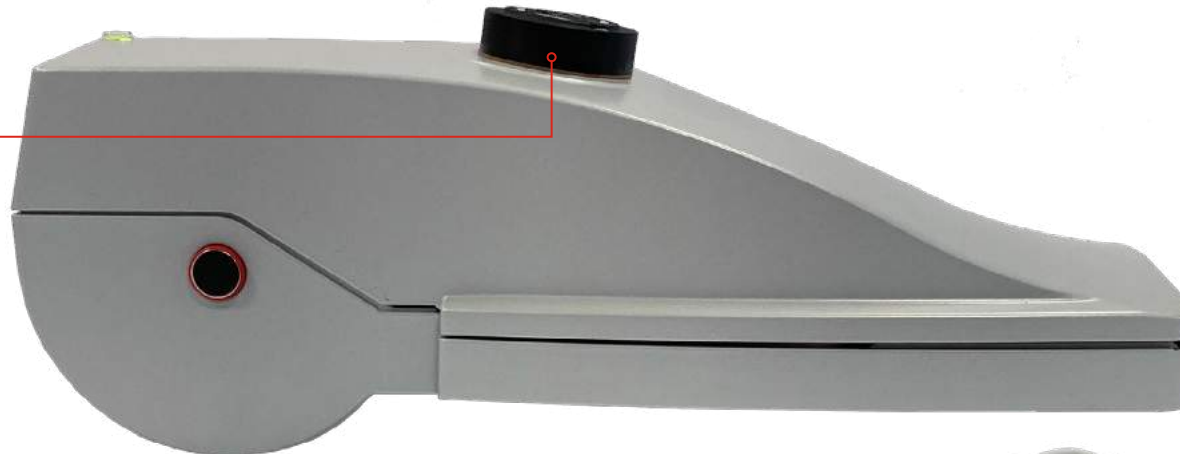
Staying Connected

[Upgradeable Light Engine](#) > [Interchangeable LED Modules](#) > [MountSet](#) > [PowerSet](#) > [Summary & Benefits](#) >

Easy upgrading of both gear & LEDs and options for the onsite power adjustment of gear and LED output.

CMS Ready

simply connect with a
7 pin NEMA socket



Future Proof with the latest Zhaga
Book 18 4 pin socket (top and bottom)



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Product Features.

Upgradeable Light Engine

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With minimal future costs, the lantern is designed so that upgrades can be achieved quickly and cost effectively.



1.
Release concealed latch with a
flat bladed screw driver



2.
Lever open with finger

What is Optio Micro?



Product Features



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Product Features.

Interchangeable LED Modules

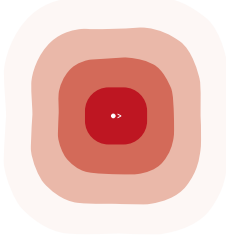
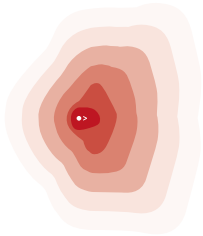
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The Optio Micro LED module is available with flat glass or exposed lenses, each with 5 different optical distributions and a choice of 70CRI 3000K or 4000K. Easily identifiable using coloured identifiers

Optio Micro Photometry Footprints

GA2 Yellow

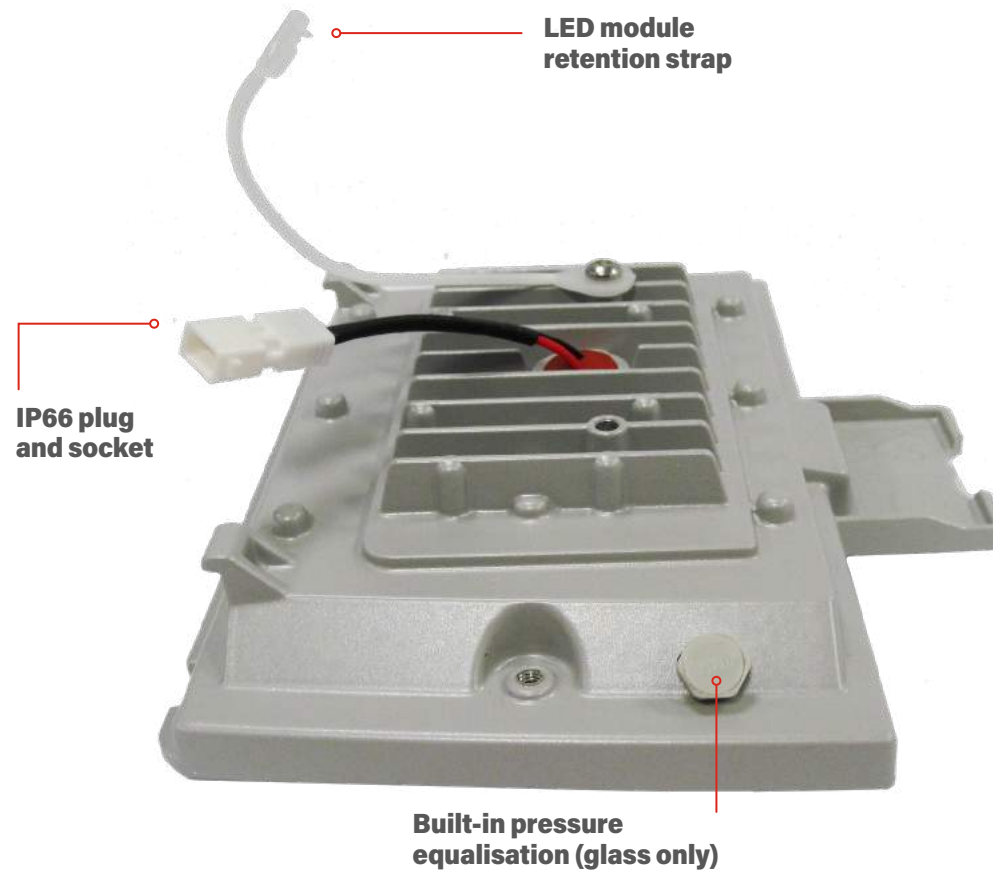
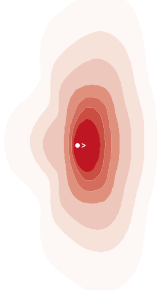
GA3 Purple



GR2 Red

GR5 Blue

GR7 Green



What is Optio Micro?



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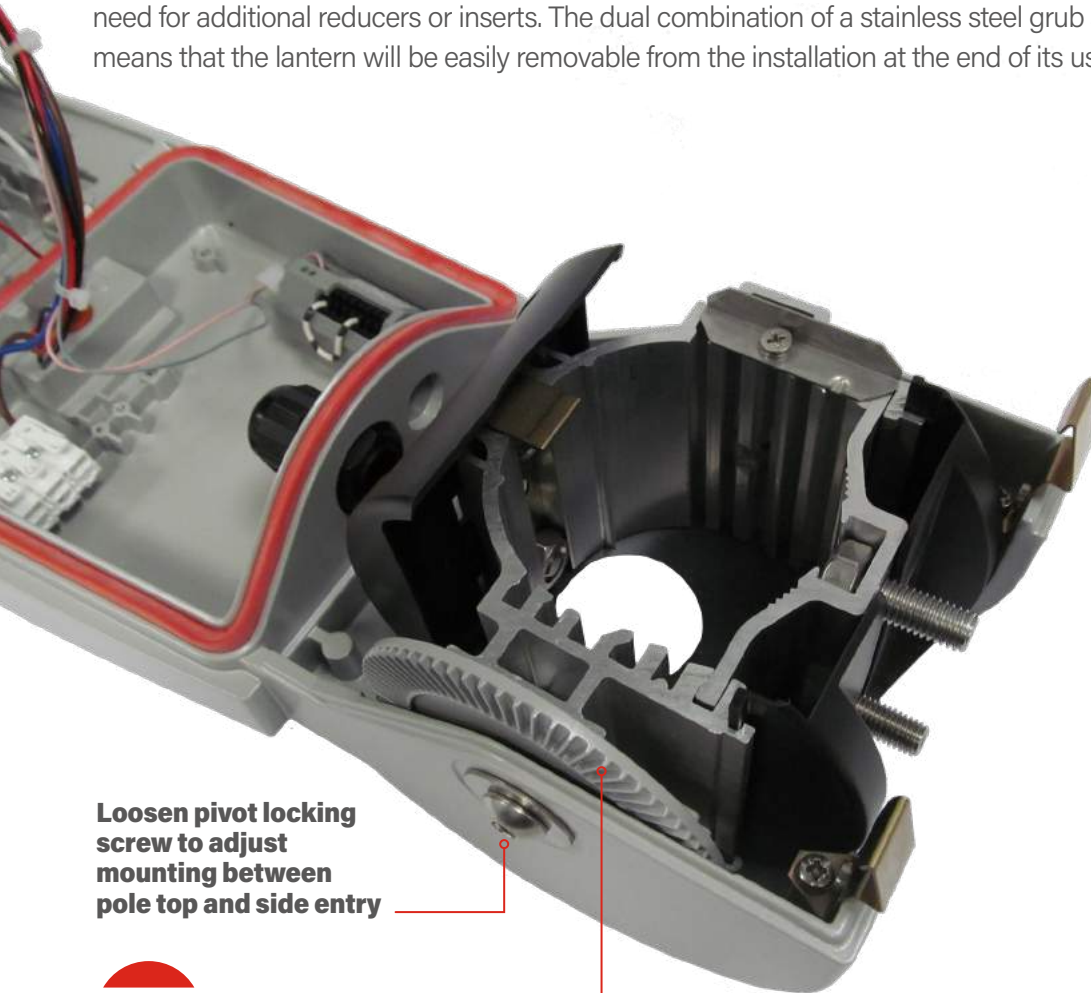


Product Features.

MountSet (Patent Pending)

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Enables the Optio Micro to be mounted onto a wide array of column and bracket sizes without the need for additional reducers or inserts. The dual combination of a stainless steel grub screw and nut means that the lantern will be easily removable from the installation at the end of its useful life.



Loosen pivot locking screw to adjust mounting between pole top and side entry

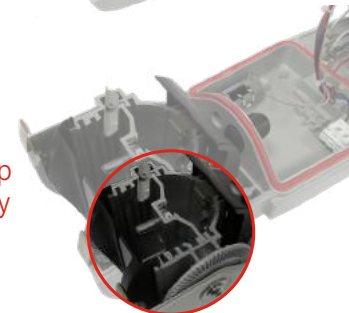
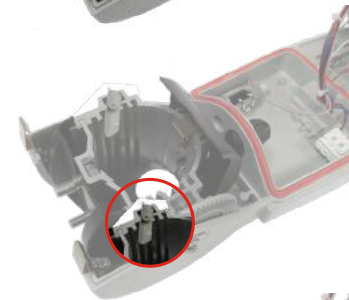
5° increments for easy elevation and declination

Factory Set 76mm

STEP 1
Open locking plate

STEP 2
Move column clamp and rotate assembly to desired position

STEP 3
Close locking plate



What is Optio Micro?



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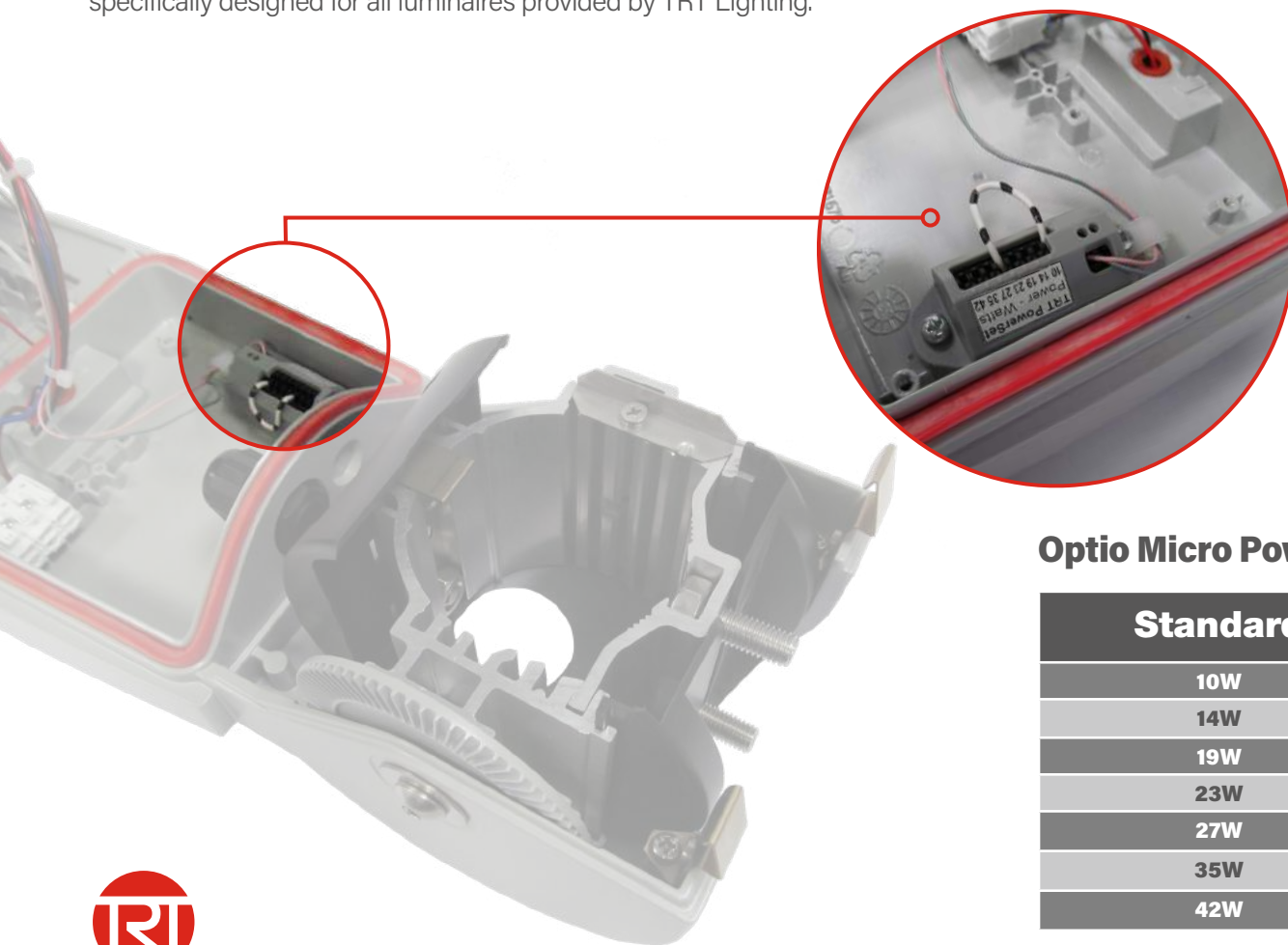


Product Features.

PowerSet

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An innovative power selection module that provides the End User with the flexibility to easily adjust power and lumen output whilst the luminaire is installed or in the depot. The PowerSet feature allows for reduced stock holding and each module is specifically designed for all luminaires provided by TRT Lighting.



Optio Micro PowerSet Settings

Standard	CLO
10W	10W
14W	13W
19W	18W
23W	22W
27W	26W
35W	33W
42W	40W



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Product Features.

Summary & Benefits

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Circular Economy Design – designed to be maintained - all key components can be easily replaced with maximum component re-use - the “most circular economy ready” lantern we are aware of.

Future ‘ready’ – with the option of Zhaga Book 18 (SR) sockets, top and bottom. Simple upgrade options with minimal future costs - the lantern is designed so that upgrades can be achieved quickly and cost effectively (gear and LEDs) – with the addition of options for onsite power adjustment of gear and LED output.

Adjustability – allowing installations to be optimised and operatives to carry out varied lantern replacements if needed with lanterns they carry – especially with the variety of mounting options available.

Compact & lightweight – discrete and unobtrusive to the ‘street-scape’ - smaller in size to suit existing column and bracket infrastructure.

Clarity of communication – which lenses are in use can easily be checked by colour coding; this relates to the names of photometric files for ease of relating designs to installations.

Recyclable – the luminaires castings are manufactured from LM6 aluminium and 1000 hours salt spray compliant. The Optio Micro has also been extensively mechanically and electrically tested to ensure that it is built to last.

Minimised stock holding – due to the lantern’s flexibility stock holding becomes more agile and practical which reduces the administration and deliveries required by ordering in per design.



What is Optio Micro?



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Technical Specifications.

[Mechanical Characteristics](#) > [Shields options](#) > [Dimensions](#) >

Electrical Characteristics

System Power	10 - 42W
LED CCT	3000K or 4000K
LED CRI	>70
Lumen Output	Up to 5553lm
Lumen Maintenance	Projected L90 after 100,000 hours
Drive Current	150-835mA
Driver Output	Constant Current Output with AM Dimming
Power Factor (Full Load/Half Load)	0.95/0.90
Operational Voltage	220-240VACrms
Operating Frequency	50/60Hz
Inrush Current (Apk/50%-μS)	53A/200μS
Running Current	0.208A max
Surge Protection (COM/DIF)	8kV/6kV
Additional Surge Protection (on request)	10kV/10kA
Lighting Controls Options	NEMA 3 or 7 PIN NEMA Socket, Miniature Photocell and Zhaga Book 18 (SR) Socket (Top and Bottom)
Dimming Protocols	DALI

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Technical Specifications.

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Mechanical Characteristics

Housing Material	High pressure die cast LM6 aluminium
Housing Finish	Chromate free pre-treatment, Polyester powder coat, Light Grey (RAL9006), Black (RAL9005), Dark Grey (RAL7022)
Cover Material	Toughened Flat Safety Glass
Lens Material	PMMA
Ingress Protection Rating	IP66
Weight	5.5kg
Wind Area	0.05m ²
Impact Resistance Rating	IK08
Mounting Methods	Post Top 60mm or 76mm/ Side Entry 34mm, 42mm, 60mm or 76mm
Mounting Inclination	-10°, -5°, 0°, 5°, 10°
Photometric Centre	312mm (to center of PCB)

Shields Options

Universal Front/Rear	83BAF72019
Universal Side	83BAF72020



What is Optio Micro?



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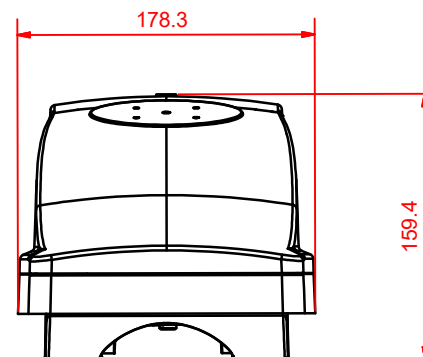
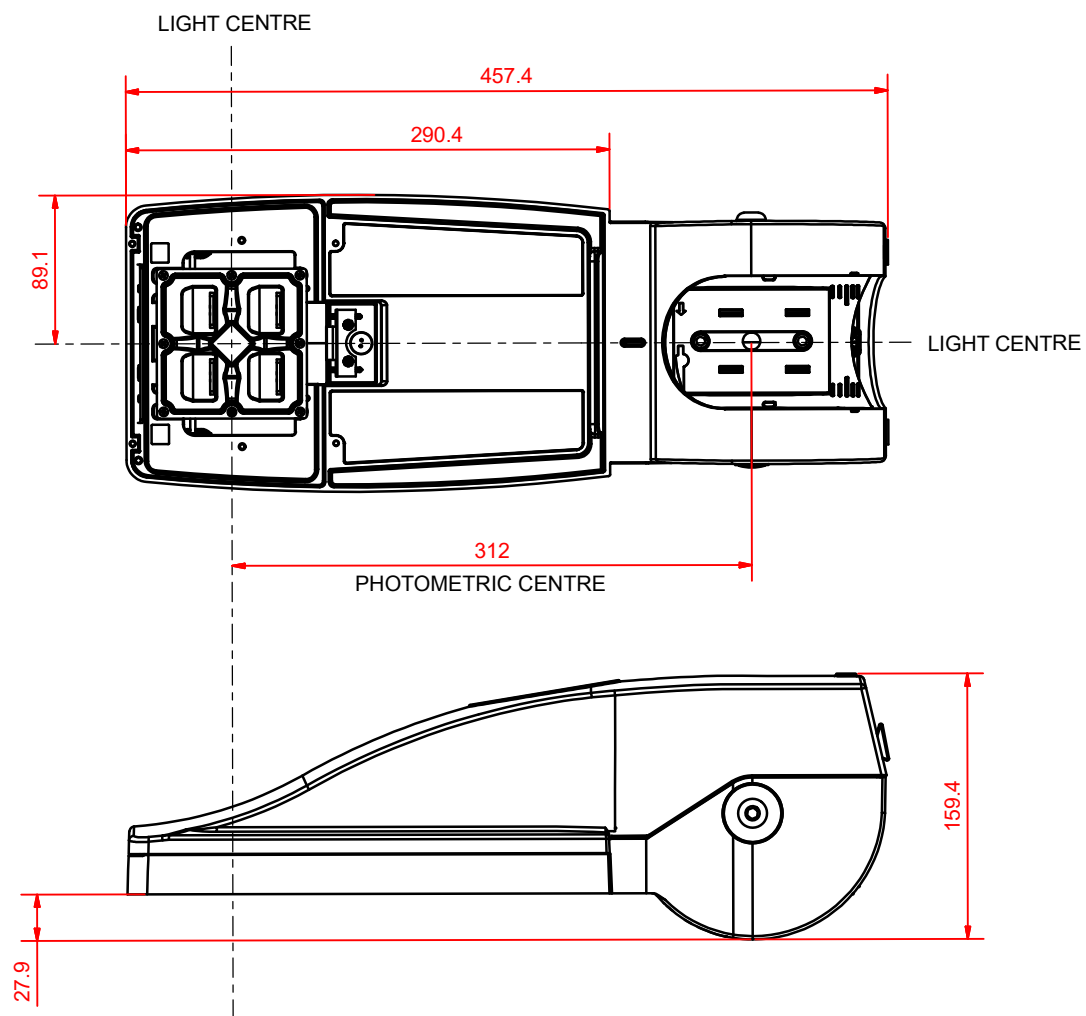
Ordering



Technical Specifications.

Dimensions

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What is Optio Micro?

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Ordering.

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Step 1: Select Product Variant	Step2: Select Power Level	Step 3: Select Distribution	Step 4: Select CCT	Step 5: Select Paint Colour	Step6: Select Cover Type	Step 7: Select Pivot	Step 8: Select Accessories
OPM4 (Standard Optio Micro 4 LED)	10 14	GR2 General Road 2 (Red) GR5 General Road 5 (Blue) GR7 General Road 7 (Green) GA2 General Area 2 (Yellow) GA3 General Area 3 (Purple)	3K (3000K) 4K (4000K)	LG (Light Grey) DG (Dark Grey) B (Black)	G (Flat Glass) E (Exposed Lens)	UNI (Universal)	MC10 (35/18 Minicell) NEM3 (3 Pin NEMA Socket) NEM7 (7 Pin NEMA Socket) XMARC1.5 (Xm of Arctic 1.5mm ² Cable) XMARC2.5 (Xm of Arctic 2.5mm ² Cable) NEM3C (3 Pin NEMA Socket with 35/18 NEMA Photocell) NEM7C (7 Pin NEMA Socket with 35/18 NEMA Photocell) ZB18T (SR Socket on top with sealing cap) ZB18B (SR Socket on bottom with sealing cap) LS (Left Shield) RS (Right Shield) FS (Front Shield) BS (Back Shield)
OPM4P (Optio Micro 4 LED with PowerSet)	19 23 27 35 42						
OPM4C (Optio Micro 4 LED with Constant Light Output (CLO))	10 13						
OPM4PC (Optio Micro 4 LED with PowerSet & Constant Light Output (CLO))	18 22 26 33 40						

Example

Product	Power (W)	Distribution	LED Temp	Paint Colour	Cover Type	Pivot	Accessories
OPM4	10	GR2	4K	LG	G	UNI	MC10, 7MARC1.5



Working with TRT


TRT Lighting evolved from Thorlux Lighting in 2012 as a specialist division of the FW Thorpe Group with a core focus on developing innovative lighting products for roads and tunnels using only LED technology.

Culture of transparency – we provide clear, honest information designed to be useful so clients have a clear understanding of what can be expected from the product and the company.

Sustainability – we are a CO₂ neutral supplier with strong roots in British manufacturing dating back to 1936.

Locally supported – we manufacture our luminaires in Redditch, Worcestershire and are proud members of the official Made in Britain campaign.

For more information

 +44 (0) 1527 521 162

www.trtlighting.co.uk

eBOOK.
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