

MULTI-PURPOSE WHITE-LIGHT LED

# rayLUX PRODUCTS

AT A GLANCE

rayTEC<sup>®</sup>

WHITE-LIGHT DIVISION

[www.raytecctv.com](http://www.raytecctv.com)

# WHITE-LIGHT RANGE AT A GLANCE

## DIRECTIONAL



300 SERIES



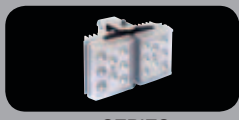
200 SERIES



150 SERIES



100 SERIES



50 SERIES



25 SERIES

## URBAN



UBA48 ADAPTIVE SERIES



UBA32 ADAPTIVE SERIES



UBF24 FIXED SERIES

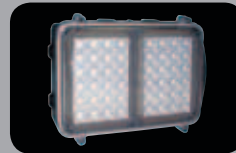


UBF16 FIXED SERIES

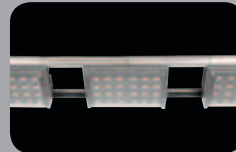


UBF8 FIXED SERIES

## SPECIALIST



WARRIOR



LINEAR

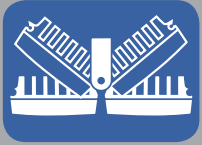


MODULAR



PoE

# WHY RAYLUX LED?



## ADAPTIVE ILLUMINATION™

Adaptive Illumination™ allows the installer to adjust the angle of the light projection from a single unit to fit the specific demands of any installation. Adjustment is quick and convenient and any angle up to 180° (depending on model) is easily selectable. Adaptive Illumination is patent pending technology available exclusively from Raytec.



## ACTIVE LED LIFE CONTROL

All Raytec illuminators employ cutting edge materials science techniques to improve thermal efficiency throughout the unit and ensure consistency of LED power. The New Advanced Cool Running™ system draws heat away from the LEDs, shielding the LED from abnormal stress, and allows Raytec LED products to deliver outstanding performance and consistency of illumination throughout the operational life of the illuminator.



## ENERGY SAVING

All Raytec illuminators use high efficiency LED's and advanced control methods to deliver extremely low electrical consumption. Raytec illuminators are energy saving and deliver huge savings in running costs compared to traditional bulb illuminators.



## SMT LED TECHNOLOGY

The future of lighting is surface mount LED technology. Compared to standard through hole LED's, surface mount LED's are a more robust solution increasing reliability and improving product life. They are also far more efficient at the dissipation of heat allowing the LED's to run at higher power and achieve significantly improved performance.

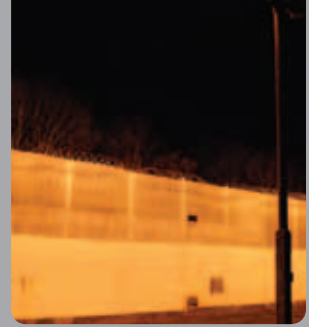


## VANDAL RESISTANT

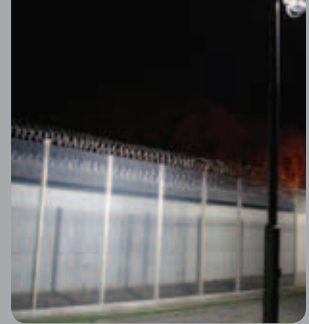
The polycarbonate lens design protects against severe blows from crowbars, baseball bats and can even withstand successive shots from air pistols and rifles (range dependant).



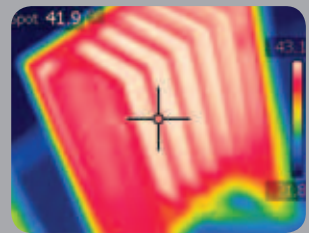
Source: Sodium  
Consumption: 526W



Source: RAYLUX LED  
Consumption: 100W



OLD TECHNOLOGY  
VS NEW TECHNOLOGY



COOL RUNNING  
THERMAL  
MANAGEMENT

Model shown:  
Directional - RAYLUX 200



DIRECTIONAL ILLUMINATION IN ACTION:



# DIRECTIONAL ILLUMINATION

High Performance White-Light directional LED illuminators provide class leading performance, long life, energy efficiency and zero maintenance. They incorporate the very latest surface mount LED's to deliver excellent optical output and outstanding reliability.

The unique Adaptive Illumination™ concept provides the flexibility to direct the angle of illumination on site to suit the required lighting specification from 10 to 180 degrees.

Each unit is fitted with Active LED Life Control to carefully control LED output, delivering consistent illumination power and a projected working life of 10 years.

RAYLUX Directional illuminators are supplied with a power supply. Control features on the power supply include adjustable power output, photocell and telemetry control.

## APPLICATIONS



ADAPTIVE  
ILLUMINATION™



QUICK START  
LIGHTING ON DEMAND

## BEAM PATTERNS AVAILABLE\*:

10-20 degree

30-60 degree

50-100 degree

120-180 degree

\*Other angles available

Model shown:  
Urban - Fixed Head UBF Series



Adaptive  
Illumination™  
versions  
available

# URBAN LIGHTING RANGE

With all the benefits of the directional series, the RAYLUX Urban White-Light LED series allows installers to deliver multipurpose lighting for commercial applications such as footpaths, car parks and campus lighting as well as lighting for surveillance cameras.

The RAYLUX Urban series delivers crystal clear, energy saving White-Light, providing zero-maintenance and a pleasing aesthetic look.

The RAYLUX Urban series is a full product family and is the perfect energy saving choice for applications such as campus sites, hospital grounds or any application where security and safety really matters. RAYLUX Urban can also provide lighting for site camera systems to secure the surrounding area.



## ADAPTIVE ILLUMINATION™

Adaptive Illumination™ allows you to alter the horizontal light distribution on-site to suit your lighting requirement.



ADAPTIVE  
ILLUMINATION™



MULTI HEAD  
VERSION AVAILABLE

## BEAM PATTERNS AVAILABLE:\*

### UBF Fixed Series:

50 x 50  
120 x 120  
80 x 120  
120 x 80

### UBA Adaptive Series:

50+ x 50  
120+ x 120  
80+ x 120  
120+ x 80

## APPLICATIONS



\*Other angles available

**Model shown:  
RAYLUX WARRIOR II**



## **WARRIOR:**

ATEX and IECEx approved for all Zone 1 and Zone 2 hazardous applications.



# SPECIALIST LIGHTING

## CORE TECHNOLOGY FOCUS

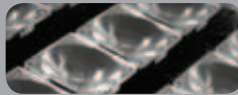
### ELECTRONICS



### THERMAL



### OPTICS



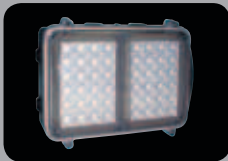
### SOFTWARE



With over 50,000 LED illuminators installed in 50 different countries, Raytec's team of engineers and lighting designers can deliver a range of bespoke solutions and products to deliver powerful, flexible and reliable lighting for many specialist requirements.

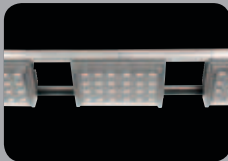
## SPECIALIST

### WARRIOR



- Explosion Protected for Hazardous Areas
- ATEX & IECEx Rated
- Zone 1 and Zone 2

### LINEAR



- High Power Illumination
- Linear - Perfect for Tunnels
- Flexible Design

### MODULAR

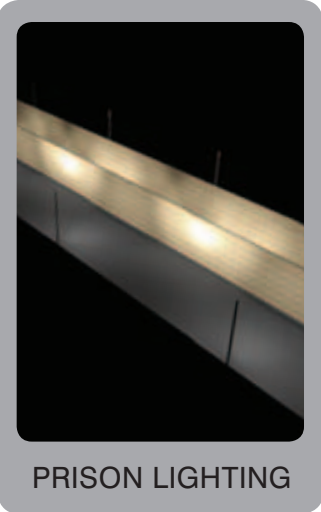


- High Power Directional Illumination
- Modular - Perfect for Architecture
- Up to 31,200 lumen

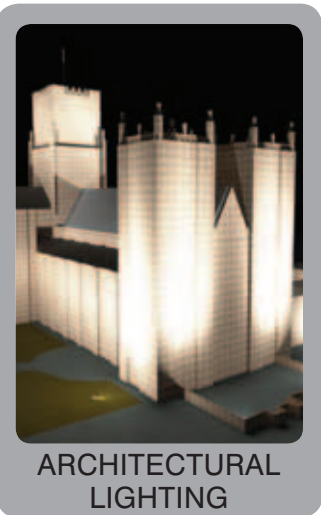
### PoE



- Operates from PoE
- Externally Rated
- Internal PSU/Photocell

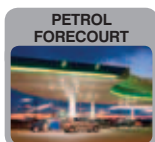


PRISON LIGHTING



ARCHITECTURAL LIGHTING

## APPLICATIONS



**FREE**  
SPECIALIST  
DESIGN SERVICE

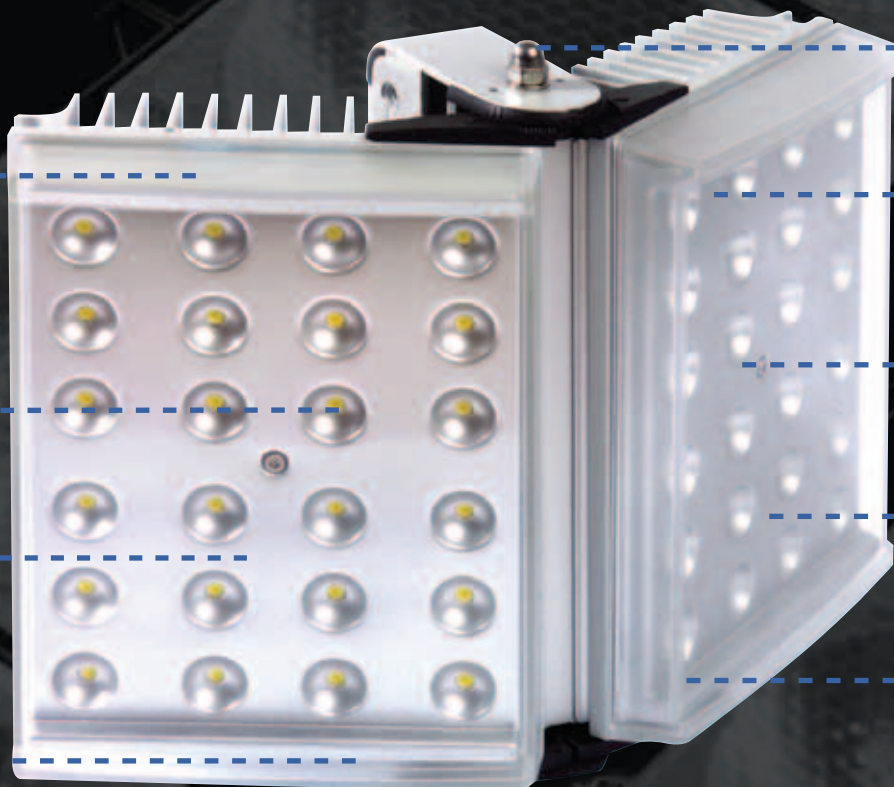
**Model shown:  
Directional - RAYLUX 200**

10°, 30°, 50°,  
120°, 80°/120°  
or 120°/80°  
Variations

Advanced  
PLATINUM  
SMT LED  
Technology

Vandal  
Resistant

Quick start  
on activation



Adaptive  
Illumination™

Ultra Low  
Running  
Costs & Zero  
Maintenance

Active LED  
Life Control

Even Output  
Illumination

Low Voltage  
Options  
Available



### WHY ADAPTIVE ILLUMINATION™?

Adaptive Illumination™ allows the installer to adjust the angle of the light projection from a single unit to fit the specific demands of any installation. Adjustment is quick and convenient and any angle up to 180° (depending on model) is easily selectable. Adaptive Illumination is patent pending technology available exclusively from Raytec.

# TECHNICAL SPECIFICATIONS

## RAYLUX DIRECTIONAL SERIES

Model	Consumption	Lumen Output*	Colour Temp**	CRI**	Temp	Colour	Angles	Bracket***	IP	Weight
RL300	<120W	7000	6500K	74-80+	-50°C to +50°C	Silver other RAL options available	Various	U-Bracket	IP66	6kg
RL200	<80W	4700	6500K	74-80+						4kg
RL150	<75W	4600	6500K	74-80+						3.5kg
RL100	<50W	3100	6500K	74-80+						3kg
RL50	<25W	1600	6500K	74-80+						1.7kg
RL25	<15W	800	6500K	74-80+						1kg

## RAYLUX URBAN SERIES

Model	Consumption	Lumen Output*	Colour Temp**	CRI**	Temp	Colour	Angles	Bracket***	IP	Weight
UBA48	<80W	4700	6500K	74-80+	-50°C to +50°C	Silver other RAL options available	Various	Side Entry	IP66	5kg
UBA32	<50W	3100	6500K	74-80+						4kg
UBF24	<40W	2350	6500K	74-80+						3kg
UBF16	<25W	1600	6500K	74-80+						2.5kg
UBF8	<15W	800	6500K	74-80+						1.5kg

**Operating Voltage:** All Raytec units are supplied complete with a dedicated (Universal 100-240V AC auto sensing) current controlled PSU c/w adjustable photocell, power and telemetry input.

**NOTE:** Full independent photometry available on request.

\* Lumen output depends upon final lens selection. Lumen output shown based on average between 10 and 50 degree angles.

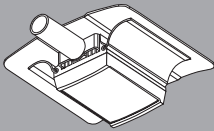
\*\* Cool White as standard - Warm White options available. CRI published reflects range between Cool and Warm White.

\*\*\* Other options available including wall and post top with a range of adapters.

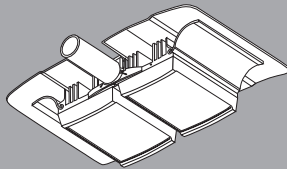
# TECHNICAL – BRACKETS

## RAYLUX URBAN – BRACKET SOLUTIONS

All Raylux Urban products are supplied with an integrated cable managed arm. This can be used in conjunction with a range of mounting accessories or can be mounted directly to existing columns (adapters may be required).



UBF Range

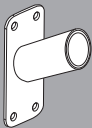


UBA Version

- Tube outreach 125mm
- o/d (outside diameter) 33.7
- i/d (inside diameter) 28

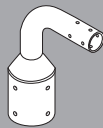
## BRACKET OPTIONS (URBAN SERIES)

### WALL BRACKET



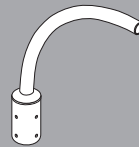
- Finished in Silver
- o/d (outside diameter) 42.4
- i/d (inside diameter) 34.4

### TOP STUB BRACKET



- Arm o/d 42.4, i/d 39.4
- Bracket Cup o/d 88.9, i/d 84.9
- Fits 76 Spigot
- Twin Version Available

### HOCKEY BRACKET



- Arm o/d 42.4, i/d 39.4
- Bracket Cup o/d 88.9/i/d 84.9
- Fits 76 Spigot
- Twin Version Available

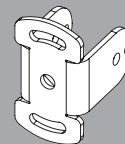
### ADAPTER KIT



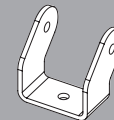
- Example:
- o/d (outside diameter) 42.4
  - i/d (inside diameter) 34.4
  - Please contact for full range

## RAYLUX DIRECTIONAL SERIES

All Raylux 'Adaptive illumination' directional series are supplied as standard with an AI Circular bracket. This provides a large degree of flexibility of mounting options. This can be attached directly to a wall, ceiling and a range of bracket accessories including Pan and Tilt brackets (please contact for full listing)



AI Circular bracket  
(RL300, RL200, RL150,  
RL100 & RL50)



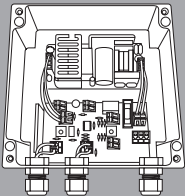
RL 25 series U-Bracket.

# TECHNICAL – PSU

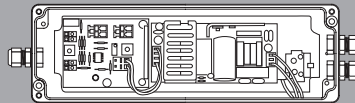
All Raylux products are provided complete with a dedicated current controlled PSU (Power Supply Unit), delivering outstanding performance and consistency of illumination throughout the illuminators life.\*

## RAYLUX URBAN SERIES

The Urban series has a slim line PSU designed to fit within most general lighting column bases (exc. UBA48).\*\*



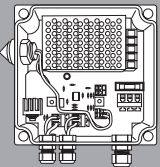
UBA48  
160mm x 160mm x 90mm



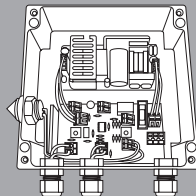
UBA32, UBF24, UBF16, UBF8  
(suitable for most column bases)  
300mm x 80mm x 55mm

## RAYLUX DIRECTIONAL SERIES

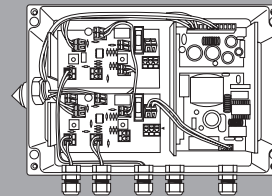
The Raylux directional series PSU's are designed to be mounted externally on a column, wall or internally in a feeder pillar / suitable column base.



RL25 AND RL50 SERIES  
160mm x 120mm x 80mm



RL100 AND RL200 SERIES  
160mm x 160mm x 81mm



RL150 AND RL300 SERIES  
240mm x 160mm x 81mm

### PSU STANDARD FEATURES:

- Input: Universal 100-240V AC auto-sensing
- Output: Low Voltage (~14V Current Controlled)
- -50 to +50 C
- IP67
- Telemetry (Volt Free)
- Integrated Photocell (Adjustable)
- Power Adjustable

### OPTIONAL PRO PSU:

As above plus:

- 12V (1amp) DC Output
- Photocell Following Contact
- Allows Pro IQ and Pro Pulse modules to be fitted

### PRO PSU PLUG IN MODULES:

#### PRO IQ

- Remote Illumination Adjust (Dim and Boost)
- Energy Saving Setting
- Deterrent setting
- Timer options

#### PRO PULSE

- Synchronization with vision technologies
- Suitable for ANPR and Machine vision purposes

\* The PSU unit is designed to be positioned separately from the illuminator head, providing easy installation and access for adjustment and maintenance purposes.

\*\* For multiple head applications a wider column base or feeder pillar may be required. The photocell is positioned on the illuminator head.



# Q & A

## Q WHAT DO I NEED TO CONSIDER WHEN CREATING A LIGHTING SPECIFICATION?

- A
- What is the purpose of the light?
  - What kind of light is already around or installed?
  - How much light do I really need, and what are the long-term energy costs?

Contact Raytec for your free lighting specification document detailing key considerations and checklist items.

## Q HOW MUCH DOES IT COST TO RUN A RAYLUX PRODUCT?

- A Based on electrical consumption and maintenance costs the RL200 and UBA48 Adaptive Illumination™ system cost only £35 per year to operate. This compares to £242 for a traditional 300W mains operated halogen luminaire, and £96 for a White SON.

### *How much money, energy and CO<sub>2</sub> can I save?*

Eg) Switching 10 x 300W halogen luminaires to 10 x RL200/UBA48 units saves £2,070, 9,680 kWh of power and 5 tonnes of CO<sub>2</sub> per year. Switching 10 x 150W White SONs to 10 x RL200/UBA48 units saves £610, 3,080 kWh of power and 2 tonnes of CO<sub>2</sub> per year. \*

## Q DO RAYLUX PRODUCTS EMIT OBTRUSIVE LIGHT?

- A With all RAYLUX products you can direct the light precisely where it is required without wasting light or energy. The RAYLUX Urban range also has an environmental protection shield that effectively restricts upward light.

## Q CAN I USE YOUR PHOTOMETRIC DATA IN LIGHTING DESIGN PACKAGES?

- A Yes – you can request or download RAYLUX photometric files that are compatible with most proprietary lighting design packages including Relux, Dialux and Reality. However it is important to follow the guidelines when preparing a design to ensure that you gain the best advantage when using the Raytec Adaptive Illumination™ feature.

## Q CAN I RUN RAYTEC PRODUCTS DIRECTLY FROM MY OWN LOW VOLTAGE SOURCE?

- A Generally no. However, low voltage versions of the PSUs are available to order. Raytec also manufacture a full range of FUSION White-Light products which run directly from 12/24V AC/DC input. Using any other power source will invalidate the product warranty and jeopardise the performance of the product.

## Q CAN I ALTER THE POWER ON SCENE?

- A Yes. All Raytec PSU's have the ability to adjust the power via a simple adjustable potentiometer. This means that if you have too much power on scene you can easily adjust the setting to match the scene; remote adjustment available.

## Q CAN RAYLUX UNITS BE SWITCHED ON REMOTELY OR VIA A PIR?

- A Yes, via a simple telemetry connection in the PSU or if required via the VMS (Video Management System) or (Building Automation Software). Additional functionality is available from the PRO Series PSU including dimming, timer and deterrent functions.

## Q CAN THE RAYTEC TEAM HELP WITH LIGHTING DESIGN AND SPECIFICATION?

- A Yes. Raytec have a team of lighting designers that utilise several design software packages and are happy to work closely with you in designing and specifying the correct products for your project. Raytec also provide a free lighting survey and a comprehensive energy saving report.

\*Calculations based on 4400 hours use per year at 10p kw/hr and £40 labour/maintenance costs at per unit.

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innovation + illumination

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Raytec have a comprehensive range of specification and support tools including the Raytec Lighting Guide, the Cost Saving Calculator and a host of useful footage.