K-LiTE

WACO PRO

# INFRASTRUCTURE LIGHTING

## 60 - 300W in one Waco family

# WACO PRO

## Elegance . Functionally

Designed for Urban Environment, Waco Pro range offers optimised photometrical performance with a minimum total cost of ownership. It offers towns and cities the ideal tool to improve lighting levels, generate energy saving and reduce their ecological footprint.

Waco Pro comes in four sizes and offers flexible combinations of LED modules, a choice of currents and dimming options to further maximise energy savings and provide the most cost-effective solution.

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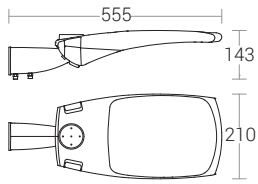
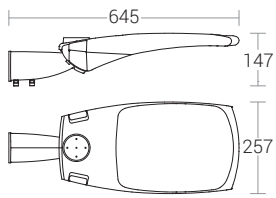
## WACO PRO MINI

Luminaire Power :
60W



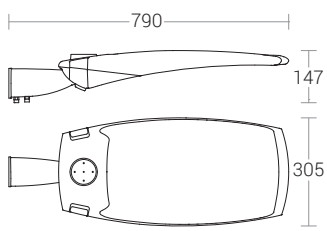
## WACO PRO MIDI

Luminaire Power :
120W



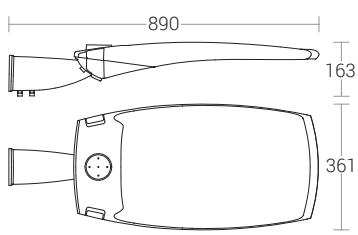
## WACO PRO MAXI

Luminaire Power :
180W



## WACO PRO MEGA

Luminaire Power :
240W



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# Waco Pro

Waco Pro encompasses design, visual comfort, performance, energy savings in a single street lighting system. Waco Pro comes in four different sizes, together with an adjustable inclination joint that guarantees maximum flexibility.

## Product Description

- Housing and front frame made of die-cast aluminium (ADC12) featuring high strength and anti corrosion.
- Separate optical & driver compartment for tool less maintenance.
- Clear toughened glass diffuser.
- High light transmittance optical lens for various applications.
- Suitable for mounting on to 60 mm dia pipe at lateral (side entry) and vertical (top mount) with adjustable angle -15° to +15°.
- Cable entries for through-wiring of mains supply cable.
- Integral constant current power supply
- CRI (Ra) : ≥70 (>80 On Request)
- Prewired with LED driver and suitable for operating on 240V, 50Hz single phase ac supply.
- Ordering guide : KL-4328-CCT (Colour Temperature)
- Available CCT : 3000K, 4000K, 5700K

BIS | CE | IP66 | IK08 | >60,000h L70 B10 | SDCM <5

## Product Benefits

- High luminous efficiency at reduced wattage.
- Functionally versatile, stable with sound engineering.
- Corrosion resistant and maintenance free.
- Quick installation and low assembly costs.
- Sustainable LED technology offers durability and optimal light output with low power consumption.

## Controls

- Dimmable options : Dali / 1-10V / PWM (On Request)
- Smart control management system (On Request)

## Area of Application

Roads and highways, Parking lots and large areas, Roundabouts, Pedestrian and bicycle paths, Pedestrian crossing.

## Available Finish

Pure polyester powder coated

- Graphite grey
- Anthracite grey
- Jet black

***** (On Request) depends upon the availability and validation of drivers and other accessories

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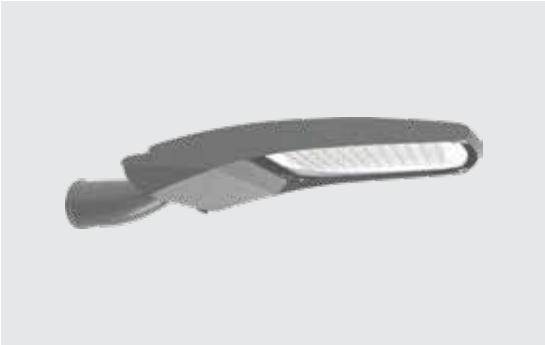
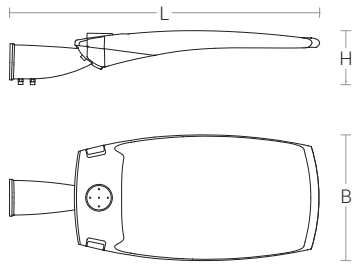
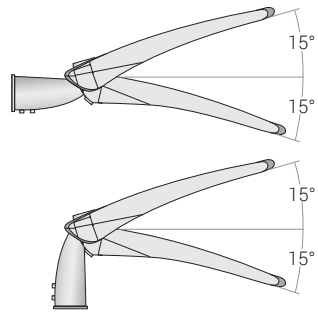
# Waco Pro





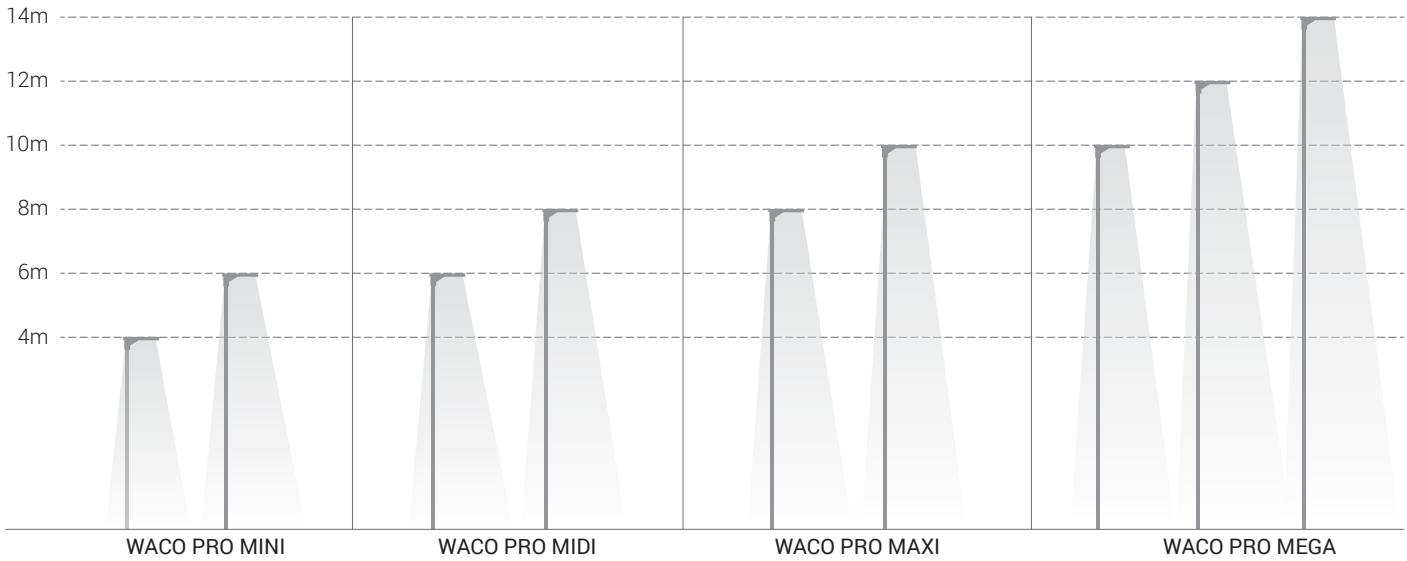

Bracket with a tilting system from -15° to +15°

| Product Code | KL-4328 | KL-4306 | KL-4307 | KL-4308 |
|---|---|---|---|---|
| Input Wattage | 60W | 120W | 180W | 240W |
| Wattage Range | 40W - 60W | 80W - 120W | 150W - 200W | 200W - 300W |
| Installation Pipe Diameter | Ø60mm | | | |
| Color Temperature | 3000K / 4000K / 5700K | | | |
| Input Voltage | AC90~305V | | | |
| Frequency Range | 50/60Hz | | | |
| Power Factor | PF>0.97 | | | |
| Surge Protection | 6KV (Additional Surge Protection on Request) | | | |
| Color rendering index | Ra≥70 (>80 On Request) | | | |
| Operating Temperature | -15°C~+50°C | | | |
| LED Lifetime | >60000hrs | | | |
| Protectin Grade | IP66 | | | |
| Protection level | IK08 | | | |
| Installation Height | 3-6m | 6-8m | 8-10m | 10-14m |
| Dimension (L x B x H) | 555 x 210 x 143 | 645 x 257 x 147 | 790 x 305 x 147 | 890 x 361 x 163 |

Note : • Luminous flux / Power consumption may vary by ±10%.
• Luminaire efficiency upto 150lm/W.

**Luminaire Use**

According to the Lamp Post Height



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# Waco Pro Mini

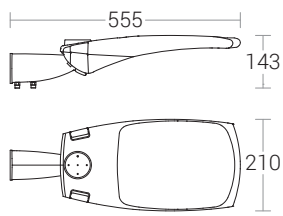
## Technical Specifications

### General

| | |
|---|---|
| ID | : 4328 |
| System Wattage | : 60W LED |
| Driver Integral | : Constant Current |
| Input Voltage | : 230-240Vac |
| Frequency | : 50-60 Hz |
| Operating Voltage | : 90-305Vac |
| Operating Temperature | : -15°C~+50°C |

### Physical

| | |
|---|---|
| Body | : Die-cast aluminium (ADC12) |
| Diffuser | : Clear toughened glass |
| Mounting | : Suitable for mounting Horizontal & Vertical on 60 mm OD pipe |
| Finish | : Graphite grey / Anthracite grey / Jet black |




### Light Source

| | |
|---|---|
| CRI (Ra) | : ≥70 (>80 On Request) |
| LED Colour Temperature | : 3000K / 4000K / 5700K |

### Driver

| | |
|---|---|
| Power Supply | : Integral |
| Power Factor | : >0.97 |
| THD | : <10% |
| Surge Protection | : 6KV (Additional Surge Protection on Request) |
| Efficiency | : >85% |
| Dimmable options | : Dali / 1-10V / PWM (On Request) |
| Control | : Smart control management system (On Request) |

### Optical Performance

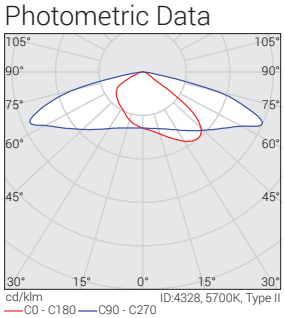
| | |
|---|---|
| Colour Temperature | : 5700K |
| Luminous flux | : 8797 lm |
| Optical Distribution | : Type II (On Request - Type III, Type IV) |

Light distribution & IES files - Please refer Online

BIS | CE | IP66 | IK08 | >60,000h L70 B10 | SDCM ≤ 5

Note :
- Luminous flux / Power consumption may vary by ±10%.
- Luminaire efficiency upto 150lm/W.

## Photometric Data



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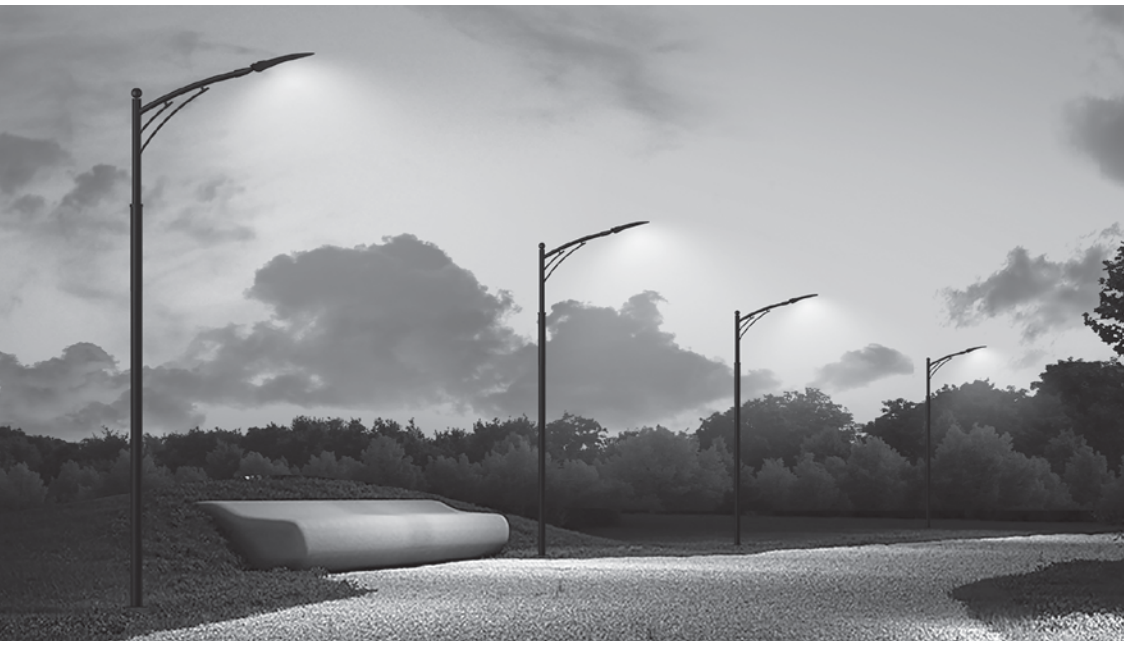
# Waco Pro Midi



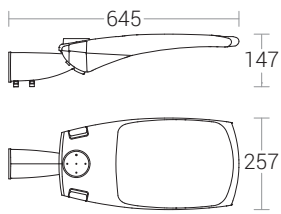
## Technical Specifications

### General

| | |
|---|---|
| ID | : 4306 |
| System Wattage | : 120W LED |
| Driver Integral | : Constant Current |
| Input Voltage | : 230-240Vac |
| Frequency | : 50-60 Hz |
| Operating Voltage | : 90-305Vac |
| Operating Temperature | : -15°C~+50°C |

### Physical

| | |
|---|---|
| Body | : Die-cast aluminium (ADC12) |
| Diffuser | : Clear toughened glass |
| Mounting | : Suitable for mounting Horizontal & Vertical on 60 mm OD pipe |
| Finish | : Graphite grey / Anthracite grey / Jet black |




### Light Source

| | |
|---|---|
| CRI (Ra) | : ≥70 (>80 On Request) |
| LED Colour Temperature | : 3000K / 4000K / 5700K |

### Driver

| | |
|---|---|
| Power Supply | : Integral |
| Power Factor | : >0.97 |
| THD | : <10% |
| Surge Protection | : 6KV (Additional Surge Protection on Request) |
| Efficiency | : >85% |
| Dimmable options | : Dali / 1-10V / PWM (On Request) |
| Control | : Smart control management system (On Request) |

### Optical Performance

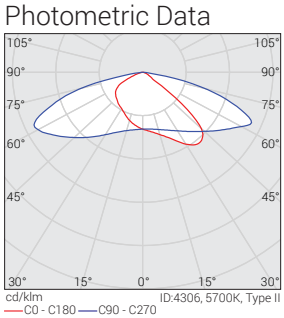
| | |
|---|---|
| Colour Temperature | : 5700K |
| Luminous flux | : 17347 lm |
| Optical Distribution | : Type II (On Request - Type III, Type IV) |

Light distribution & IES files - Please refer Online

BIS | CE | IP66 | IK08 | >60,000h L70 B10 | SDCM ≤ 5

Note :
- Luminous flux / Power consumption may vary by ±10%.
- Luminaire efficiency upto 150lm/W.

## Photometric Data



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# Waco Pro Maxi

## Technical Specifications

### General

| | |
|---|---|
| ID | : 4307 |
| System Wattage | : 180W LED |
| Driver Integral | : Constant Current |
| Input Voltage | : 230-240Vac |
| Frequency | : 50-60 Hz |
| Operating Voltage | : 90-305Vac |
| Operating Temperature | : -15°C~+50°C |

### Physical

| | |
|---|---|
| Body | : Die-cast aluminium (ADC12) |
| Diffuser | : Clear toughened glass |
| Mounting | : Suitable for mounting Horizontal & Vertical on 60 mm OD pipe |
| Finish | : Graphite grey / Anthracite grey / Jet black |

### Light Source

| | |
|---|---|
| CRI (Ra) | : ≥70 (>80 On Request) |
| LED Colour Temperature | : 3000K / 4000K / 5700K |

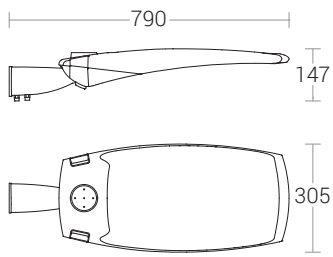
### Driver

| | |
|---|---|
| Power Supply | : Integral |
| Power Factor | : >0.97 |
| THD | : <10% |
| Surge Protection | : 6KV (Additional Surge Protection on Request) |
| Efficiency | : >85% |
| Dimmable options | : Dali / 1-10V / PWM (On Request) |
| Control | : Smart control management system (On Request) |

### Optical Performance

| | |
|---|---|
| Optical Distribution | : Type II (On Request - Type III, Type IV) |

Light distribution & IES files - Please refer Online




BIS | CE | IP66 | IK08 | >60,000h L70 B10 | SDCM ≤ 5

Note :
- Luminous flux / Power consumption may vary by ±10%.
- Luminaire efficiency upto 150lm/W.

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# Waco Pro Mega

## Technical Specifications

### General

| | |
|---|---|
| ID | : 4308 |
| System Wattage | : 240W LED |
| Driver Integral | : Constant Current |
| Input Voltage | : 230-240Vac |
| Frequency | : 50-60 Hz |
| Operating Voltage | : 90-305Vac |
| Operating Temperature | : -15°C~+50°C |

### Physical

| | |
|---|---|
| Body | : Die-cast aluminium (ADC12) |
| Diffuser | : Clear toughened glass |
| Mounting | : Suitable for mounting Horizontal & Vertical on 60 mm OD pipe |
| Finish | : Graphite grey / Anthracite grey / Jet black |

### Light Source

| | |
|---|---|
| CRI (Ra) | : ≥70 (>80 On Request) |
| LED Colour Temperature | : 3000K / 4000K / 5700K |

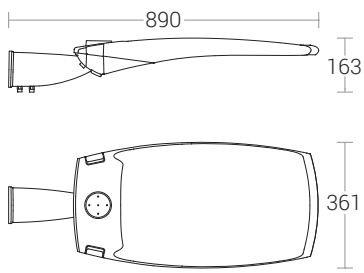
### Driver

| | |
|---|---|
| Power Supply | : Integral |
| Power Factor | : >0.97 |
| THD | : <10% |
| Surge Protection | : 6KV (Additional Surge Protection on Request) |
| Efficiency | : >85% |
| Dimmable options | : Dali / 1-10V / PWM (On Request) |
| Control | : Smart control management system (On Request) |

### Optical Performance

| | |
|---|---|
| Optical Distribution | : Type II (On Request - Type III, Type IV) |

Light distribution & IES files - Please refer Online




BIS | CE | IP66 | IK08 | >60,000h L70 B10 | SDCM ≤ 5

Note :
- Luminous flux / Power consumption may vary by ±10%.
- Luminaire efficiency upto 150lm/W.

## EFFICIENT AND SUSTAINABLE

The Waco Pro range offers optimised photometrical performance with a minimum total cost of ownership. It offers towns and cities the ideal tool to improve lighting levels, generate energy saving and reduce their ecological footprint.

Waco Pro comes in four sizes and offers flexible combinations of LED modules, a choice of currents and dimming options to further maximise energy savings and provide the most cost-effective solution.

A rear bracket version of the Waco Pro luminaire is available so that streets, side streets and large pavements can be lit using the same luminaire design.

## ADVANTAGES

- Sustainable and recyclable materials. Die-cast aluminium (ADC12).
- Modular LED engines for a precise light distribution.
- Mounting piece inclination adjustment system on-site.
- Seperate IP66 optical compartment sealed by clear toughened glass.
- Seperate IP66 driver compartment.
- Tool-Less Maintenance.
- 60 - 300W in one Waco family.
- Side & Pole Top Mounting.

## MAXIMUM ENERGY SAVINGS

It is equipped with LEDs and various dimming and remote management options for a dramatic reduction in energy consumption.

## PERFORMANCE AND FLEXIBILITY

The Waco Pro luminaires are equipped with photometric engines composed of modular quantities of LEDs so that they can offer a wide range of lumen packages. They can also be equipped with a variety of drivers and dimming options.

The Waco Pro luminaires can be adjusted on-site for optimal photometric performance. This flexibility ensures that the light distributions are specifically adapted to the real needs of the area to be lit.

## CONTROL OPTIONS

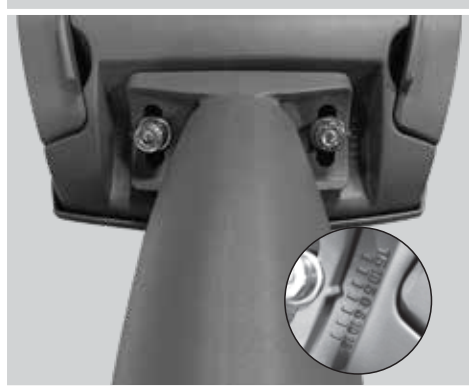
The follow dimming Options are possible for the Waco Pro street light luminaires

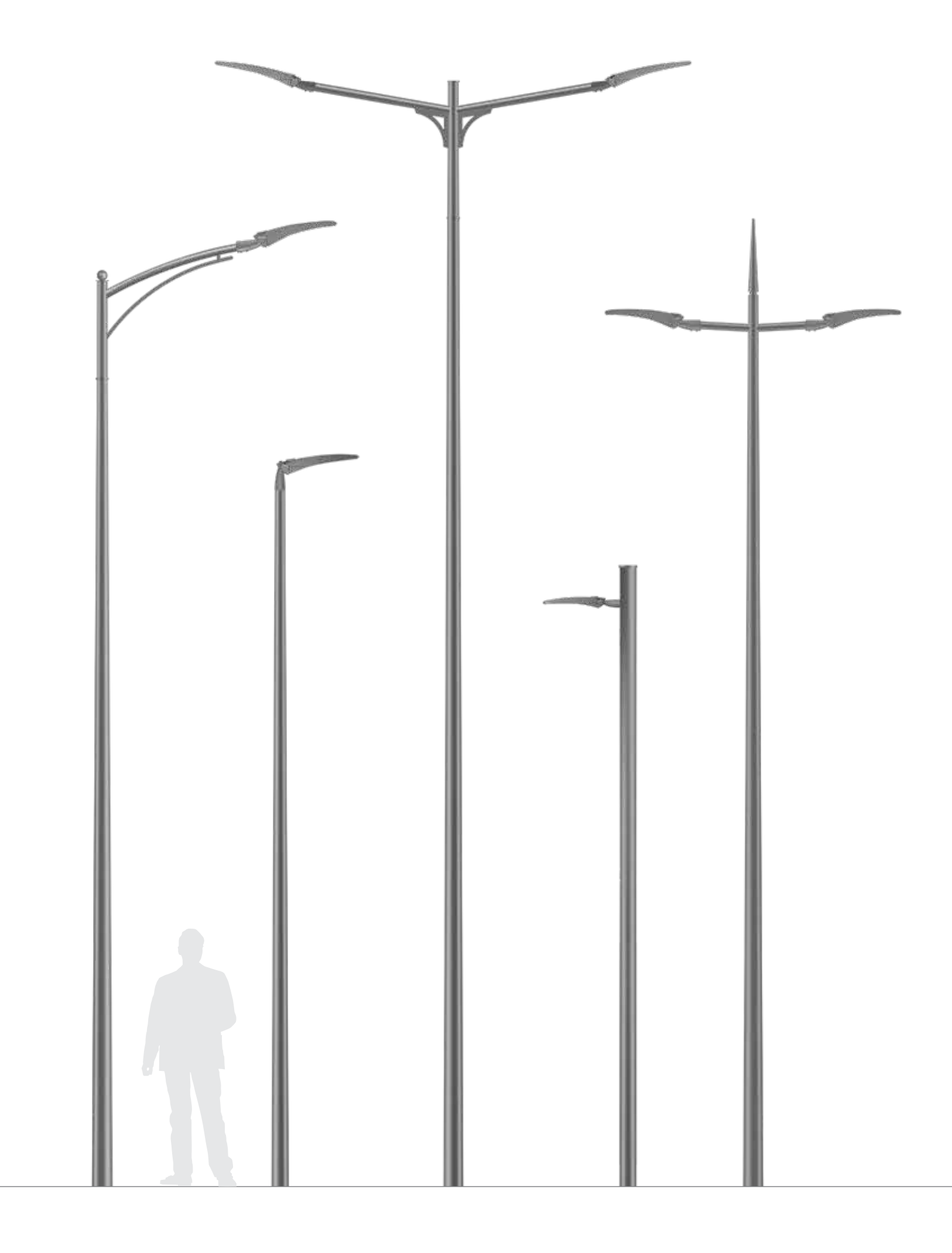
Dali / 1-10V / PWM

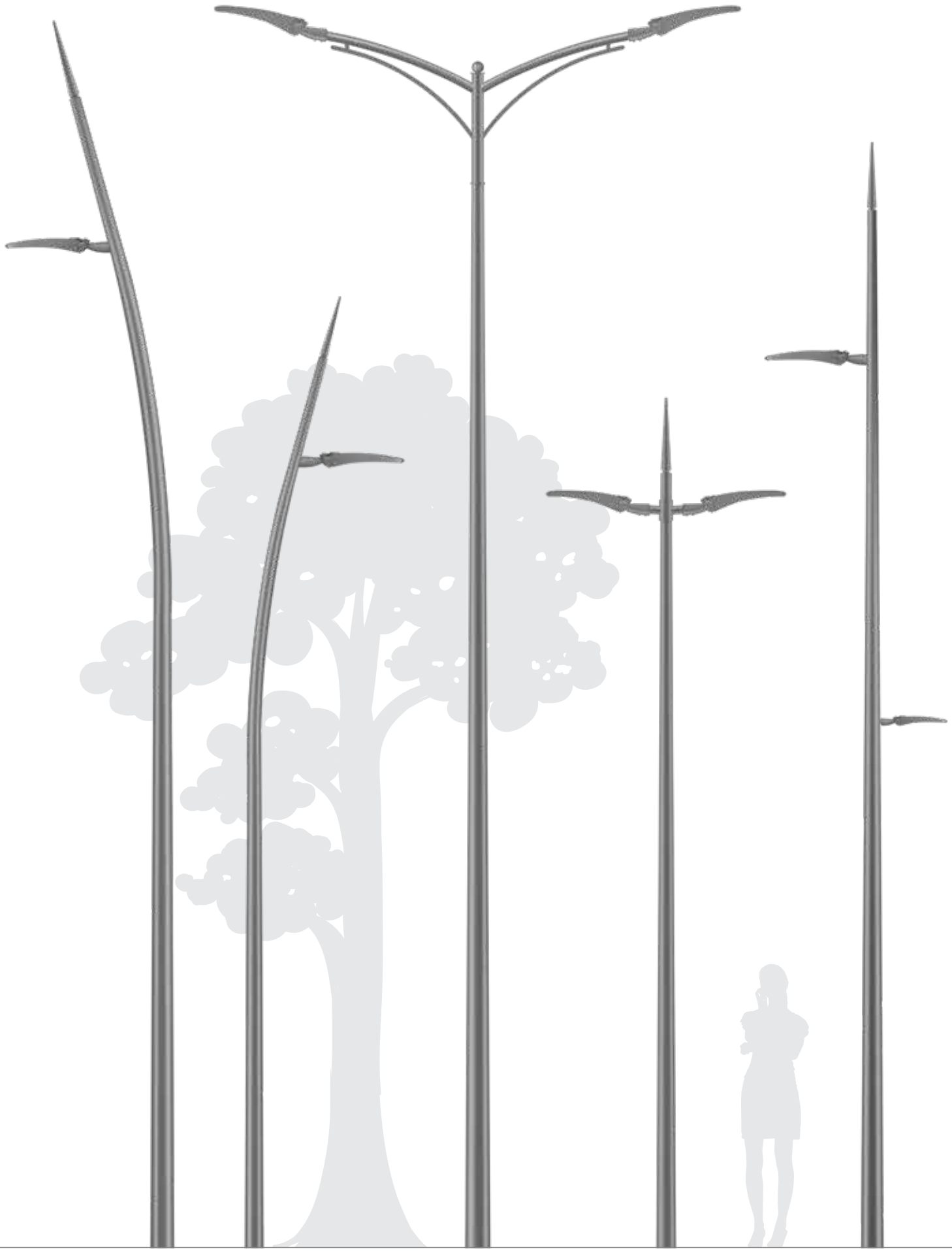
As an option, this luminaires can be equipped with a standard NEMA socket, enabling an easy access to the digital era of lighting with advanced lighting features that plan, monitor and control outdoor lighting networks.

## INSTALLATION AND MAINTENANCE

The complete range is available with four different size adapted for post-top and side-entry mounting (Ø60mm). The inclination angle can be adjusted on-site for both post-top (-15 to +15°) and side-entry (-15 to -15°) mounting in 5° steps.







# Technical Features

## Fixing

- Suitable for post top or side mounting on Ø60mm OD pipe.
- Scale available on housing for mounting bracket and adjustable by (5° step).
- Adjustable angle -15° to +15°.

## Materials

- Die-cast aluminium (ADC12)
- Clear Tempered glass
- Stainless steel fastners

## Finish

- Pure polyester powder coated
  Graphite grey / Anthracite grey / Jet black

## Structure

- Die-cast aluminium housing, with a IP66 protection rating.
- Transparent extra-clear flat glass, 4mm thick
- Silicone gasket between frame and cover
- IK08 mechanical resistance

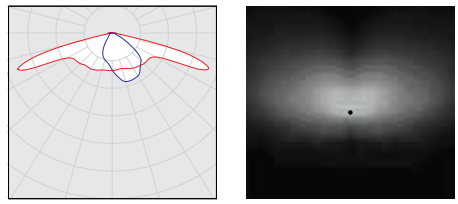
## Electrical auxiliaries

- Can be supplied with programmable electroinic power supply for smart controls
- Automatic power cutoff switch when top cover is opened
- Wiring plate with space for any auxiliary remote control devices (Smart City Ready) and additional surge protection devices (SPD)

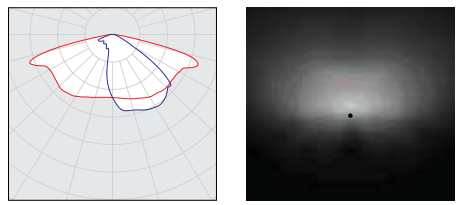
## Power Supply

- Protected against short circuit, over-temperature and over-voltages upto 6KV (Additional Surge Protection on Request)
- Nema socket available on request

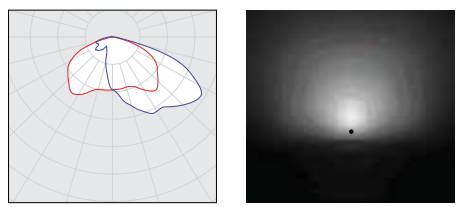
## Light Distribution



TYPE II - ASYMMETRIC ROAD



TYPE III - ASYMMETRIC ROAD WITH SIDEWALK



TYPE IV - ASYMMETRIC ROAD

Complete versatility of use thanks to street geometries that meet the requirements necessary for all applications presented.

**K-LiTE**

India's Lighting Company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**T : 48591800, 48581950.**
**M: 95000 79797, 95000 85511**
**E : info@klite.in**
**W: www.klite.in**

**Unit II**
23B,
SIDCO Industrial Estate,
Chennai - 600 098.

**Unit III**
179 & 180,
SIDCO Industrial Estate,
Chennai - 600 098.

**Unit IV**
Plot No.E29, E30, Industrial Area,
Phase-II, Mandideep Tehsil,
Goharganj District-462046.Raisen (MP).

**Unit V**
**Illumination Lab**
G8, Ambattur Industrial Estate,
Chennai - 600 058.

**Unit VI**
22B,
SIDCO Industrial Estate,
Chennai - 600 098.

**Showroom**
7/11, M.T.H. Road,
Chennai - 600 058.

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