

# 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.

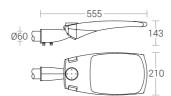
Waco Pro comes in four sizes and offers flexible combinations of LED modules, a choice of currents and dimming options to further maximise energy savings and provide the most cost-effective solution.



# **WACO PRO MINI**

ID: 24328

Luminaire Power: 60W

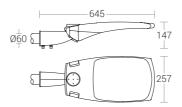




# **WACO PRO MIDI**

ID: 24306

Luminaire Power: 120W

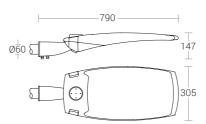




# **WACO PRO MAXI**

ID: 24307

Luminaire Power: 180W

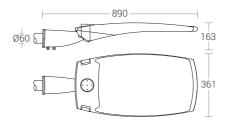




# **WACO PRO MEGA**

ID: 24308

Luminaire Power: 240W



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-24328-CCT (Colour Temperature)
- Available CCT: 2700K, 3000K, 4000K, 5700K















### **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

RAL 9004 Black

RAL 9007 Grey aluminium

RAL 7016 Anthracite grey

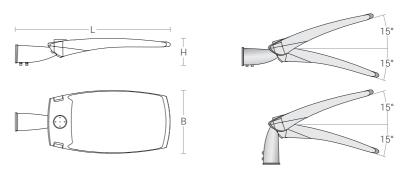
Graphite grey

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

### Waco Pro







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

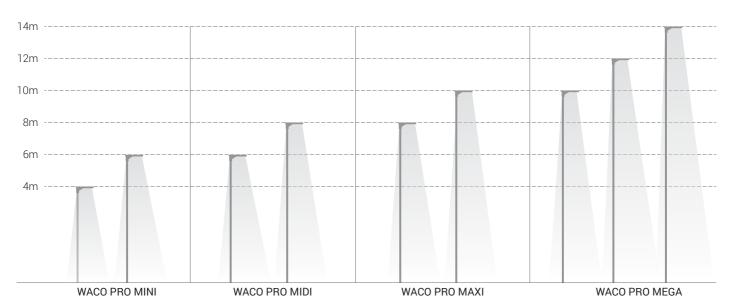
Product Code	KL-24328	KL-24306	KL-24307	KL-24308		
Input Wattage	60W	120W	180W	240W		
Wattage Range	40W - 60W	80W - 120W	150W - 200W	200W - 300W		
Installation Pipe Diameter	Ø60mm					
Color Temperature	2700K / 3000K / 4000K / 5700K					
Input Voltage	AC90~305V					
Frequency Range	50/60Hz					
Power 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	IK09					
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



#### K-LiTE Waco Pro Mini





210

# **Technical Specifications**

# General

ID : 24328 System Wattage : 60W LED Driver Integral : Constant Current Operating Voltage : 90-305Vac Operating Temperature :-15°C~+50°C

Physical

Body : Die-cast aluminium (ADC12) Diffuser Clear toughened glass Suitable for mounting Mounting

Horizontal & Vertical on 60 mm OD pipe

Finish Powder coated RAL 9004 Black

RAL 9007 Grey aluminium RAL 7016 Anthracite grey

Graphite grey

# Light Source

CRI (Ra) : ≥70 (>80 On Request) LED Colour Temperature : 2700K / 3000K / 4000K /

5700K

# Driver

Power Supply : Integral : 230-240Vac : 50-60 Hz Input Voltage Frequency Power Factor :>0.97 THD :<10%

Surge Protection : 6KV (Additional Surge Protection on Request)

Efficiency

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

# Optical Performance

Colour Temperature : 5700K Luminous flux : 9186 lm Optical Distribution : Type II

Light distribution & IES files - Please refer Online













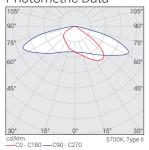




Note: • Luminous flux / Power consumption may vary by ±10%.

· Luminaire efficiency upto 150lm/W.

# Photometric Data



K-LiTE Waco Pro Midi





# **Technical Specifications**

# General

ID : 24306 System Wattage : 120W LED Driver Integral : Constant Current Operating Voltage : 90-305Vac Operating Temperature :-15°C~+50°C

Physical

Body : Die-cast aluminium (ADC12) Diffuser Clear toughened glass Suitable for mounting Mounting

Horizontal & Vertical on 60 mm OD pipe

Finish : Powder coated RAL 9004 Black

RAL 9007 Grey aluminium RAL 7016 Anthracite grey

Graphite grey

# Light Source

CRI (Ra) : ≥70 (>80 On Request) LED Colour Temperature : 2700K / 3000K / 4000K /

5700K

# Driver

Power Supply : Integral : 230-240Vac : 50-60 Hz Input Voltage Frequency Power Factor :>0.97 THD :<10%

Surge Protection : 6KV (Additional Surge Protection on Request)

Efficiency

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

# Optical Performance

Colour Temperature : 5700K Luminous flux : 18589 lm Optical Distribution : Type II

Light distribution & IES files - Please refer Online













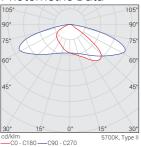


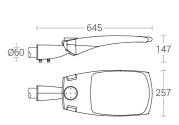


Note: • Luminous flux / Power consumption may vary by ±10%.

· Luminaire efficiency upto 150lm/W.

# Photometric Data





# **K-LiTE** Waco Pro Maxi





# **Technical Specifications**

General

ID : 24307
System Wattage : 180W LED
Driver Integral : Constant Current
Operating Voltage : 90-305Vac
Operating Temperature :-15°C~+50°C

Physical

Finish

Body : Die-cast aluminium (ADC12)
Diffuser : Clear toughened glass
Mounting : Suitable for mounting

Horizontal & Vertical on

60 mm OD pipe : Powder coated RAL 9004 Black

RAL 9007 Grey aluminium

RAL 7016 Anthracite grey

Graphite grey

Light Source

CRI (Ra) : ≥70 (>80 On Request) LED Colour Temperature : 2700K / 3000K / 4000K /

5700K

Driver

Power Supply : Integral Input Voltage : 230-240Vac Frequency : 50-60 Hz 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

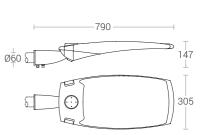
Optical Distribution : Type II

Light distribution & IES files - Please refer Online



Note: • Luminous flux / Power consumption may vary by ±10%.

• Luminaire efficiency upto 150lm/W.



K-LiTE Waco Pro Mega





# **Technical Specifications**

General

ID : 24308 System Wattage : 240W LED Driver Integral : Constant Current Operating Voltage : 90-305Vac Operating Temperature :-15°C~+50°C

Physical

Body : Die-cast aluminium (ADC12) Diffuser Clear toughened glass Suitable for mounting Mounting

Horizontal & Vertical on 60 mm OD pipe

Finish : Powder coated RAL 9004 Black

RAL 9007 Grey aluminium RAL 7016 Anthracite grey

Graphite grey

Light Source

CRI (Ra) : ≥70 (>80 On Request) LED Colour Temperature : 2700K / 3000K / 4000K /

5700K

Driver

Power Supply : Integral Input Voltage : 230-240Vac : 50-60 Hz Frequency Power Factor :>0.97 THD :<10%

Surge Protection : 6KV (Additional Surge Protection on Request)

Efficiency

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

Optical Performance

Optical Distribution : Type II

Light distribution & IES files - Please refer Online











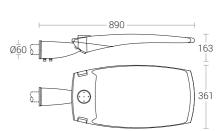






Note: • Luminous flux / Power consumption may vary by ±10%.

• 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

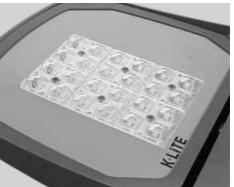
As an option, this luminaires can be equipped with a standard NEMA socket, enabling an easy access to the digital era of lighting with advanced lighting features that plan, monitor and control outdoor lighting networks.

# INSTALLATION AND MAINTENANCE

The complete range is available with four different size adapted for post-top and side-entry mounting ( $\emptyset$ 60mm). 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.

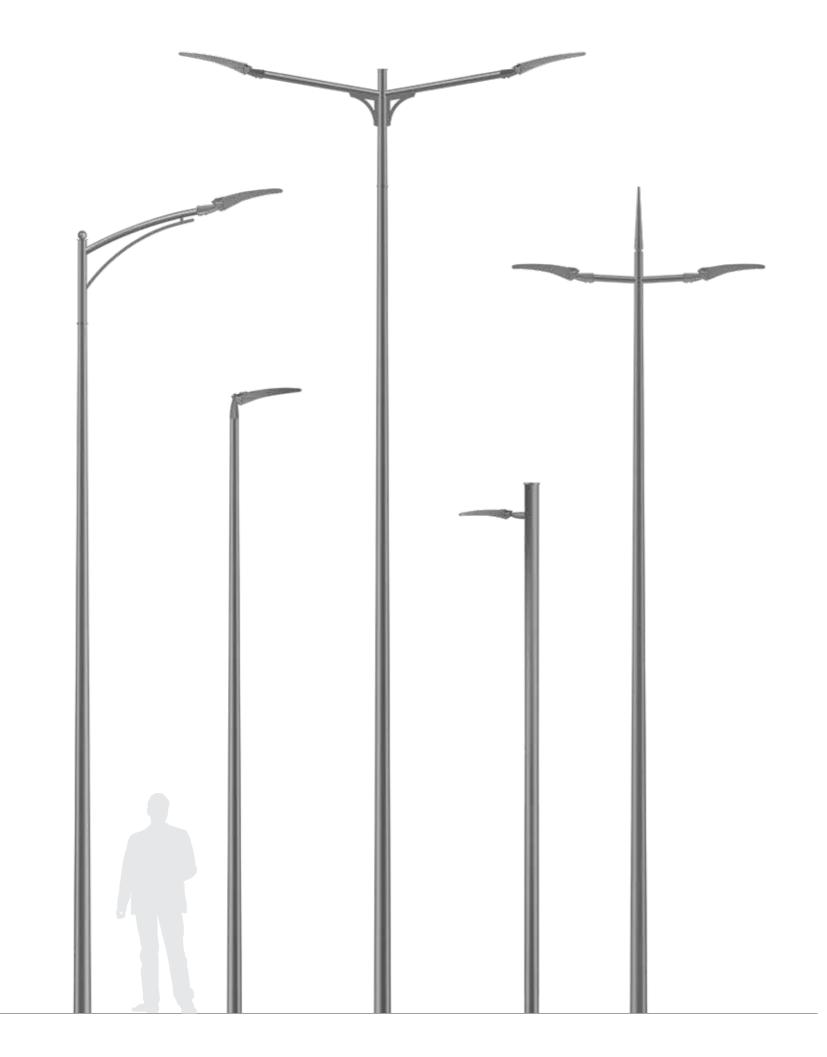
















# **Technical Features**

# 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 Toughened glass
- · Stainless steel fastners

#### Finish

 Pure polyester powder coated RAL 9004 Black RAL 9007 Grey aluminium RAL 7016 Anthracite grey Graphite grey

#### Structure

- Die-cast aluminium housing, with a IP66 protection rating.
- Transparent extra-clear flat glass, 4mm thick
- Silicone gasket between frame and cover
- IK09 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

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



# **K-LiTE** K-LITE INDUSTRIES PVT.LTD

D-10, Ambattur Industrial Estate, Chennai - 600 058. T: 26257710, 48591800, 48581950. M: 95000 79797, 95000 85511

E : info@klite.in W: www.klite.in

Unit II

23B, SIDCO Industrial Estate, Chennai - 600 098.

Illumination Lab

G8, Ambattur Industrial Estate, Chennai - 600 058.

Delhi Office - NCR L-14/10, DLF City, Phase - II, Gurgaon - 122002.

Haryana.

Unit III

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

Unit VI

22B, SIDCO Industrial Estate, Chennai - 600 098.

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

Plot No.E29-E30-E31-E32,Industrial Area, Phase-II, Mandideep Tehsil, Goharganj District-462046.Raisen (MP).

K-LITE EUROPE LTD London Showroom 271 Abbeydale Road, London, HAO 1TW. T:0208 012 8393 E:info@klite.co.uk W:www.klite.co.uk