

### **LIGHT MEETS EMOTION AND PRUDENCE.**

They are perfect for your service road or employee car park. GIFAS products highly score with their elegant design, modern LED technology and long-lasting service life, providing great lighting for your movement area in the long run.

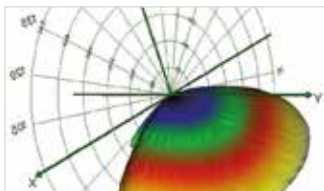
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## StreetLED SMART



### Light-emitting diode (LED)

Only high quality LEDs are used for the StreetLED SMART, with an optimal balance of colour quality, light output, life expectancy and free of mercury and lead (RoHS compliant). To achieve the best balance between natural colour distribution (true colour rendering) and the human eye at night, the colour temperature of 4000 K was selected.



### Optics

In addition to standard-compliant illumination, the asymmetrical light distribution also leads to less light pollution or glare; in combination with the „full cut-off“ characteristic, light pollution is reduced to zero. Less stray light allows residents to sleep more peacefully and thus increases their quality of life.



### Electronics / Optional power reduction to 50%

The circuit boards used in the StreetLED SMART are specially designed and equipped with an individual driver to reduce the power to 50 % if required.



### Housing






In addition to a modern housing design, objectives such as resistance to extreme weather conditions, support of the important functions as well as protection of the vital parts of the luminaire had to be fulfilled. The result distinguishes the StreetLED SMART; completely sealed, no openings, disturbing cooling fins or fans. A lightweight aluminium alloy with a multi-layer surface finish is used.



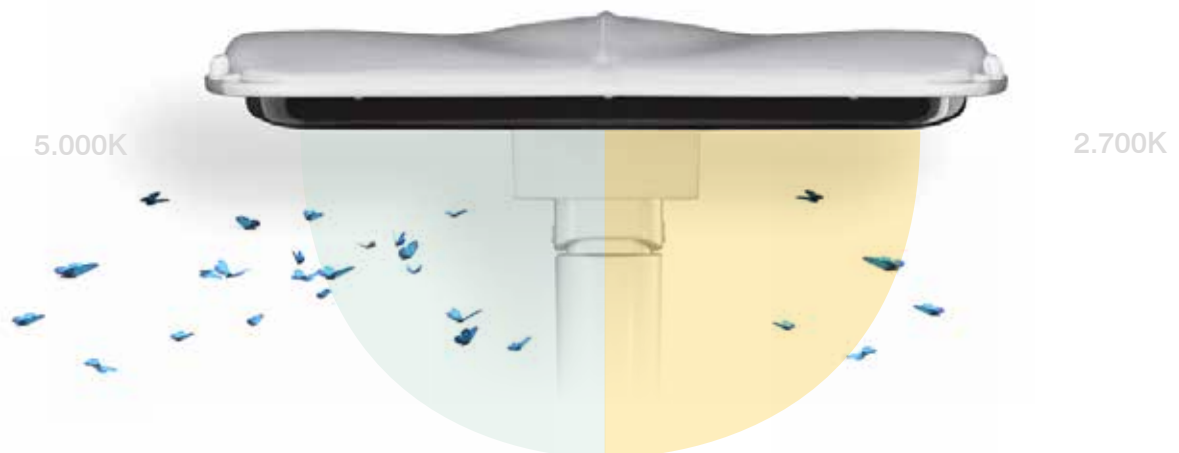
### Future-proof

The StreetLED SMART is a high-tech street lighting system with future-oriented features such as light management via internet, wireless internet connection WIFI, security cameras, video control, speed sensors, light sensors and much more.

Type comparison – StreetLED SMART

Types	StreetLED SMART 12	StreetLED SMART 12	StreetLED SMART 24	StreetLED SMART 36	StreetLED SMART 42
					
<b>Technical data</b>					
<b>Number LED</b>	12	12	24	36	42
<b>Height of light spot (m)</b>	to 5m	to 5m	5-7m	7-12m	9-14m
<b>Pole spacing (m)</b>	24m (5m height)	20m (5m height)	21m (6m height)	28m (8m height)	35m (10m height)
<b>Luminous flux</b>	2390lm	3950lm	7990lm	11420lm	15730lm
<b>System output</b>	149lm/W	141lm/W	148lm/W	150lm/W	157lm/W
<b>Power input</b>	16W	28W	54W	76W	100W
<b>Connection cable</b>	8m	8m	8m	12m	12m
<b>LVK</b>	A	B	B	B	B
<b>Street category</b>	P4/M6	P4/M6	P3/M5	M4	M3
<b>Area of application</b>	For smaller roads, paths and cycle lanes, private driveways, alleyways and parking spaces.	For smaller roads, paths and cycle lanes, private driveways, alleyways and parking spaces.	For larger paths and cycle lanes, private areas and industrial zones.	For communal roads, crossroads, car parks and challenging open land and industrial zones.	For city roads and squares, multiple intersections, large areas and parks, large open land and industrial zones.

Insect-friendly lighting



Insect-friendly LED pole lights with 2700K and 3000K

UV, blue and white LED light attract most insects. The more red components there are in the light, the fewer insects are attracted. When buying lamps for outdoor use, therefore, care should be taken to ensure that the light contains as few blue components as possible. With modern LED pole luminaires, the essential conditions for insect-friendly lighting can be well met. The LED technology used can be easily switched and dimmed and is thus ideally suited to sustainably adapt the light supply to the light requirement. We at GIFAS already offer corresponding lamps, for example in 2700K and 3000K versions. The completely enclosed lamp housing as well as a low surface temperature of the housing provide additional protection against insects. Another advantage: the street luminaires with asymmetrical light distribution not only provide standard-compliant illumination but also result in fewer light emissions. Fewer light emissions increase the quality of life for people, animals and insects.

We will be happy to support you in your planning!

# StreetLED SMART



**IP66 IK09**  **FULL CUTOFF**



The retrofitable StreetLED SMART is the answer to the diverse possibilities of future-proof and smart street lighting that can do a lot more than just illuminate a street. With a high degree of modularity, the StreetLED SMART is already prepared today for the requirements of tomorrow.

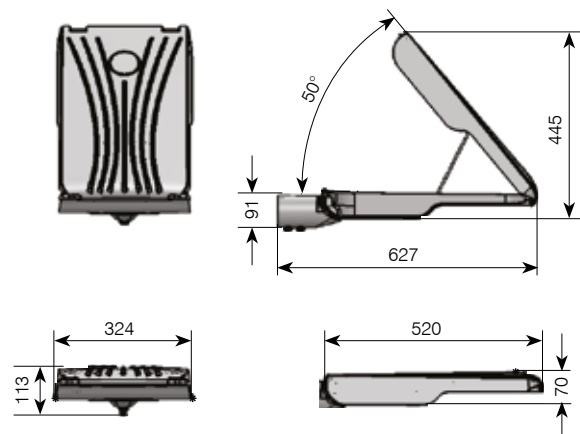
## Scope of services

- Tool-free opening
- Zhaga version for retrofitting standardized Sensors or control solutions
- Tiltable  $\pm 15^\circ$
- Overvoltage protection
- Automatically tension-free when opening

## Technical data

Input voltage	202-254 VAC/50-60 Hz
Power factor	>0.95
Light colour	4000 K
CRI	$\geq 80$
Service life approx.	100.000 h (L90/B10)
Protection category	IP66
Shock resistance	IK09
Protection class	I
Dimensions LxWxH	520x324x70 mm
Weight	7.2 kg
Adjustability	-15° to +15° (5°-Steps)
Control	DALI, Sensor Ready via Zhaga socket
Temperature operation range	-40°C to +50°C
Flash cover	10 kV
Connection cable	3x1.5 m <sup>2</sup> (8m or 12m pre-assembled))
Pole mount	60 mm or 76 mm, to be ordered separately
Cover	made of toughened safety glass, 4mm
Housing	Die-cast aluminum
Colour	RAL 9006

## Technical drawing (incl. mast mounting):

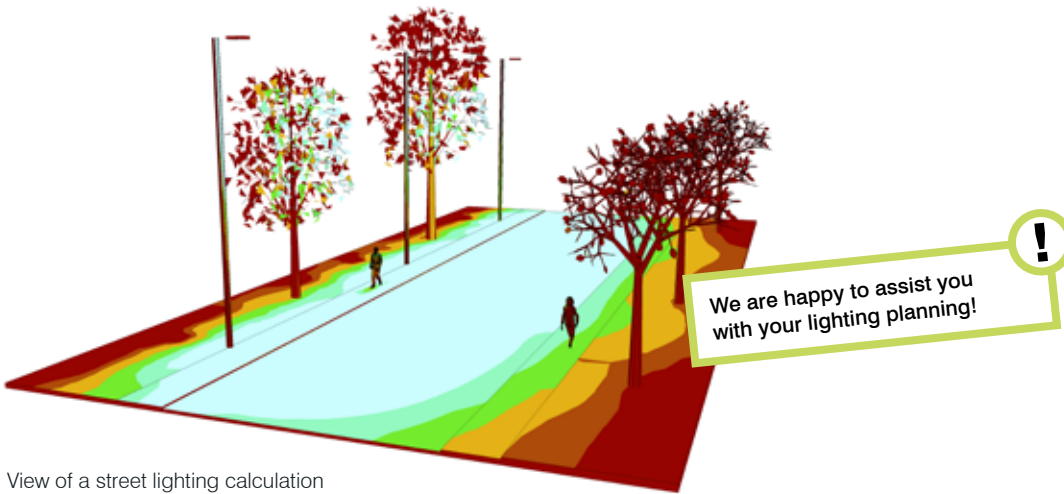


The mast mounting is available separately in 60 mm or 76 mm and enables post-top or side-entry mounting. The slope can be in 5° steps can be changed by +/- 15°. All screws are off made of weatherproof stainless steel.

Classic applications of the StreetLED SMART are public Streets, intersections, parking lots and demanding open and industrial terrain.

Item no.	Description
800370	StreetLED SMART 12, Zhaga, 16W, 2390lm
800371	StreetLED SMART 12, Zhaga, 28W, 3950lm
800372	StreetLED SMART 24, Zhaga, 54W, 7990lm
800373	StreetLED SMART 36, Zhaga, 76W, 11420lm
800374	StreetLED SMART 42, Zhaga, 100W, 15730lm

Item no.	Accessories
800375	Mast mount 60 mm, RAL 9002
800376	Mast mount 76 mm, RAL 9002



View of a street lighting calculation with additional visualization of the StreetLED SMART, 76W, 11420lm

Mounting height: 10m  
Mast spacing: 15m

**Interface technology**

With the integrated Zhaga\* socket and a sensor-ready driver, various sensors and wireless solutions can be used as required. Retrofitting of lighting control functionalities such as motion or daylight sensors can be carried out easily and without tools on site. Radio transmitting and receiving units are also available, with which bidirectional communication takes place with regard to the operating status, predictive maintenance and switching arrangement (e.g. groups).

**Light and motion sensor**



Item no.	Accessories
800377	Light and motion sensor for Zhaga socket (Mast height up to 12 m)
on request	Sensor for traffic detection incl. software
on request	Radio control for Zhaga socket

**Optional on request**

- Autonomous dimming (without Zhaga socket)
- Four more optics for different mast spacings or street widths

\*Zhaga: The Zhaga Consortium is an international organization that defines industry specifications for interfaces and components for lighting systems. This guarantees the interoperability of components from different manufacturers.



## StreetLED CUBE2



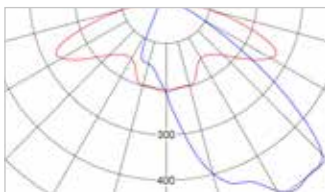
### Classic design

The simple, classic StreetLED CUBE2 is made of pressed aluminium. The cast parts are powder coloured and thermally processed. The luminaire has IK 10 impact resistance and IP66 protection.



### Technology

Use of Cree LED chips with a minimum efficiency of 130 lm/W. The colour temperature of 4500K is very pleasant. The StreetLED CUBE2 is also available in warm white on request.



### Optics

The optical lenses of the StreetLED CUBE2 are made of high-quality PMMA grade, with over 90% light transmission. They are UV and ozone resistant. It is possible to meet the most demanding technical requirements with a combination of different quantities and positions of the lenses.



### Driver

The driver is for the whole lifetime, for a minimum of 50000 h, and with many interesting options. DALI, 1-10 V dimming or autonomous dimming system. We can offer a wireless management system or NEMA connector with photocell.







### Additional functions

We can operate the LEDs with an operating current of 300 mA - 700 mA, depending on the size of the lamp and the customer's requirements.



Type comparison – StreetLED CUBE2

Types	StreetLED CUBE2 12	StreetLED CUBE2 24	StreetLED CUBE2 48	StreetLED CUBE2 72
				
<b>Technical data</b>				
<b>Number LED</b>	12	24	48	72
<b>Height of light spot (m)</b>	up to 5 m	5-7 m	7-12 m	7-12 m
<b>Pole spacing (m)</b>	24 m (5 m height)	26 m (6 m height)	38 m (8 m height)	38 m (10 m height)
<b>Street category</b>	P4/M6	P3/M5	M4	M3
<b>Dimmable</b>	✓	✓	✓	✓
<b>Light colour</b>	4000 K	4000 K	4000 K	4000 K
<b>Variability</b>	+/- 15° (5°-Steps)	+/- 15° (5°-Steps)	+/- 15° (5°-Steps)	+/- 15° (5°-Steps)
<b>Area of application</b>	For smaller roads, paths and cycle lanes, private driveways, alleyways and parking spaces.	For larger paths and cycle lanes, private areas and industrial zones.	For communal roads, crossroads, car parks and challenging open land and industrial zones.	For city roads and squares, multiple intersections, large areas and parks, large open land and industrial zones.

Types	StreetLED CUBE2 S48	StreetLED CUBE2 H48
		
<b>Technical data</b>		
<b>Number LED</b>	48	72
<b>Height of light spot (m)</b>	7-12 m	7-12 m
<b>Pole spacing (m)</b>	38 m (8 m height)	38 m (10 m height)
<b>Street category</b>	M4	M3
<b>Dimmable</b>	✓	✓
<b>Light colour</b>	4000 K	4000 K
<b>Variability</b>	–	–
<b>Area of application</b>	For communal roads, crossroads, car parks and challenging open land and industrial zones.	For city roads and squares, multiple intersections, large areas and parks, large open land and industrial zones.

# StreetLED CUBE2

## StreetLED CUBE2 12



IP66



FULL CUTOFF

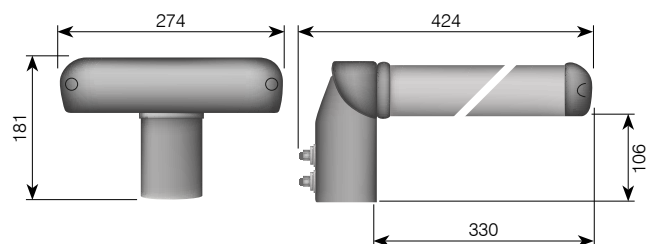
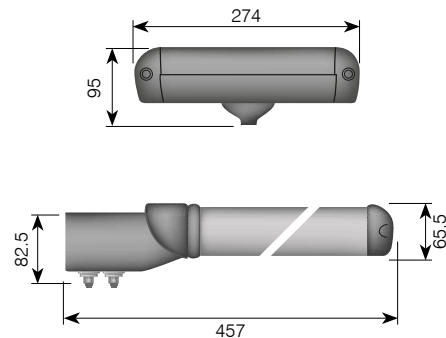
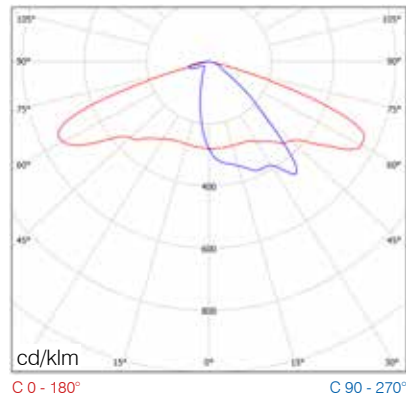


The right light for needs of approx. 5lx, corresponding to lighting class P4. Classic Application cases of StreetLED CUBE2 12 are smaller neighbourhood streets, pedestrian and cycling paths, private forecourts, alleys and car parks.

### Technical data

Light source	1 Modul-12 LEDs
System output	18W
Luminous flux	2653lm
Light colour	4000K
Input voltage	120-277VAC, 50/60Hz
Service life	min. 100000h (L90)
Protection category	IP66
Shock resistance	IK10
Weight	4.2kg
Dimensions LxWxH	424x274x82.5mm
Street category	P4/M6
Recommended height of light spot	to 5m
Recommended pole spacing	24m (LPH 5m)
Select current	450mA
Variability	-15° to +15° (5°-Steps)
Temperature operation range	-40°C to +50°C
Housing colour	RAL 9006
Dimmable	50% control phase 230VAC
Fuse protection	flash cover 10kV
Equipment	mounted with H07RN-F cable 8m, 4x1mm <sup>2</sup>

### 18W – 2653lm



Item no.	Description
303608	StreetLED CUBE2 12, switchable 50% control phase 230VAC, mounted with H07RN-F cable 8m, 4x1mm <sup>2</sup>
800375	Pole securing mechanism for poles of diameter 60mm
800376	Pole securing mechanism for poles of diameter 76mm



StreetLED CUBE2 24

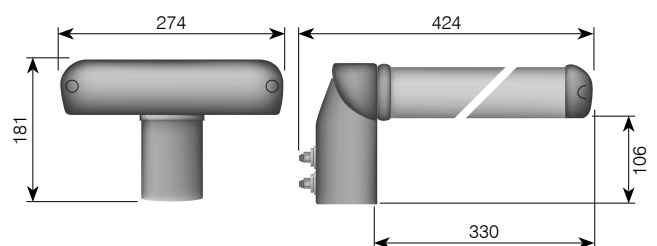
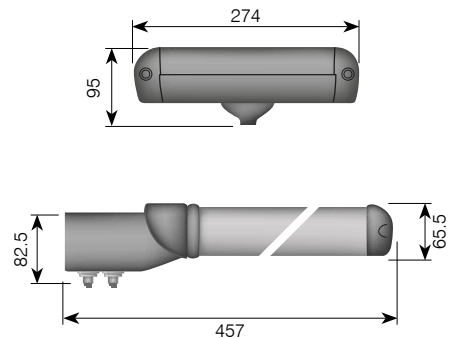
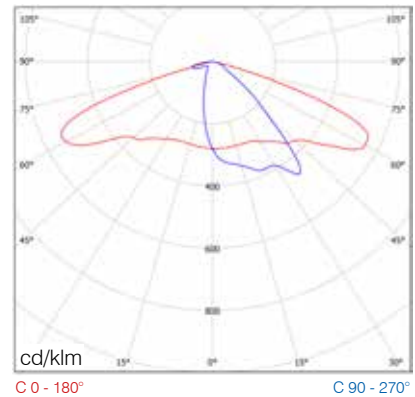


The right light for needs of approx. 7.5lx or 0.5cd/m<sup>2</sup>, corresponding to lighting classes P3 and M5. Classic Application cases of StreetLED CUBE2 24 are neighbourhood streets, major pedestrian and cycling paths, private areas and industrial sites.

**Technical data**

Light source	2 Modul-24 LEDs
System output	34W
Luminous flux	5271lm
Light colour	4000K
Input voltage	120-277VAC, 50/60Hz
Service life	min. 100000h (L90)
Protection category	IP66
Shock resistance	IK10
Weight	4.25kg
Dimensions LxWxH	424x274x82.5mm
Street category	P3 (7,5lx) or M5 (0.5cd/m <sup>2</sup> )
Recommended height of light spot	5-7m
Recommended pole spacing	26m (LPH 6m)
Select current	450mA
Variability	-15° to +15° (5°-Steps)
Temperature operation range	-40°C to +50°C
Housing colour	RAL 9006
Dimmable	50% control phase 230VAC
Fuse protection	flash cover 10kV
Equipment	mounted with H07RN-F cable 8m, 4x1mm <sup>2</sup>

34W – 5271lm



Item no.	Description
303609	StreetLED CUBE2 24, Dimmable 50% control phase 230VAC, mounted with H07RN-F cable 8m, 4x1mm <sup>2</sup>
800375	Pole securing mechanism for poles of diameter 60mm
800376	Pole securing mechanism for poles of diameter 76mm

# StreetLED CUBE2

## StreetLED CUBE2 48



IP66



FULL CUTOFF

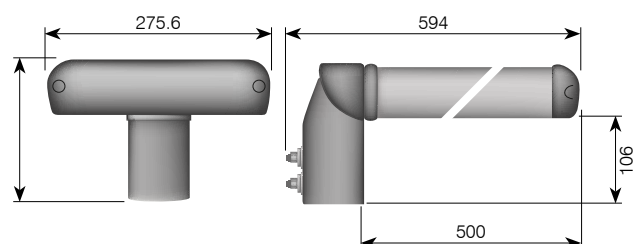
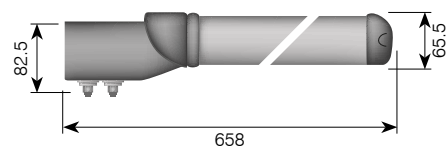
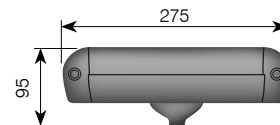
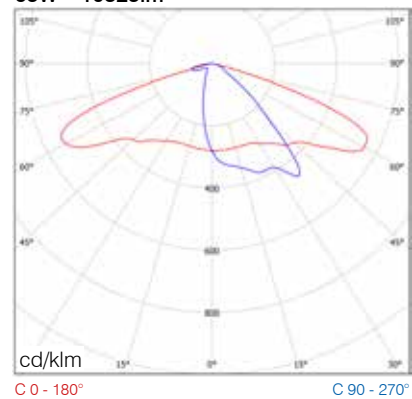


The right light for lighting needs of approx. 0.75cd/m<sup>2</sup>, corresponding to lighting class M4. Typical Application cases of StreetLED CUBE2 48 are local roads, intersections, car parks and demanding outdoor and industrial premises

### Technical data

Light source	4 Module-48 LEDs
System output	65W
Luminous flux	10325lm
Light colour	4000K
Input voltage	120-277VAC, 50/60 Hz
Service life	min. 100000h (L90)
Protection category	IP66
Shock resistance	IK10
Weight	6.35kg
Dimensions LxWxH	594x275x82.5mm
Street category	M4 (0.75cd/m <sup>2</sup> )
Recommended height of light spot	7-12m
Recommended pole spacing	38m (LPH 8m)
Select current	450mA
Variability	-15° to +15° (5°-Steps)
Temperature operation range	-40°C to +50°C
Housing colour	RAL 9006
Dimmable	50% control phase 230VAC
Fuse protection	Flash cover 10kV
Equipment	mounted with H07RN-F cable 12m, 4x1mm <sup>2</sup>

65W – 10325lm



Item no.	Description
303610	StreetLED CUBE2 48, switchable 50% control phase 230VAC, mounted with H07RN-F cable 8m, 4x1mm <sup>2</sup>
800375	Pole securing mechanism for poles of diameter 60mm
800376	Pole securing mechanism for poles of diameter 76mm

StreetLED CUBE2 72

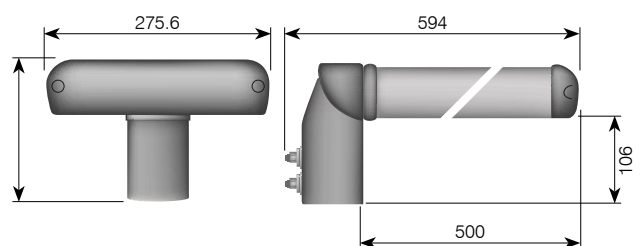
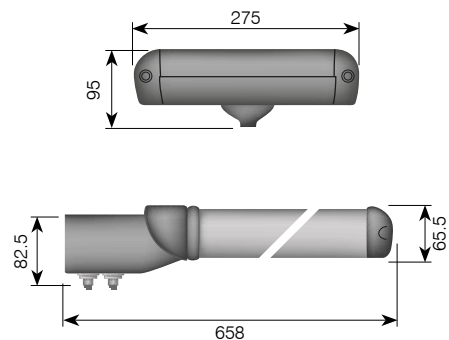
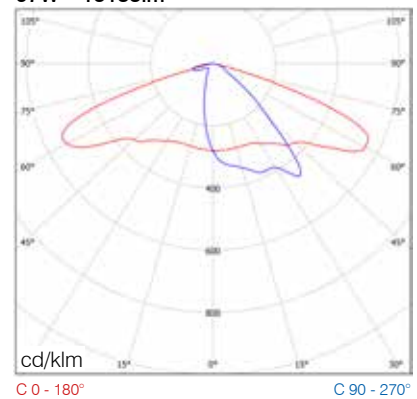


The right light for lighting needs of approx. 1.0cd/m<sup>2</sup>, corresponding to lighting class M3. Typical Application cases of StreetLED CUBE2 72 are urban streets and squares, multiple intersections, large areas and car parks, and large outdoor and industrial premises.

**Technical data**

Light source	6 Module-72 LEDs
System output	97W
Luminous flux	15183lm
Light colour	4000K
Input voltage	120-277VAC, 50/60Hz
Service life	min. 100000h (L90)
Protection category	IP66
Shock resistance	IK10
Weight	6.45kg
Dimensions LxWxH	594x275x82.5mm
Street category	M3 (1.0cd/m <sup>2</sup> )
Recommended height of light spot	7 - 12m
Recommended pole spacing	38m (LPH 10m)
Select current	450mA
Variability	-15° to +15° (5°-Steps)
Temperature operation range	-40°C to +50°C
Housing colour	RAL 9006
Dimmable	50% control phase 230VAC
Fuse protection	Flash cover 10kV
Equipment	mounted with H07RN-F cable 12m, 4x1mm <sup>2</sup>

**97W – 15183lm**



Item no.	Description
303611	StreetLED CUBE2 72, switchable 50% control phase 230VAC, mounted with H07RN-F cable 8m, 4x1mm <sup>2</sup>
800375	Pole securing mechanism for poles of diameter 60mm
800376	Pole securing mechanism for poles of diameter 76mm

# StreetLED CUBE2

## StreetLED CUBE2 S48

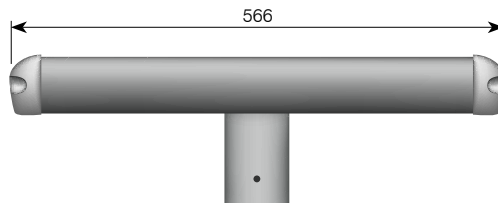
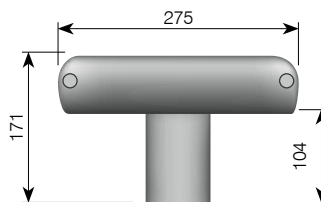
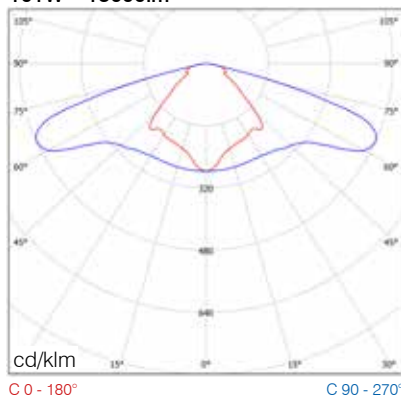


The right light for needs of approx.  $0.75 \text{ cd/m}^2$ , corresponding to lighting class M4. Classic Application cases of StreetLED CUBE2 S48 are municipal roads, intersections, car parks and complicated outdoor and industrial sites

### Technical data

Light source	4 Module-48 LEDs
System output	101W
Luminous flux	15000lm
Light colour	4000K
Input voltage	120-277VAC, 50/60 Hz
Service life	min. 100000h (L90)
Protection category	IP66
Shock resistance	IK10
Weight	6.35kg
Dimensions LxWxH	566x275x171mm
Street category	M4 ( $0.75 \text{ cd/m}^2$ )
Recommended height of light spot	7-12m
Recommended pole spacing	38m (LPH 8m)
Select current	700mA
Temperature operation range	-40°C to +50°C
Housing colour	RAL 9006
Dimmable	50% control phase 230VAC
Fuse protection	Flash cover 10kV
Equipment	mounted with H07RN-F cable 8m, $4 \times 1 \text{ mm}^2$

### 101W – 15000lm



Item no.	Description
303612	StreetLED CUBE2 S48, Dimmable 50% Control phase 230VAC, mounted with H07RN-F cable 8m, $4 \times 1 \text{ mm}^2$
284292	Pole securing mechanism for poles of diameter 60mm

StreetLED CUBE2 H48

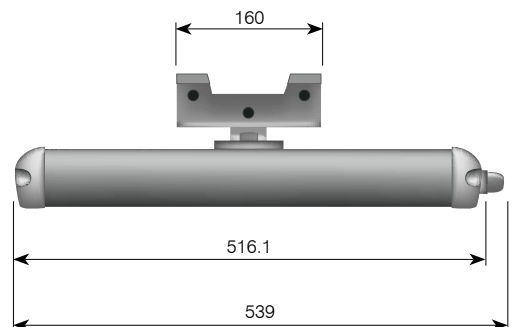
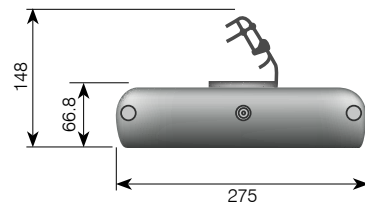
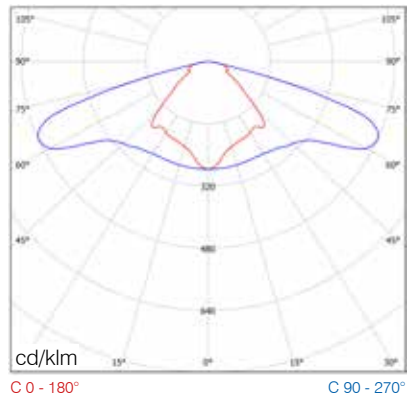


The right light for needs of approx. 1.0cd/m<sup>2</sup>, corresponding to lighting class M3. Classic Application cases of StreetLED CUBE2 H48 are urban streets and squares, multiple intersections, large areas and car parks, and large outdoor and industrial sites.

**Technical data**

Light source	4 Module-48 LEDs
System output	101W
Luminous flux	15087lm
Light colour	4000K
Input voltage	120-277VAC, 50/60Hz
Service life	min. 100000h (L90)
Protection category	IP66
Shock resistance	IK08
Weight	6.45kg
Dimensions LxWxH	539x275x148mm
Street category	M3 (1.0cd/m <sup>2</sup> )
Recommended height of light spot	7 - 12 m
Recommended pole spacing	38m (LPH 10m)
Temperature operation range	-40°C to +50°C
Select current	700mA
Housing colour	RAL 9006
Dimmable	50% control phase 230VAC
Fuse protection	Flash cover 10kV
Equipment	mounted with H07RN-F cable 1m, 4x1mm <sup>2</sup>

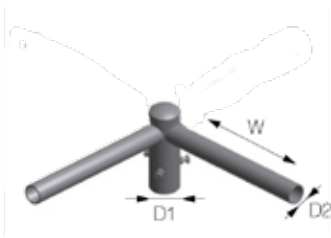
101W – 15087lm



Item no.	Description
303613	StreetLED CUBE2 H72, Dimmable 50% Control phase 230VAC, mounted with H07RN-F cable 8m, 4x1mm <sup>2</sup>

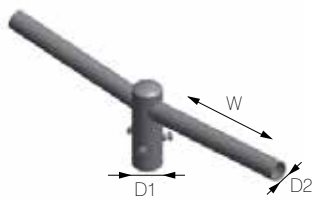


## Accessories mast mounts



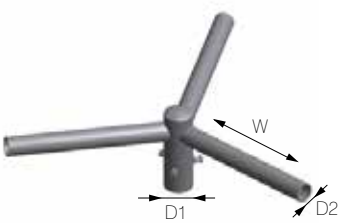
Outrigger twice, 90°

Item no.	W	D1	D2
283064	400	60	60
277764	400	76	60



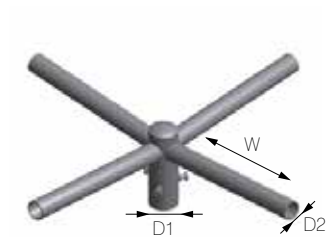
Outrigger twice, 180°

Item no.	W	D1	D2
276320	280	70	60
279209	280	60	60



Outrigger threefold, 120°

Item no.	W	D1	D2
277145	280	76	60



Outrigger fourfold, 90°

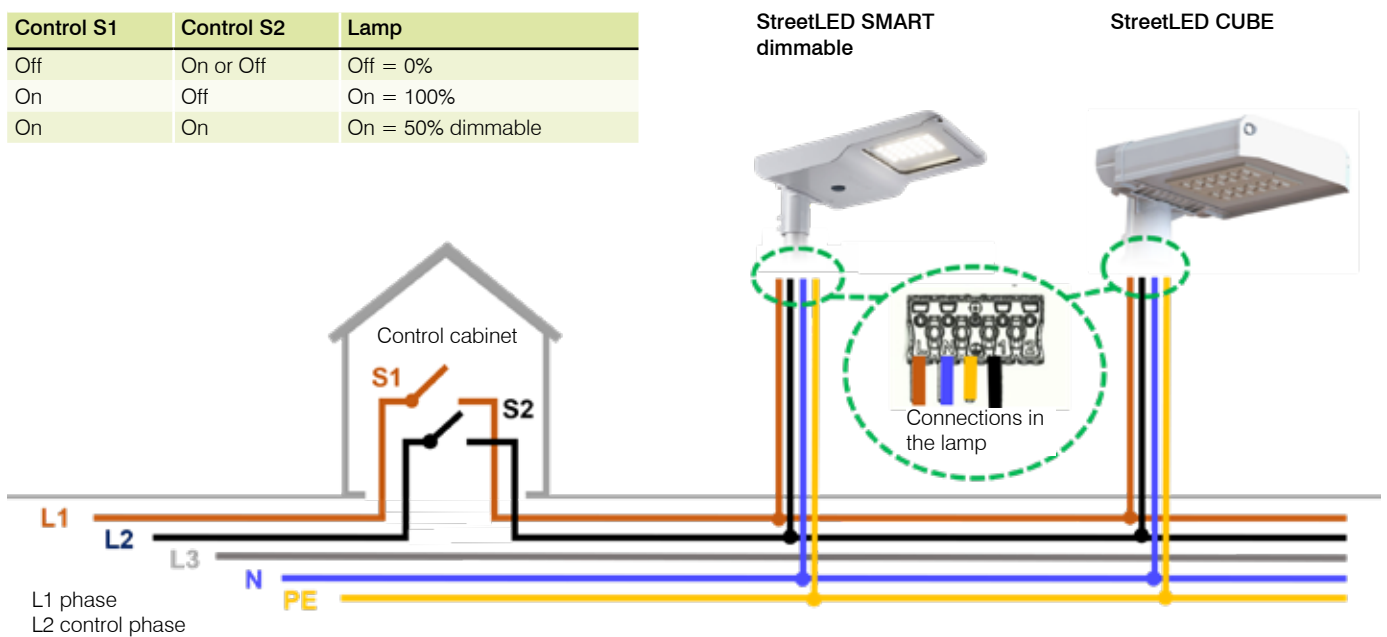
Item no.	W	D1	D2
285849	400	60	60
277908	250	76	60



**Power reduction to 50% via 230V phase switching**  
- switchable for StreetLED SMART and StreetLED CUBE -

The lamp is switched on by switching phase (L). The luminaire can be dimmed by 50% by switching on or off another phase (control phase). This is a preset value which cannot be changed. The power reduction is also 50%.

Control S1	Control S2	Lamp
Off	On or Off	Off = 0%
On	Off	On = 100%
On	On	On = 50% dimmable



## StreetLED3 / StreetLED CUBE2



BMW, Munich



BMW, Munich



Sewage treatment plant, Osnabrück



Sewage treatment plant, Osnabrück



Factory site



Ask Chemicals, Wülfrath

StreetLED3 / StreetLED SMART



Retail, Ernstbrunn



ARA „Energiepark“, Morgental



Urban road, industrial area



Factory site, chemical industry



Parking lot lighting, Göllheim



## StreetLED3 / StreetLED CUBE



Before - Residential area, Rorschacherberg



After - Residential area, Rorschacherberg



Footpath, Rebstein



GIFAS, Rheineck



Bicycle path, Rebstein

StreetLED3 / StreetLED CUBE



Car park lighting Billa, Mistelbach



Main street, Rorschach



Energy Seeland, Lyss



Urban road, residential area



Urban road, residential area

# WE ARE EXPERTS IN YOUR FIELD

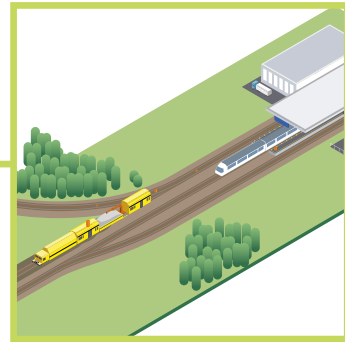
Street lighting /  
path lighting



Public sector



Industrial sector



Transportation

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