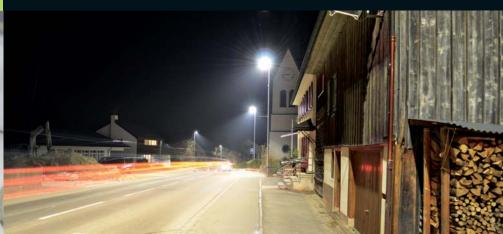
# StreetLED

Catalog-StreetLED

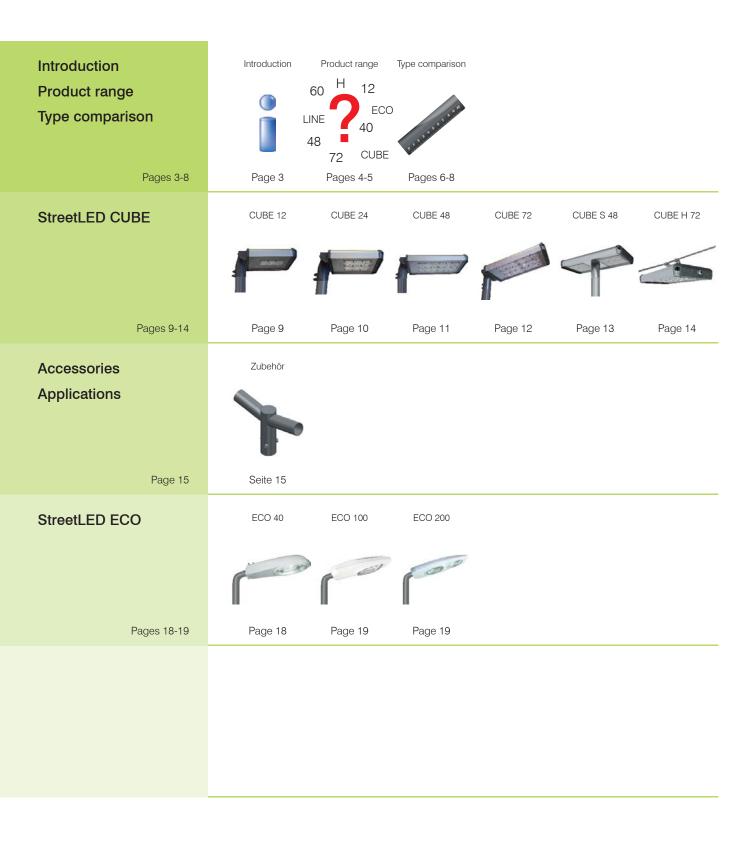






09B





#### How do I make my choice?

Here is a simplified sequence with which the lighting class can be determined.

## The most important classes at a glance (excerpted from DIN EN 13201-2):

#### ME classes

Classes ME1 to ME6 apply to roads with medium to high driving speeds. Classes MEW1 to MEW5 apply to wet roads. The quality characteristics of the lighting correspond to the luminance rating.

Quality characteristics:  $\bar{L}$  m, U0, UI, TI, SR.

#### CE classes

Lighting classes CE0 to CE5 are applied in the same manner as ME classes, but for roads with zones of conflict, as well as intersections, junctions, roundabouts, traffic jam areas at intersections, streets with pedestrians and cyclists, shopping and commercial streets, and subways and stairs.

The quality characteristics of the lighting correspond to the illuminance rating.

Quality characteristics: Em, U0

#### S classes

Lighting classes S1 to S7 are applied to pedestrian and cycling areas, breakdown lanes, road shoulders, and other areas outside of the roadways, for prestigious streets, residential streets, pedestrian zones, sidewalks, bike paths, park roads, school playgrounds, etc.

The lighting is evaluated according to the illuminance rating.

Die Gütemerkmale sind: Em, Emin

#### Additional classes

A class

ES classes

EV classes

- Em Service value of the mean luminance on the road; the actual value must never be below this value.
- Em Service value of the mean illuminance on the road; the actual value must never be below this value.
- U0 Overall uniformity; ratio of the lowest luminance (or illuminance) to the mean luminance on the road surface.
- UI Longitudinal uniformity; ratio of the lowest luminance to the highest luminance on the centre line of a lane.
- TI Threshold value increase; a measure of the loss of visibility of a visual object due to physiological glare from lights that are too bright.
- SR Ambient illuminance ratio to improve spatial orientation so that the areas adjacent to the roadway if they are not illuminated themselves can also be seen.

Lighting situation	Lighting class	Quality characteristics
A1, A2, A3	ME1 – ME5	$\bar{L}_{\rm m}$ , $U_{\rm 0}$ , $U_{\rm I}$ , $T_{\rm I}$ , SR
B1, B2	ME1 – ME6	$\overline{L}_{m}$ , $\overline{U}_{0}$ , $\overline{U}_{l}$ , $\overline{T}_{l}$ , SR
C1	S1 – S6	$\bar{E}_{m}, E_{min}$
D1, D2	CE2 – CE5	$\bar{E}_{m},U_{o}$
D3, D4	S1 – S6	$\bar{E}_{m}, E_{min}$
E1	S1 – S6, CE2	$\bar{E}_{m}, E_{min}$
E2	S1 – S5, CE2	$\bar{E}_{m}, E_{min}$

#### Determination of light-related requirements

One of the most important tasks in planning street lighting is determining the lighting class with which the light-related system data are specified.

The procedure for determining the quality characteristics of lighting on a certain street is divided into the following steps:

 First, the street to be lighted must be classified – in terms of traffic-related data – in a lighting situation according to CEN/TR 13201-1.



 The lighting class is then chosen according to CEN/TR 13201-1, based on the primary tables and additional tables.



Finally, the lighting category is used to determine the light-related requirements for the lighting according to DIN EN 13201-2.

### Introduction/Product range



#### **Preface**

(excerpts from the DIN EN 13201 standard)

The most important task of street lighting is to protect road users – pedestrians, cyclists and motorists – from damage to life, limb or health in the dark. A proven scientific correlation between the quality of street lighting and traffic safety exists. With good street lighting, people, obstacles and hazards on or near the road are identified in time and road users can react accordingly. Good street lighting is an effective way to reduce the number and severity of accidents in the dark, thus making them a major contribution to road safety management.

The quality characteristics for street lighting are specified in the European standard DIN EN 13201, "Street Lighting". This standard pursues the principle that the quality of street lighting must be higher when there is a higher safety risk for the road users. This is in turn determined primarily by the meeting of road users at different speeds (for example, pedestrians, cyclists, motor vehicles) and the risk of collision. The traffic volume at night – in terms of the amount and frequency – and the danger of disturbances resulting from the meeting of pedestrians and stationary traffic (parked at the side of the road) with motorists are further criteria that determine the quality characteristics of lighting.

Traffic regulations in Europe are largely uniform; there are also uniform minimum requirements for street lighting since November 2003. Nevertheless, it is possible for people in the European regions to design their street lighting according to their own conceptions of value and design.

The uniform lighting standard EN 13201-2 for street lighting is valid in 28 European countries: Belgium, Denmark, Germany, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Austria, Poland, Portugal, Sweden, Switzerland, Slovakia, Slovenia, Spain, Hungary, Czech Republic, Cyprus. It was worked out by CEN TC 169 (CEN = Comité Européen de Normalisation; TC = Technical Committee).

#### Street lighting: light-related requirements

Light-related requirements for streetlights are described by quality characteristics. The most important are:

- luminance/illuminance and its uniformity,
- glare reduction,
- colour reproduction.

The quality characteristics of lighting apply to when it is dark. The minimum values of individual quality characteristics can change during the night and over seasons, for example due to changes in traffic density and the ambient brightness.

In addition to these quality characteristics, other features of the lighting system are critical to producing a smooth flow of traffic. In particular, this includes visual guidance. For example, lights with a higher luminous flux as well as with other light colours are positioned at intersections, drawing attention to them even from a distance. It may also be necessary to use additional lights to improve the visual alignment of the road so that, for example, drivers can recognise a winding route in time.

#### StreetLED CUBE



#### Design/Material



The simple, classic StreetLED CUBE is made of extruded aluminium. The castings are powder-painted and thermally machined.

The aluminium parts are guaranteed by IK10 and IP66 classes.

#### LED



Cree LED chips are used, with a standard performance of at least 130 lm/W at  $Tj=850^{\circ}$  C. The colour temperature is a pleasantly neutral white with approx. 4,500 K. But street lights in warm white or pure white are also available upon request.

#### Optics/Light



The optical lenses of the StreetLED CUBE are manufactured according to the highest PMMA degree, with over 90% light transmission. They are UV- and ozone-resistant. By combining various quantities and positions, the lenses can satisfy the most demanding technical requirements.

#### Drive



The driver is designed for the entire lifetime (a minimum of 50,000 h) and with numerous interesting optional features. DALI transmitter, 1-10 V dimmer or autonomous dimming system. We can offer a wireless management system or a NEMA plug with a photocell.

#### Auxiliary function

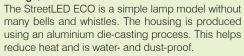


We can operate the LEDs with a control current of 300 mA - 700 mA, depending on the size of the lamp and the customer's requirements.

#### StreetLED ECO



### Design/Material







StreetLED CUBE 24

Commercially available high-quality LED chips are used for the ECO version.



StreetLED CUBE 24



### Optics/Light

The design of the independent light distribution device controls the light coming from the LED within the requirement. It improves the uniformity of the light's effect and energy use, highlighting the LED street lamp's energy-saving advantage.



The ECO uses commercially available high-quality drivers.



#### Auxiliary function

The StreetLED ECO has no standard additional functions.



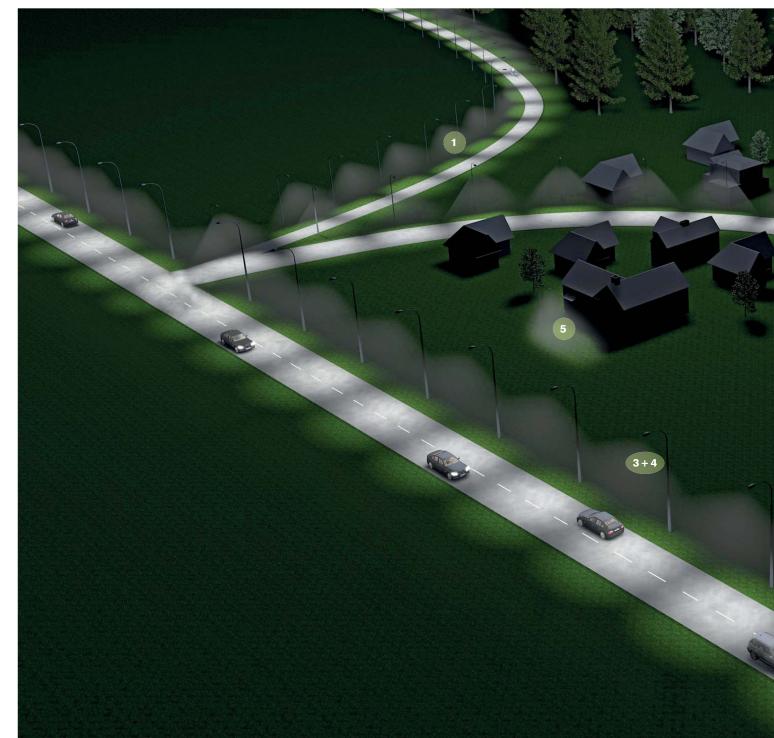
StreetLED ECO 100









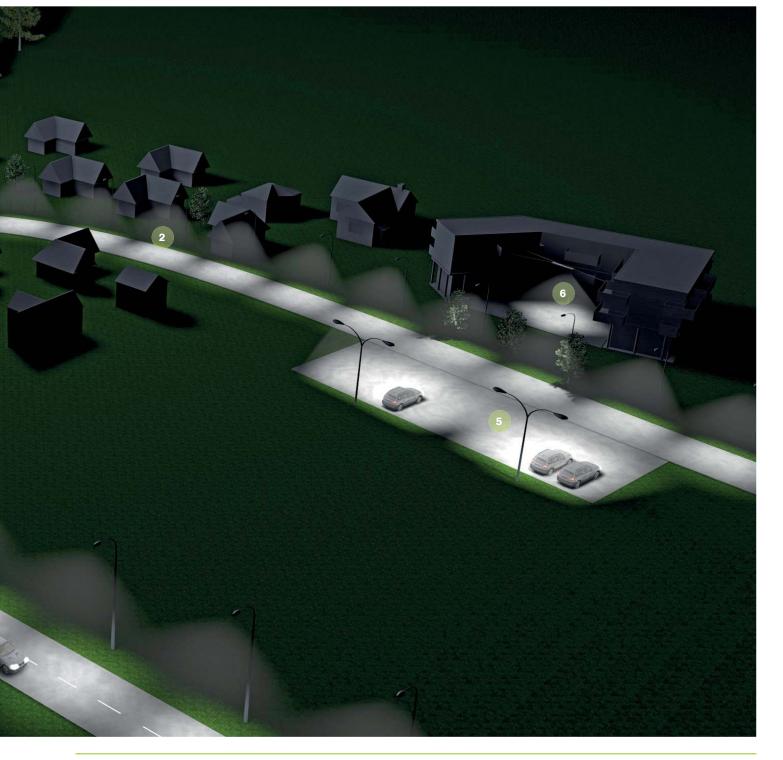


## Type comparison











### Street lamps 1

Type StreetLED CUBE 12		StreetLED CUBE 24	StreetLED CUBE 48	StreetLED CUBE 72
Technical data				
Number LED	12	24	48	72
Height of light spot (m)	to 5 m	4-7 m	7-12m	7-12 m
Pole spacing (m)	24m (5m)	26m (6m)	38m (8m)	38m (10m)
Dimmable	✓	✓	✓	✓
Light colours	4'500 K	4'500 K	4'500 K	4'500 K
System luminous efficiency	105 lm/W 105 lm/W 103 lm/V		103 lm/W	102 lm/W
Measurements	424x275x82.5mm	424x275x82.5mm	594x275x82.5mm	594x275x82.5mm
Variability	-15° to +15° (5°-steps)	-15° to +15° (5°-steps)	-15° to +15° (5°-steps)	-15° to +15° (5°-steps)
Temperature range	-30°C to 40°C	-30°C to 35°C	-30°C to 40°C	-30°C to 30°C
Auxiliary module	internal	internal	internal	internal
for details, see	10	11	12	13

### Square lamps 1

Туре	StreetLED CUBE S48	StreetLED ECO 40	StreetLED ECO 100	StreetLED ECO 200
Technical data				
Number LED	72	1 Chip	1 Chip	1 Chip
Height of light spot (m)	7-12m	bis ca. 6m	bis ca. 8 m	bis ca. 14m
Pole spacing (m)	38m (8m)	=	=	_
Dimmable	✓	-	=	-
Light colours	4'500 K	5'500 K	5'500 K	5'500 K
System luminous efficiency	103 lm/W	91 lm/W	91 lm/W	91 lm/W
Measurements	566x275x171mm	713 x 354 x 161 mm	720 x 324 x 172 mm	1193 x 425 x 205 mm
Variability	-	-	-	-
Temperature range	-30°C to 40°C	-30°C to +60°C	-30°C to +60°C	-30°C to +60°C
Auxiliary module	internal	-	=	-
for details, see	14	24	25	25



















#### Description

The right light for needs of approx. 5lx, corresponding to lighting class S4. Classic applications of StreetLED CUBE 12 are smaller neighbourhood streets, pedestrian and cycling paths, private forecourts, alleys and car parks.

#### Technical data

Light soucre/Light output: 1 Modul-12 LEDs/ 130 lm/W

19W System performance: Luminaire flux: 2'000 lm 105 lm/W System luminous efficiency: Light colour: 4'500 K

120-277 VAC/50-60 Hz Input voltage: Lifetime ca.: mind. 60'000 h Protection rating: IP66 und IK10 Weight: 4.2 kg

Dimensions LxBxH: 424x275x82.5mm

Lighting class: S4/ME6 Recommended height of light spot: bis 5 m Recommended pole spacing:  $24 \, \text{m} \, (\text{h} = 5 \, \text{m})$ Light loss due to aging: ~ 10% (60'000 h)

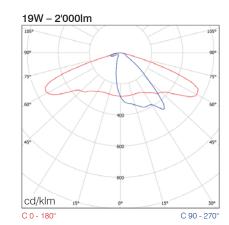
Select current: 500 mA

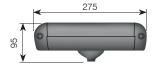
Variability: -15° to +15° (5°-steps) Temperature range: -30°C to 40°C

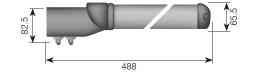
Flange Ø: 60 mm (optional 76 mm) With regulation: 50% control phase 230VAC (autonomous dimming p. 16-17)

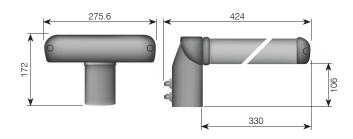
Fuse protection: flash cover 10kV

with mounted cable 8 m, 4x1mm<sup>2</sup> Equipment:









#### Item no. Description

StreetLED CUBE 12, comfort white, 19W - 2'000 lm, switchable 50%, control phase 230VAC, Ø60mm,

with mounted cable 8 m, 4x1 mm<sup>2</sup>





















#### Description

The right light for needs of approx. 7.5 lx or 0.5 cd/m2, corresponding to lighting classes S3 and ME5. Classic applications of StreetLED CUBE 24 are neighbourhood streets, major pedestrian and cycling paths, private areas and industrial sites.

#### Technical data

Light soucre/Light output: 2 Modul-24 LEDs/ 130 lm/W

38W System performance: Luminaire flux: 4'000 lm 105 lm/W System luminous efficiency: Light colour: 4'500 K

120-277 VAC/50-60 Hz Input voltage: Lifetime ca.: mind. 60'000 h Protection rating: IP66 und IK10 Weight: 4.25 kg

Dimensions LxBxH: 424 x 275 x 82.5 mm

Lighting class: S3-7.5 lx oder ME5 (0.5 cd/m<sup>2</sup>)

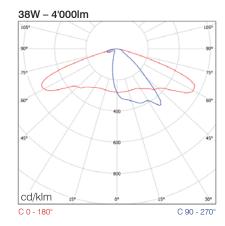
Recommended height of light spot: 5 - 7 m Recommended pole spacing: 26m (h = 6m)Light loss due to aging: ~ 10% (60'000 h) Select current: 500 mA

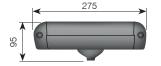
Variability: -15° to +15° (5°-steps) Temperature range: -30°C to 35°C

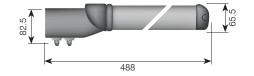
60 mm (optional 76 mm) Flange Ø: 50% control phase 230VAC With regulation: (autonomous dimming p. 16-17)

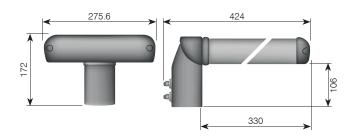
Fuse protection: flash cover 10kV

Equipment: with mounted cable 8 m, 4x1 mm<sup>2</sup>









Item no. Description StreetLED CUBE 24, comfort white, 38W - 4'000 lm, 860008 switchable 50% control phase 230VAC, Ø60mm, with mounted cable 8 m, 4x1 mm<sup>2</sup>



















#### Description

The right light for lighting needs of approx. 0.75 cd/m2, corresponding to lighting class ME4. Typical applications of StreetLED CUBE 48 are local roads, intersections, car parks and demanding outdoor and industrial premises.

#### Technical data

Light soucre/Light output: 4 Module-48 LEDs/ 130 lm/W

78 W System performance: Luminaire flux: 8'000 lm 103 lm/W System luminous efficiency: Light colour: 4'500 K

120-277 VAC/50-60 Hz Input voltage: Lifetime ca.: mind. 60'000 h Protection rating: IP66 und IK10 Weight: 6.35 kg

Dimensions LxBxH: 594x275x82.5mm Lighting class: ME4 (0.75 cd/m<sup>2</sup>)

Recommended height of light spot: 7 – 12 m Recommended pole spacing: 38m (h = 8m)Light loss due to aging: ~ 10% (60'000 h)

Select current: 500 mA

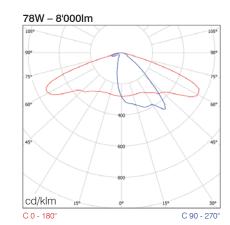
Variability: -15° to +15° (5°-steps)

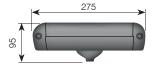
Temperature range: -30°C to 40°C

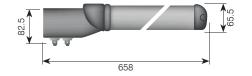
Flange Ø: 60 mm (optional 76 mm) With regulation: 50% control phase 230VAC (autonomous dimming S. 16-17)

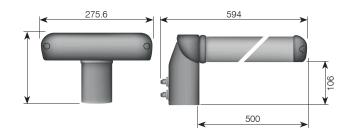
Fuse protection: Flash cover 10kV

with mounted cable 12m, 4x1mm<sup>2</sup> Equipment:









StreetLED CUBE 48, comfort white, 78W - 8'000 lm, switchable 50%, control phase 230VAC, Ø60mm,

with mounted cable 12 m, 4x1 mm<sup>2</sup>





















#### Description

The right light for lighting needs of approx. 1.0 cd/m2, corresponding to lighting class ME3. Typical applications of StreetLED CUBE 72 are urban streets and squares, multiple intersections, large areas and car parks, and large outdoor and industrial premises.

#### Technical data

Light soucre/Light output: 6 Module-72 LEDs/ 130 lm/W

System performance: 118 W
Luminaire flux: 12'000 lm
System luminous efficiency: 102 lm/W
Light colour: 4'500 K

Input voltage: 120-277 VAC/50-60 Hz
Lifetime ca.: mind. 60'000 h
Protection rating: IP66 und IK10
Weight: 6.45 kg

 $\begin{array}{ll} \mbox{Dimensions LxBxH:} & 594 \mbox{x} 275 \mbox{x} 82.5 \mbox{mm} \\ \mbox{Lighting class:} & \mbox{ME3 (1.0 cd/m}^2) \\ \mbox{Recommended height of light spot:} & 7-12 \mbox{m} \end{array}$ 

Recommended pole spacing: 38 m (h = 10 m) Light loss due to aging:  $\sim$  10% (60'000 h)

Select current: 500 mA

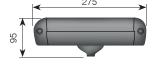
Variability: -15° to +15° (5°-steps)
Temperature range: -30°C to 30°C

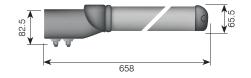
Flange Ø: 60 mm (optional 76 mm)
With regulation: 50% control phase 230VAC
(autonomous dimming S.16-17)

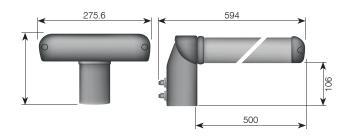
Fuse protection: Flash cover 10 kV

Equipment: with mounted cable 12m, 4x1mm<sup>2</sup>









Item no.	Description
860010	StreetLED CUBE 72, comfort white, 118W - 12'000 lm,
	switchable 50%, control phase 230VAC, Ø60mm,
	with mounted cable 12m, 4x1mm <sup>2</sup>



















#### Description

The right light for needs of approx. 0.75 cd/m², corresponding to lighting class ME4. Classic applications of StreetLED CUBE S48 are municipal roads, intersections, car parks and complicated outdoor and industrial sites

#### Technical data

Light soucre/Light output: 4 Module-48 LEDs/ 130 lm/W

System performance: 78 W
Luminaire flux: 8'000 lm
System luminous efficiency: 103 lm/W
Light colour: 4'500 K

 Input voltage:
 120-277 VAC/50-60 Hz

 Lifetime ca.:
 mind. 60'000 h

 Protection rating:
 IP66 und IK10

 Weight:
 6.35 kg

 Dimensions LxBxH:
 566x275x171 mm

Lighting class:

Recommended height of light spot:

Recommended pole spacing:

Light loss due to aging:

Select current:

566x275x171 mm

ME4 (0.75 cd/m²)

7 - 12 m

38 m (h = 8 m)

~ 10% (60'000 h)

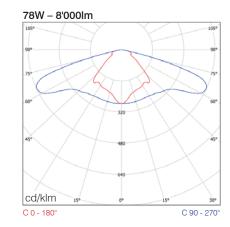
500 mA

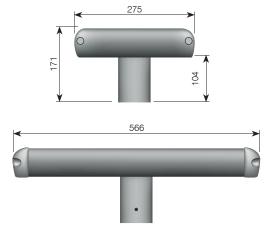
Temperature range: -30°C to 40°C
Flange Ø: 60 mm (option

Flange Ø: 60 mm (optional 76 mm)
With regulation: 50% control phase 230VAC (autonomous dimming S. 16-17)

Fuse protection: Flash cover 10 kV

Equipment: with mounted cable 8 m, 4x1 mm<sup>2</sup>





#### Item no. Description

860011 StreetLED CUBE S48, comfort white, 78W – 8'000 lm, switchable 50% control phase 230VAC, Ø 60 mm, With mounted cable 8 m, 4x1 mm²





















#### Description

The right light for needs of approx. 1.0 cd/m2, corresponding to lighting class ME3. Classic applications of StreetLED CUBE H72 are urban streets and squares, multiple intersections, large areas and car parks, and large outdoor and industrial sites

#### Technical data

Light soucre/Light output: 6 Module-72 LEDs/130 lm/W

System performance: 118 W
Luminaire flux: 12'000 lm
System luminous efficiency: 102 lm/W
Light colour: 4'500 K

Input voltage: 120-277 VAC/50-60 Hz
Lifetime ca.: mind. 60'000 h
Protection rating: IP66 und IK08
Weight: 6.45 kg

 $\begin{array}{lll} \mbox{Dimensions LxBxH:} & 539 \times 275 \times 148 \, \mbox{mm} \\ \mbox{Lighting class:} & \mbox{ME3 (1.0 cd/m^2)} \\ \mbox{Recommended height of light spot:} & 7 - 12 \, \mbox{m} \end{array}$ 

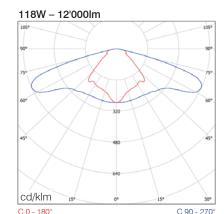
Recommended distance

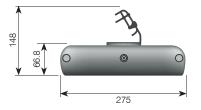
between luminaries:  $38 \, \text{m} \, (\text{h} = 10 \, \text{m})$ Light loss due to aging:  $\sim 10\% \, (60'000 \, \text{h})$ Temperature range:  $-30^{\circ}\text{C} \, \text{to} \, 30^{\circ}\text{C}$ Select current:  $500 \, \text{mA}$ 

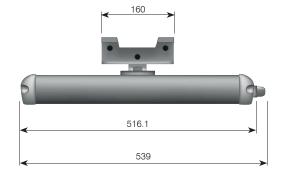
With regulation: 50% control phase 230VAC (autonomous dimming S. 16-17)

Fuse protection: Flash cover 10 kV

Equipment: with mounted cable 1 m, 4x1 mm<sup>2</sup>







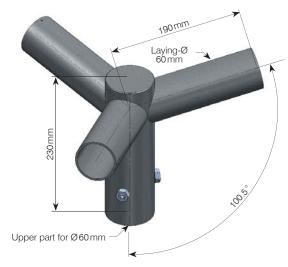
Item no.	Description
860012	StreetLED CUBE H72, comfort white, 118W – 12'000 lm, switchable 50% control phase 230VAC, Ø 60 mm, with mounted cable 1 m, 4x1 mm <sup>2</sup>

## Equipment for all types



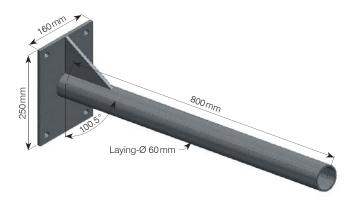
Pole adapter, 2-way boom

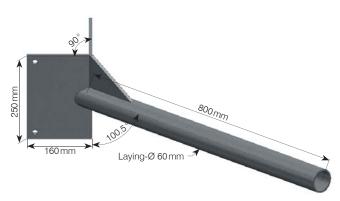
Upper part for Ø60mm Item no. 135699 Upper part for Ø76mm Item no. 138136



Pole adapter, 3-way boom

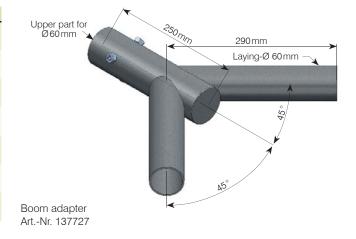
Upper part for Ø 60 mm Item no. 135700 Upper part for Ø 60 mm Item no. 138137





Wall boom Art.-Nr. 136695 Corner boom Art.-Nr. 137688

Item no.	Description
135699	Galvanized mast adapter for 60 mm diam., with 2-way boom Ø 60 mm
138136	Galvanized mast adapter for $\emptyset$ 76 mm diam., with 2-way boom $\emptyset$ 60 mm
135700	Galvanized mast adapter for Ø60 mm diam., with 3-way boom Ø60 mm
138137	Galvanized mast adapter for Ø76 mm diam., with 3-way boom Ø60 mm
136695	Galvanized wall boom for 60 mm diam., boom length: 800 mm 10.5°
137688	Galvanized corner boom, for 60 mm diam., boom length: 800 mm 10.5°
137727	Galvanized boom adapter to corner boom and wall boom, Ø60mm, with 3-way boom, Ø60mm



We would be happy to advise you in regard to poles and candelabras. Range and delivery conditions upon request

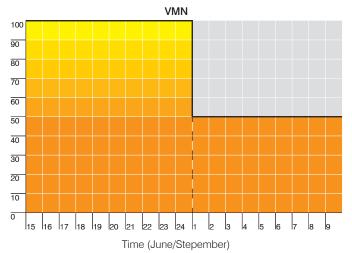
# Autonomous dimming StreetLED CUBE 12 and 24

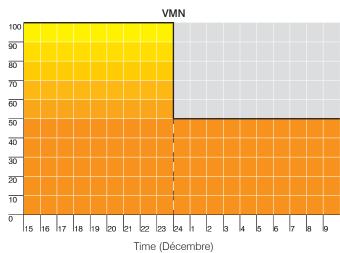


The full power of street lighting is not needed when there is little traffic on the streets and in the deep of the night. Therefore, we now offer a light with autonomous dimming capabilities that reduce luminosity to 50% at these times.

All this occurs completely automatically. An integrated clock controls this automatically; therefore, no additional control is required. However, additional settings or controls can be subsequently installed.

- The driver automatically counts the hours for which the lamp is switched on. Virtual midnight VMN. The middle of the entire time interval.
- The driver dims to 50% from VMN until morning.





	Switch on time *	Dimminglevel at midnight	Switch off time *
June**	21:00	01:00	05:00
(VMN = 01:00 Uhr)			
Dimming level	100%	50%	0%
Lamp type		StreetLED 24	
Consumption	38W	21W	OW
Power consumption	With	autonomous dimming: 23	36Wh
	Withou	it autonomous dimming:	304Wh
September**	19:30	01:00	06:30
(VMN = 01:00 Uhr)			
Dimming level	100%	50%	0%
Lamp type		StreetLED 24	
Consumption	38W	21W	OW
Power consumption	With a	autonomous dimming: 32	4.5Wh
	Withou	it autonomous dimming:	418Wh
Décembre	16:30	00:00	07:30
(VMN = 00:00 Uhr)			
Dimming level	100%	50%	0%
Lamp type	StreetLED 24		
Consumption	38W	21W	OW
Power consumption	With a	autonomous dimming: 44	2.5Wh

Without autonomous dimming: 570Wh

The hours shown above are approximate!

If the duration of the night changes by more than 1 hour, the VMN has to be recalculated. It takes 3 days until the rhythm is completely correct. In this 3-day warm-up phase, autonomous dimming does not work.

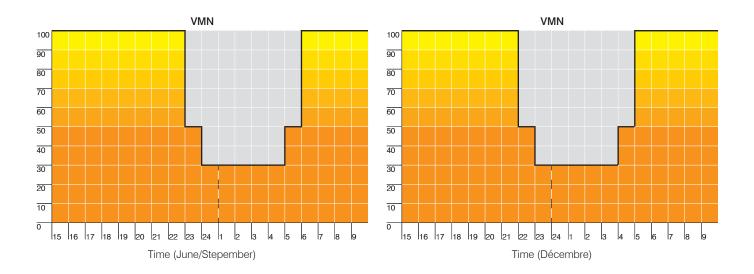
- \* The switch-on and switch-off times are determined based on sunrise and sunset times.
- \*\* The driver cannot detect the 1-hour time difference during summer; therefore, all dimming times are approx. 1 hour later than during winter.

## Autonomous dimming StreetLED CUBE 48 and 72

The full power of street lighting is not needed when there is little traffic on the streets and in the deep of the night. Therefore, we now offer a light with autonomous dimming capabilities that reduce luminosity to 50% at these times.

All this occurs completely automatically. An integrated clock controls this automatically; therefore, no additional control is required. However, additional settings or controls can be subsequently installed.

- The driver automatically counts the hours for which the lamp is switched on. Virtual midnight VMN. The middle of the entire time interval.
- The driver is programmed to be dimmed X hours before the VMN, and returns to 100% Y hours after the VMN.
- Up to 5 dimming levels can be programmed in one night.
- · These settings can be programmed on costumers requirements, but there are also other default settings available.



	Switch on time *	Dimminglevel     hours before     midnight	Dimminglevel     hour before     midnight	Dimminglevel     Hours after     midnight	4. Dimminglevel 5 hours after midnight	Switch off time *
June** (VMN = 01:00 Uhr)	21:00	23:00	00:00	05:00	06:00	05:00
Dimming level	100%	50%	30%	50%	100%	0%
Lamp type			Stree	etLED		
Consumption	118W	58W	36W	58W	118W	OW
Power consumption	Wi	th autonomous dimm	ing: 474Wh	Without autonomous dimming: 944Wh		4Wh
September** (VMN = 01:00 Uhr)	19:30	23:00	00:00	05:00	06:00	06:30
Dimming level	100%	50%	30%	50%	100%	0%
Lamp type			Stree	etLED		
Consumption	118W	58W	36W	58W	118W	OW
Power consumption	Wi	With autonomous dimming: 768Wh		Without auton	omous dimming: 1'29	98Wh
Décembre (VMN = 00:00 Uhr)	16:30	22:00	23:00	04:00	05:00	07:30
Dimming level	100%	50%	30%	50%	100%	0%
Lamp type	StreetLED					
Consumption	118W	58W	36W	58W	118W	OW
Power consumption	Wit	/ith autonomous dimming: 1'240Wh		Without autonomous dimming: 1'770Wh		

The hours shown above are approximate!

If the duration of the night changes by more than 1 hour, the VMN has to be recalculated. It takes 3 days until the rhythm is completely correct. In this 3-day warm-up phase, autonomous dimming does not work.

<sup>\*</sup> The switch-on and switch-off times are determined based on sunrise and sunset times.

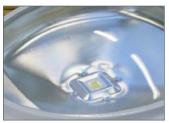
<sup>\*\*</sup> The driver cannot detect the 1-hour time difference during summer; therefore, all dimming times are approx. 1 hour later than during winter.



#### StreetLED ECO 40











#### **Technical Data**

LED Power: 44W Power supply: 85-265 VAC Lighting current: 4'004 lm LED lighting current: 91 lm/W CRI-Index: RA>80 LED operating life: >50'000h LED switching capability: >1 Mio Colour temperature:

5'500K/3'500K Operating range of temperature: -30°C to +60°C Material housing + reflector: aluminium Mounting heights: up to 6 m For pipe consumption: up to 60 mm

Degré de protection/

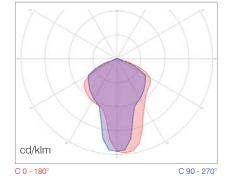
Use

Protection class: IP65/I Weight: 6.5 kg

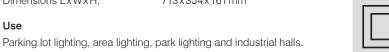
Dimensions LxWxH: 713 x 354 x 161 mm







44W - 4'004Im





Item no.	Description	Watt
115841	StreetLED ECO 40, cool white 5'500 K	40 W
125124	StreetLED ECO 40, warm white 3'500 K	40 W

#### StreetLED ECO 100



#### StreetLED ECO 200



#### Technische Daten

LED Power: 110W Power supply: 85-265 VAC 10'010 lm Lighting current: LED lighting current: 91 lm/W CRI-Index: RA>80 LED operating life: >50'000 h LED switching capability: >1 Mio Colour temperature: 5'500 K Operating range of temperature: -30°C to +60°C Material housing + reflector: aluminum

For pipe consumption: up to 60 mm
Degré de protection/
Protection class: IP65/I
Weight: 9.6 kg

Dimensions LxWxH: 720x324x172mm

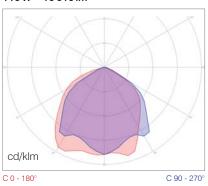
#### Use

Street lighting, park lighting, path lighting, parks, schools, industrial halls,  $\dots$ 

up to ca. 8 m

#### 110W - 10'010 lm

Mounting heights:



#### Technische Daten

LED Power: 220 W Power supply: 85-265 VAC 20'020 lm Lighting current: LED lighting current: 91 lm/W CRI-Index: RA>80 LED operating life: >50'000 h LED switching capability: >1 Mio Colour temperature: 5'500 K Operating range of temperature: -30°C to +60°C Material housing + reflector: aluminium Mounting heights: up to ca. 14 m

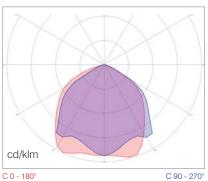
For pipe consumption: up to 60 mm
Degré de protection /
Protection class: IP65/I
Weight: 20.7 kg

Dimensions LxWxH: 1'193x425x205mm

#### Use

Street lighting, path lighting, parking lighting, area lighting, schools, industry,...

#### 220 W - 20'020 lm



Item no.	Description	Watt
115843	StreetLED ECO 100, cool white 5'500 K	100 W

Item no.	Description	Watt
115844	StreetLED ECO 200, cool white 5'500 K	200 W

News about the assortment and specific solutions can be found on our website:

www.gifas.ch





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