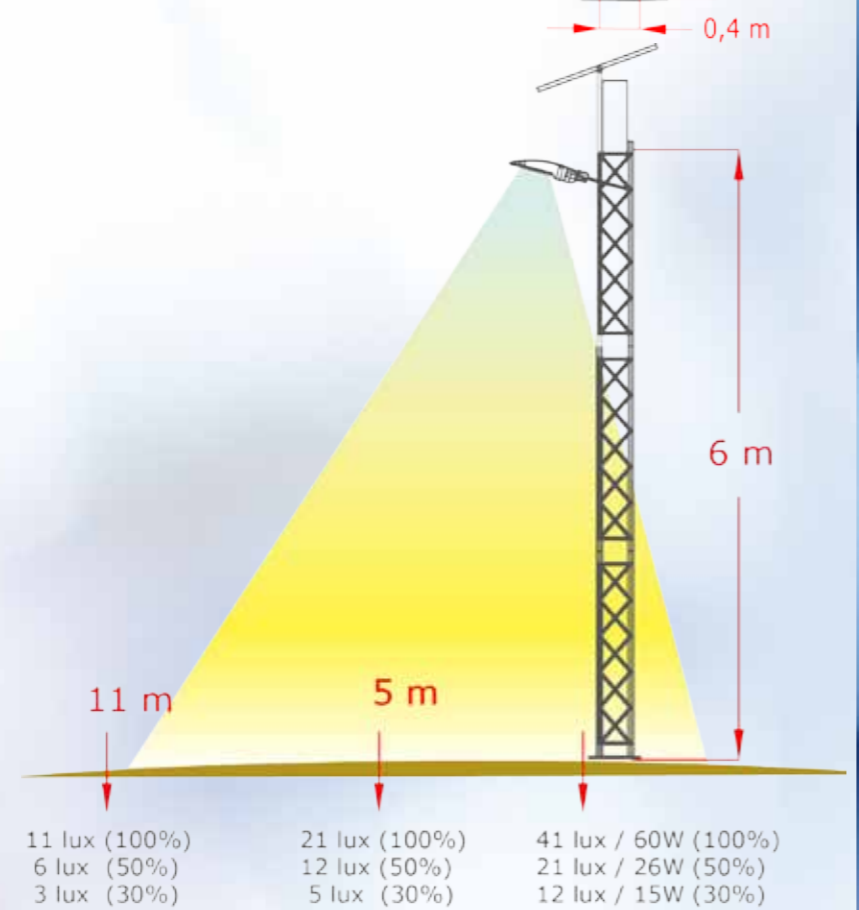
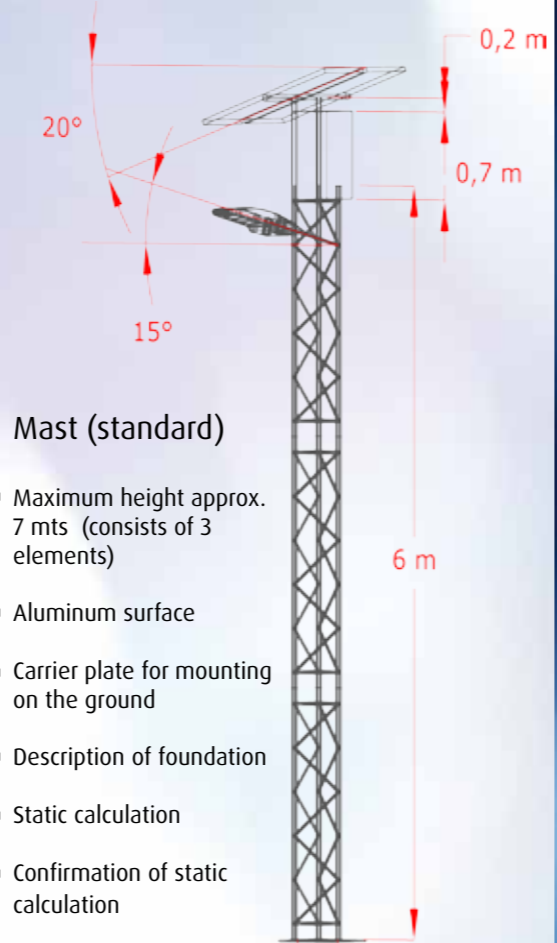


Technical characteristics ledφstreet SOLAR	
Rated power	60 W
Light flux	8280 lm
Possible range of light temperatures	2700 ..... 7000 K
LED type	SZ5-M1 (SZ5-M2)
Quantity of LED lamps on the panel	120
LED voltage	48 V
Optics	Built in, a longitudinally elliptical
Brightness control	0, 10 ..... 100%
Control	Autonomous (time of the day, illuminating intensity, battery charge)
Protection	IP67
Life cycle	10....12 years



Brightness, %	Active power, W
100	61,2
90	54
80	46
70	39
60	32
50	26
40	20
30	15
20	10
10	6,5
0	1



A model example

## bocom lighting technology

### Street Lighting ledφstreet SOLAR

The growing electricity prices and the tightening of environmental regulations (CO<sub>2</sub>) oblige people to treat the choice of lighting more responsibly, to think about the economy and reducing harmful emissions.

Thanks to research activity and a highly qualified engineering staff, bocom Company managed to develop a system that combines all the necessary requirements.



Not everywhere, where lighting is needed, there is the possibility to connect to the electricity network. In such places the street lighting, based on solar panels, is the perfect solution.

The use of solar energy not only eliminates the need of connecting to the network, but in conjunction with LED lamps, reduces CO<sub>2</sub> emissions by 85%.

Street lighting based on solar panels consists of preconfigured system elements, ready for installation.

The lamp can be used in any place: in main and secondary streets, parks and parking lots.

## The new light

### bocom Solar Street lighting system:

- bocom Company has worked out the system solution, which could be adapted for concrete climate conditions.
- no need for cable laying .
- The system is autonomous and operates without connection to the power supply network.
- Assembly of this system is modular.
- Separate groups of the masts are made in such a way that the shipment of the entire system is implemented in a standard way (max. length up to 2m).
- Energie-efficiency Class A +++
- Max. illumination at the installation height of 6m is 21 lux (by 50% brightness) and 41 lux ( by 100% ).
- Life cycle is 10 years and more.

### The components of the system Bocom Solar:

- LED lamp
- Support max. height 7m
- Solar battery
- High-performance battery 120Ah
- Control unit
- Control box with battery/control configurable individually, controls the temperature
- High-power fan-hood
- Set of cables



## ledstreet SOLAR

### The future of street lighting

#### Important battery aspects made in Germany:

- maintenance-free
- doesn't contain harmful substances
- doesn't emit dangerous gases
- very high level of security
- extrem high resistance to impact and vibration

Technical characteristics:	
Voltage	12V
Capacity	120Ah (10 h of discharge)
Weight	27kg
Connection (Pol)	Thread M6
Maximum charging rate	27A
Maximum discharge rate	800A (5 Sek.)
Internal resistance	5,5m0hm
Charging voltage	14,4-15,0V
Retention voltage	13,7-13,8V
Technology	made in Germany
Project life cycle	Up to 12 years (acc. to EUROBAT)

Use in extreme conditions:	
Temperature range	from -40°C up to +72°C
The shortest charging time	due to high charging currents
Simple charging algorithm	low-cost charging regulators
Small self-discharge currents	long-term preservation of energy without additional charging
The permissibility of full discharge	use of capacity for 100%
Low internal resistance	small circular losses
Charge without current limitation	very fast charge is possible
Space orientation is optional	construction options
The patented manufacturing technology	long life cycle
High peak output*	can be used as a starting battery

(\*till 1975A)

#### Peculiarities:

- Maintenance - free, mounting in any position
- High capacity for recombination cycles during overcharging cycles
- Safety valve as protection in case of abnormal charging modes
- High loading capacity
- Doesn't belong to dangerous goods according to IATA
- High cyclical resistance
- Robust design, plastic impact-resistant case made of ABSS
- Flameproof case according to UL 94 HB
- All batteries are manufactured according to ISO 9001, UL and CE standards
- Electrolyte is connected to fiberglass (AGM = Absorbent Glass Mat Technology)
- High reliability throughout the entire service life according to EUROBAT under the condition of keeping of operation modes
- Minimum discharge - 3% per month at 25°C

### Solar battery:

Solar batteries are produced in Germany and were worked out especially for street lighting.

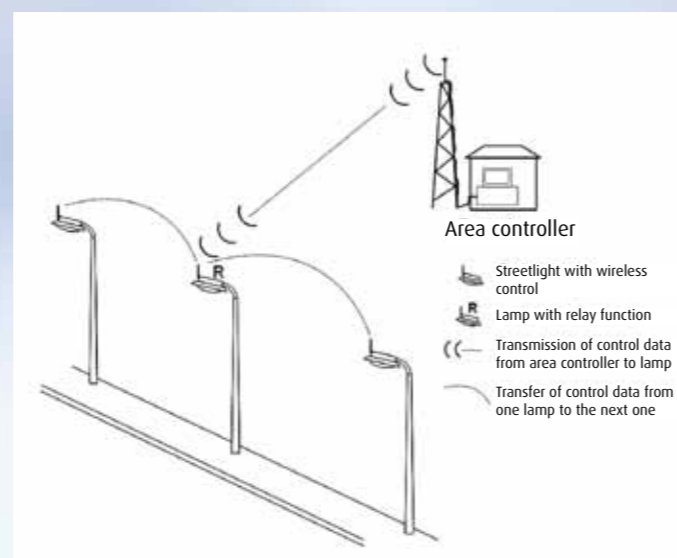
- Monocrystal silicon solar panels with connection from the back side.
- High efficiency degree (approx. 20 %) in the conversion of solar energy into electricity and life cycle is over 20 years.
- No deformation of the glass or frame panels by very high or low temperatures.
- Tempered safety glass, not damaged by hail.
- Is not polluted thanks to a special nanocover (Lotus effect).



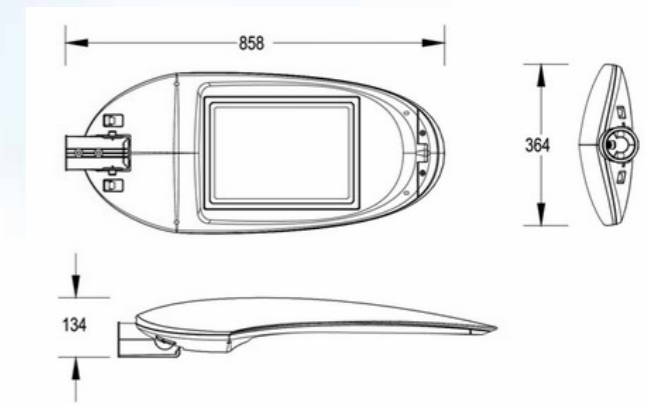
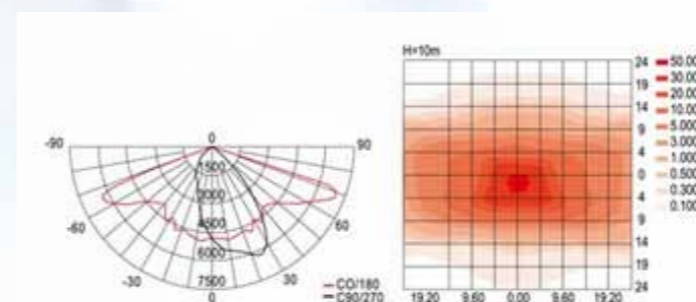
### Application of the bocom Solar LED Street lighting system:

- No need to conduct cable laying and excavation
- Lighting in any place and any time
- Independent from the power supply network and electricity suppliers
- Stepless brightness regulation (0, 10-100%) at a constant color temperature
- Long service life (over 10 years) thanks to the optimized control of the temperature
- Is practically maintenance-free
- Quick installation due to easy-to-use construction
- Immediate commissioning as the result of pre-configured modules
- No high transportation costs, because the length of the construction elements does not exceed 2m.

### Peculiarities of remote control:



New choice in offer



A model example