



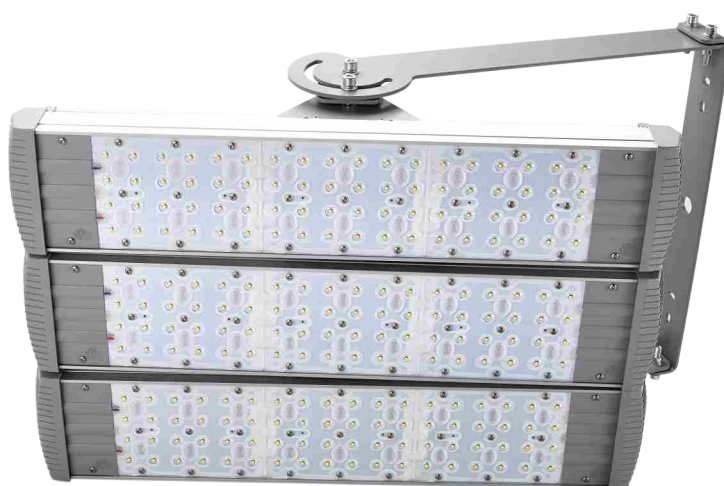
LUMINAIRES PRODUCT CATALOGUE

2020

Technical Data

	OL-30	OL-45	OL-55	OL-80	OL-105	OL-135	OL-155	OL-180	OL-210	OL-465
Luminous flux, lm	3450	5800	6900	10100	13800	17150	20900	24300	28600	62700
Power consumption, W	26	44	52	80	102	133	153	175	210	465
Luminaire energy efficiency lm/W	133	131,8	133	126,3	135	128	136	135	135	135
Weight, kg	3,8	3,8	4,1	4,5	5,7	7,25	7,75	8,1	12,5	20
Color temperature, K	3000-6500									
Color rendering index, Ra	>80									
Ripple factor, %	10 (1% optional)									
Luminous flux diagram	S (D optional)									
LED type	Oslon Square									
LED manufacturer	Osram OS, Germany									
Supply voltage, V (at rated load current)	176-264V									
Protection against short-term impulses, V	Up to 10 kV									
Power factor	Min. 0,95									
Overvoltage protection, V	More than 285V AC									
Overheat protection, V	available									
Operating temperature, °C	from -40 to +45									
IP protection code	Ip67									
Electric shock protection class	I									
LED lifetime, hours	100 000									
Guaranteed service life, years	4									
Dimming	optional									
Mount type	cantilevered / U-shaped bracket									
Connector type	WAGO 221-412									
Network connection	Sealed compartment									
Body material	Anodized aluminum									
Optics material	Impact resistant polycarbonate, UV resistant									

For luminaires with LoRaWAN radio modem	
Frequency plan	864-868 Mhz
Operating mode	Receiver, Transmitter
Luminaire connection interface	UART
Radio module power supply voltage	3,3V
Current consumption	0,2 A
Input supply voltage	12 V
Radio sensitivity	146 dB
Operating temperature	-40/+60 °C
IP protection code	Ip68 (the radio module is embedded in the lid with a compound)
Antenna gain	+3dBi
Antenna directivity	omnidirectional
Antenna length	108 mm
Antenna connector	SMA



Main characteristics and design features of SOVTEST luminaires:

- IP protection code - Ip67.
- The company ISO 9001-2015 certified. High quality of our products is achieved by the strictest quality control at all stages of production.
- Only reliable, efficient and long service life (up to 100,000 hours) Osram OS and CREE LEDs are used
- Luminaire service life is 12 years.
- UV-resistant secondary optics made of high-strength optical polycarbonate resistant to mechanical damage and non-dimming.
- Corrosion resistant housing made of anodized aluminum.
- Luminaire energy efficiency is 145 lm / W.
- Operating ambient temperature range is -40°C to $+45^{\circ}\text{C}$.
- Color temperature from 3000 K to 6500 K according to the Customer's requirements
- An SPD (optional) can be placed in the sealed compartment.
- PLED elements can be used to increase luminaire's durability (optional).
- Luminaire's smooth shape makes it a good alternative to luminaires with molded housings when used for street, road and highway lighting.



Key features detailed



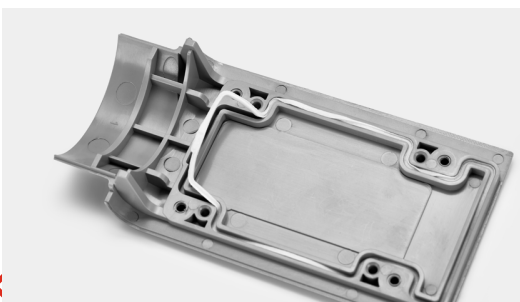
Sealing cords



Gutter



Terminal compartment



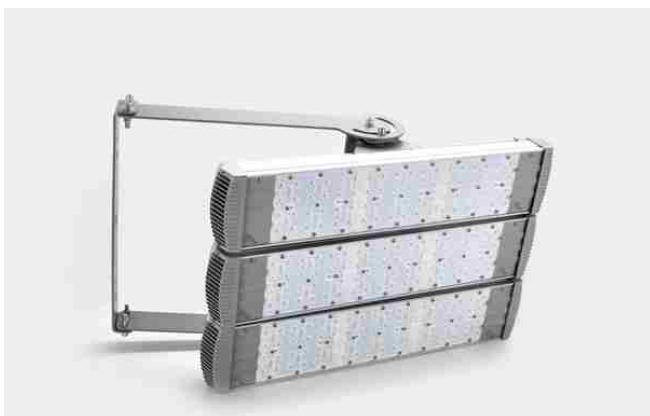
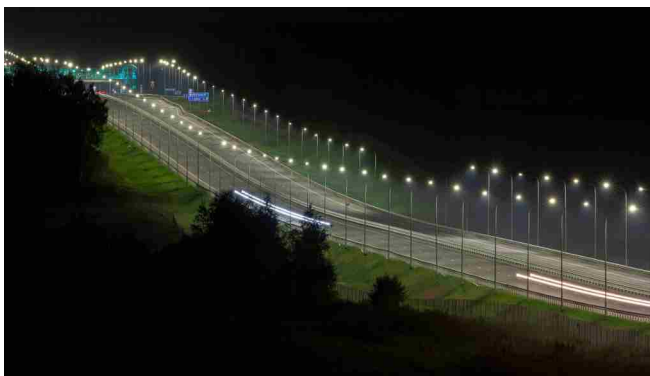
Cover with cord



Springs

Terminal compartment:

- completely sealed due to the use of silicone grommets and silicone sealing cord (Ip67);
- connecting terminals are located in a sealed compartment and are oxidation-proof under condition of industrial and automobile emissions, aggressive gases, moisture, salt mists;
- WAGO 221(222) quick-release spring connectors marked «Phase», «Zero», «Ground» are easy to install and guarantee reliability and correct connection;
- Surge protection device (optional) against short-pulse interference of at least 10 kV and 10 kA, with a built-in end of life indicator, can be placed in the sealed compartment with the possibility of quick replacement on the support without dismantling the luminaire
- Convenient access makes it easier to connect the luminaire to the network and replace the power source if necessary
- a lock for fixing the supply cable prevents the transfer of pulling force from the supply cable of the network to the connection terminals, which increases the reliability of the connection
- sliding cover of the luminaire housing allows replacement of the luminaire power source without dismantling it from the support;
- the power source is fixed on springs, which simplifies the assembly of the luminaire and replacement of the power supply, and also reduces the thermal contact of the power supply with the luminaire housing, which reduces the risk of overheating and increases the service life of the power supply.



Sovtest ATE luminaires are used for lighting of:

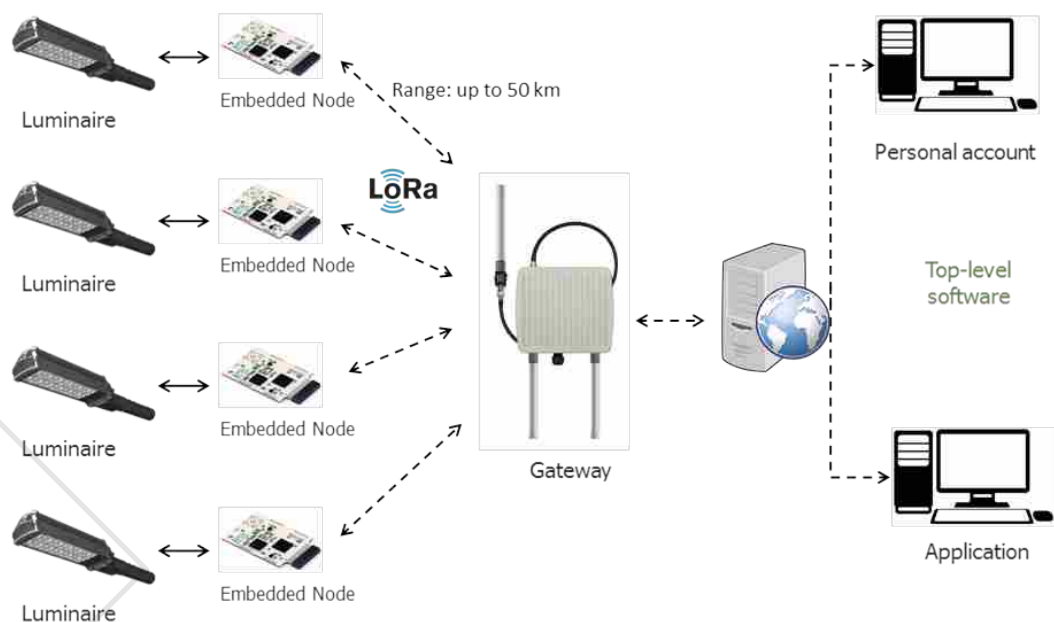
- Highways
- Parking lots
- Road / emergency works, landscaping works at night
- Plants and factories
- Livestock production units
- Warehoused
- Entrances and courtyards
- Parks and alleys
- Walkways
- Construction sites
- Country houses
- Car washes
- Labs
- Sport yards

Smart outdoor lighting control system (SOLCS)

The wireless distributed automated control system for outdoor lighting of the city and linear objects is based on LoRaWAN wireless communication technology and is an integral part of the Smart City system.

Advantages of the SOLCS

- Energy saving up to 25% (comparing to LED lamps without SOLCS) due to scheduling and lamp brightness control.
- Luminaires emit light at the right time and in the right place with the required brightness.
- Operating cost savings due to luminaire's status remote data collection so that on-site status checks are not required.
- Control of each single luminaire as well as the whole city lighting system.
- Storage and analysis of luminaire's energy consumption data in order to optimize the operating modes of outdoor lighting in the city (schedule, brightness) and increase energy efficiency.
- Status monitoring and immediate notification of a malfunction, indicating the exact location of the accident.



SOLCS functional features:

- LED luminaires remote control (separately or in groups): online switching on/off and dimming
- Remote working schedule control
- Smart lighting using motion sensors
- Remote luminaire's status monitoring including malfunction reports.
- System control using any device
- Google maps integration
- Ability to create various types of tables, graphs, diagrams to display system indicators..
- Ability to create complex scenarios for processing luminaire performance indicators.
- Ability to customize notifications when scenario conditions are triggered: SMS notifications / on-screen notifications / sound notifications / e-mail.
- Ability to customize the export of data by specified parameters in a convenient format (Excel, Word, txt, csv).
- Ability to set user access rights: the ability to edit or view administrator-defined parts of the system defined by an administrator.
- System backup import and export

SOLCS extra features:

Additional sensors upon customer's request:

- Eco-monitoring sensors (CO2, harmful gas analysis, etc.);
- Illumination sensors;
- Atmospheric pressure sensors.







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