

## Specification

Model		IR-294-S	IR-294-M	IR-294-L	IR-294-XL	IR-294-XXL
Wavelength, nm	Beam angle, $2\theta_{0,5}$ , °	Illumination range, m (see "Product purpose")				
880±20	30±3	100	140	170	240	280
	45±5	60	80	100	140	170
	60±6	45	60	75	110	130
	90±9	30	45	60	80	90
940±20	20±2	45	65	80	110	130
	60±6x40±4	17	25	30	42	50
Direct current, A		1,2max	2,4max	3,0max	5,5max	7,0max
Operating supply voltage, V		12±0,6				
Temperature range, ° C		-30... +40				
Dimensions, mm		219x134x134	219x141x134	219x200x134	236x200x272	236x270x272
Weight, kg		1,0	1,43	1,73	4,2	5,2
IP Protection Standard		IP66				

### Safety precautions

The IR-illuminator is made in compliance with EN60065:2001+Amd1: Audio-, video-equipment and analogous electronic equipment: Safety requirements and Maximum permissible action limits are in accordance with IEC60825-1. The product meets the requirements of EMC directive 89/336/EEC with amending directives 92/31/EEC and 93/68/EEC.



**Caution! IR LED invisible radiation!** Do not look directly into the illuminator using optical devices (optical lenses). CLASS 1M LED item.

**Follow polarity connection: (+) of supply – red or brown;**

**(-) of supply – black or blue.**

**Illuminator operation is prohibited at parameters exceeding maximum permissible values.**

### Maintenance

During illuminator maintenance it is necessary to clean dark-room filter and fin of radiator when dirty. Radiator cleaning from dust is carried out by a brush. If necessary it is possible to use water. Dark-room filter cleaning is carried out by a wet cotton cloth with continuous change of cloth contact surface in order to avoid filter surface damage by abrasive.



### Attention!

**Do not use dissolvent or chemicals for cleaning!**

### Transport and storage regulations

Goods in the manufacturer's packing are transported by all types of covered transport in compliance with the State Standard 12297-84 and rules effective in relation to this type of transport.

Illuminator storage is carried out in an enclosed space in acid and alkali fumes free environment. Ambient temperature is from -50° up to +50° C; upper relative air humidity is 80% at temperature +25°C.

### Warranty

The manufacturer or supplier guarantees illuminator's compliance with technical requirements given that consumers follow storage and maintenance requirements indicated in this document. Warranty life is 36 months from the day of sale. Warranty is expired in the case of consumer non-observance of installation, connection, storage or maintenance requirements, case crippling or unassisted repair, renovation, modernization etc.

### Product purpose

The illuminator is designed for observation object hidden illumination in low light conditions. Illumination range is indicated for black-and-white camera without IR correction with 1/3" array, sensitivity not lower than  $1,5 \cdot 10^{-5}$  Wt/m<sup>2</sup> in IR band of 0,8...1 mcm (equivalent of video-camera with sensitivity of 0,01 lux), lens F1.4. The illuminator is designed for outdoor installation. When being installed it is necessary to ensure free airflow of illuminator case for cooling.

### IR-294S, IR-294M, IR-294L delivery set

Illuminator -1 pc., bracket -1 pc., allen screw M6x12 – 1 pc., allen key S5 – 1 pc., packing – 1 pc., maintenance manual – 1 pc.

### IR-294XL, IR-294XXL delivery set

Illuminator (two identical parts) -1 pc., bracket -1 pc., allen screw M6x25 – 4 pcs., allen key S5 – 1 pc., packing – 1 pc., maintenance manual – 1 pc.

### Device structure

The IR-294 infrared illuminator contains emitter on the basis of LEDs with built-in beam forming optics.

Illuminator's case is made of aluminum alloy. Face of the case has LEDs covered by an infrared filter made of special plastic (see Fig.2).

Test certificate

Serial number \_\_\_\_\_

Illuminator has been tested and is ready for operation.

QC (Quality Control) stamp \_\_\_\_\_

Test date \_\_\_\_\_

Commercial organization \_\_\_\_\_  
(Stamp here)

Date of sale \_\_\_\_\_

Customer's signature \_\_\_\_\_



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Fig.1 General view of an illuminator with a bracket

The back part of the case has cooling fins. Located on the illuminator's back panel in the space uncovered by radiator's fins there is an M6 screw-threaded fixation hole for a standard bracket. The bracket is fixed to an illuminator by means of a screw included in the delivery set.

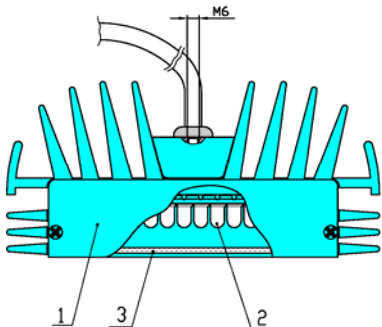
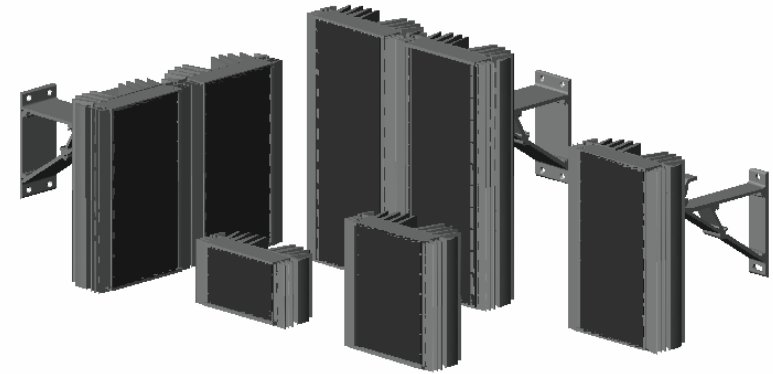


Fig. 2 Illuminator.  
1 - case, 2 - LEDs, 3 - light filter



**INFRARED ILLUMINATOR**  
**IR-294S, IR-294M, IR-294L, IR-294XL, IR-294XXL**  
Technical Datasheet

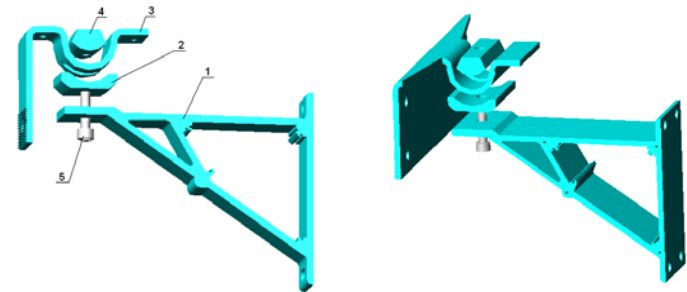
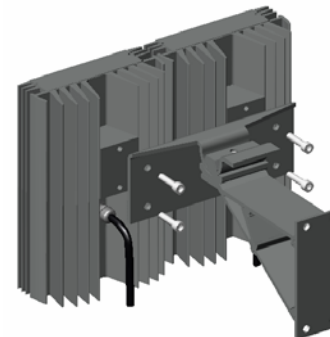


Fig.3 Bracket  
1 - bracket, 2 - pivot bearing, 3 - ball stud, 4 - die, 5 - allen screw



**IR-294XL, IR-294XXL installation**

Put the bracket together as it is shown on Fig. 3, then fix two illuminator cases to the ball stud by means of M6x25 screws (included in the delivery set). Fix the bracket and illuminator on the vertical surface, adjust rotation and slope angles by loosening the ball stud screw, fix securely the ball stud and illuminator by tightening up the screws.