

Инфракрасный прожектор IR-1 HELIOS

Технический паспорт

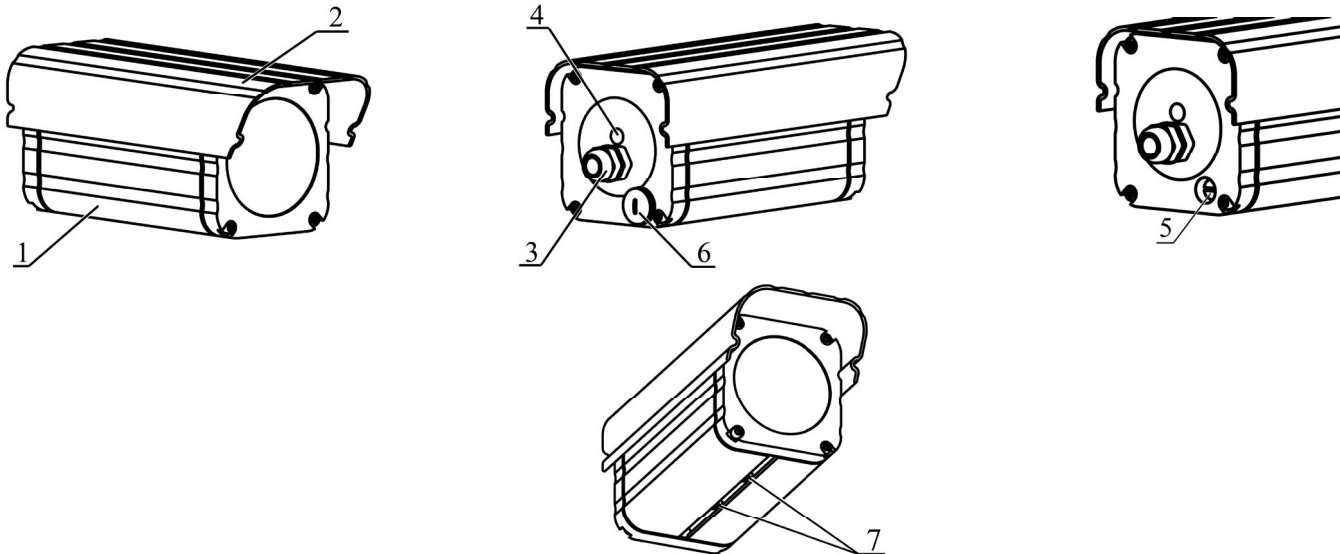
Infrared Illuminator IR-1 HELIOS

Instruction manual

Product purpose and device design

The IR-1 Illuminator is designed for covert illumination of environments in conditions of insufficient lighting. HELIOS may be installed either outdoors or indoors. For appropriate cooling it is necessary to provide free circulation of ambient air around the illuminator's case (while installing).

IR-1 Illuminator consists of an aluminum case (1), covered by visor (2), a cable jack (3) on its back side, a photo sensor (4) and adjusting screw (5) for setting of radiation angles. The screw is covered by a metal lid (6). Two nuts threaded M4 (7) are provided to attach the bracket to the bottom of the illuminator.



Technical parameters

Wavelength, nm	850
Illumination range, m	see table 1 *
Viewing angle, °	variable, from 2 to 100 **
Photosensor turn off delay, sec	30 ***
Input voltage, V	12...24 AC/DC
Power consumption, W	under 4
Operating temperature, °C	-30...+40
Dimensions, mm	72×73.5×185 ****
Weight, kg	0,74 ****
Protection Standard	IP66

* The illumination distances are indicated for the B/W video cameras without IR correction with 1/3" matrix with sensitivity equal or better than $1,5 \cdot 10^{-5}$ W/m² in the IR band of 0,8...1 μm (an equivalent of a video camera with sensitivity of 0,01 lx), with F1.4 objective, for instance - Ganz ZC-NH405P camera with Computar TG5Z8513IR-31 objective.

** One full rotation of the adjusting screw equals 1,3° illumination angle change.

*** To permanently disconnect the photo sensor remove JP1 jumper (on the board power).

**** Information indicate without bracket.

Table 1.

Viewing angle, °	2	2.5	3	3.5	4	5	6	9	13	17	25	40	50	65	90	100
Illumination range, m	400	300	250	200	150	120	100	80	60	50	40	30	25	22	20	18
Horizontal coverage width, m	12	12	12	11	9	9	9	11	12	13	16	20	20	25	35	40

Install guide

- Assemble the bracket as shown on the picture;
- Attach the illuminator with a visor to the bracket using two internal hexagon screws M4x10 (included in your package). Adjust horizontal placement settings;
- Vertically fix the bracket with the illuminator, losing the hinge screw adjust rotation and vertical angles, tighten the screws;
- Connect to a power source;

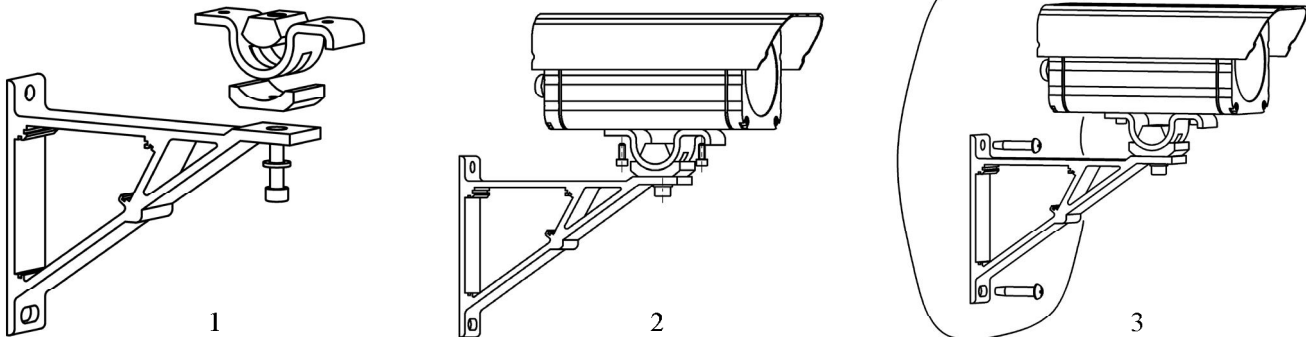
Attention!!! Connection polarity is not necessary.

- Remove plastic film from the glass
- Unscrew the plastic lid from the back panel of the illuminator. Rotating the adjusting screw, set the desired illumination angle ;

Attention. If you use electric instrument to avoid breakage adjustment mechanism, a torque applied to the adjustment screw should not exceed 0.1 Nm;

- Screw the plastic lid back in.

The Manufacturer establishes the minimum angle of radiation equal 2° . One turn of the adjusting screw changes a radiation angle on 1.3° .



Maintenance

Periodically clean the protective light filter and illuminator's case.

Use a scrub or a brush to clean the case. Water may be used if needed.

The light filter cleaning is done with a wet cotton cloth. Continuously change the contacting surface of a cloth to avoid filter's damage.

Warning! Never use dissolvents or chemical reagents!

Safety measures

IR-1 Illuminator complies with EN60065:2001+Amd1: Audio, Video & similar electronic equipment: Safety requirements and maximum permissible exposure limits of IEC60825-1. This product conforms to EMC Directive 89/336/EEC as amended by 92/31/EEC and 93/68/EEC. CLASS 1M LED product.

Caution! Invisible LED radiation! Do not look directly via optical magnifiers.

Storage rules

The illuminator should be stored in a closed space away from acid vapors or alkali mist. Ambient air temperature should be from -50°C to $+50^{\circ}\text{C}$; relative humidity should not exceed 95% at 25°C .

Package includes

1. IR-1 Illuminator
2. Visor
3. Bracket Set (4 bracket pieces, two M4×10 screws, one M6×25 screw, a washer size 6)
4. Hexagonal key
5. Technical passport
6. Packing set

Warranty

The manufacturer or the supplier guarantees the IR-1 illuminator's conformity to the technical requirements under condition of compliance with storage and operational rules described in the manual.

Warranty period is 24 months from the date of sale. The warranty is voided in case of user's non-compliance with the storage or operation rules, case integrity breach or voluntary repair, alteration, modernization etc.

Certificate of acceptance

Serial number _____

The IR-1 Illuminator passed the engineering control test and is considered to be in operational condition.

ECD (Engineering Control Department) Stamp _____

Date of the test _____

Trade organization _____

(place for stamp)

Date of sale _____

Signature of the buyer _____