IR-Spot

NIR Module

The Optron® infrared spot works in the NIR spectral region with the advantage of a high penetration depth of the radiation energy. Focusing of the infrared radiation energy at a focal length of 50 mm

- ► Power 150W (17V, 9A)
- ▶ 100% power within 1-2 seconds
- ► No heat-up time or cooling-off period
- ➤ On-line power adjustment while in use by our power controllers
- ► Focal length 50 mm with additional reflector 17 mm
- ► Focal spot diameter 10 mm with additional reflector Ø 6 mm
- ► Protective quartz glass plate
- ▶ 1.5 m connecting cable
- ► Any position of installation possible
- ► Low weight, approx. 500 g (excl. cable)



INFRARED SYSTEMS

IR spot with optional clamp joint

The infrared module is ventilated by an integrated fan. So, there is no need of further precaution when used in industrial environments, even when in permanent use.

Fixation is done by the use of a slot nut (M8) in the profile rail of the infrared module.

The highest energy density is achieved at the focal point (see diagram back side). The IR-Spot can be used outside the focal point also with the effect of increasing the irradiation area as well as a reduction of the intensity.

Item

IR spot; 150W; 17V; focal length 50mm with 1.5m connecting cable with Harting connector



item no.

600.5100.1

Power controller

SC150

Desktop with integrated power controller and Harting connector, ready for connection of one IR-Spot, stepless and flicker-free adjustment of the heating power via potentiometer or through an external 0 - 10 VDC signal, mains supply via two-pin grounded plug, dimensions (w x h x d): 260 x 90 x 240 mm



600.5118.2

SC150plus

Features like the SC150, with integrated closed loop control and display to set a target temperature

131970.2

SC600

Features like the SC150, for connection and individual control of up to 4 spots dimensions (w x h x d): 360 x 90 x 240 mm

131948

For detailed information of the power controller, please see the datasheet "Power Controller IR-Spot" Accessories / spare parts

Spare infrared emitter (average lifetime 750h) 600.5111

Adjustable, lockable clamp joint for fixation of the infrared Spot 600.5113

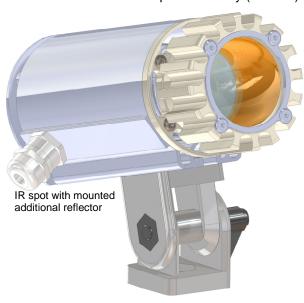
Additional power cable, 5G 1,0 mm² 600.1142

All pictures are approximations Last update: 19.12.2023

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Last update: 19.12

NIR Module

Additional reflector (inside gold plated) for reduction of the spot focal point diameter to Ø 6 mm with increased power density (factor 4)



Additional reflector:

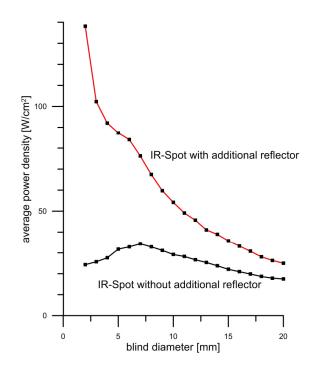
- with protective glass and optimised cooling

item-no.: 600.5124

Alignment assistance

to detect the position of the focal point

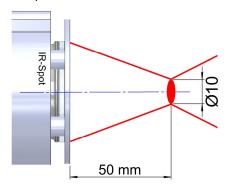
item-no.: 600.5125



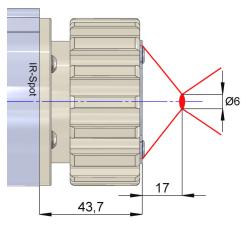
OPTRON° INFRARED SYSTEMS

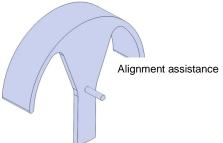
Positions of the focal point

IR-Spot without additional reflector



IR spot with additional reflector and protective glass





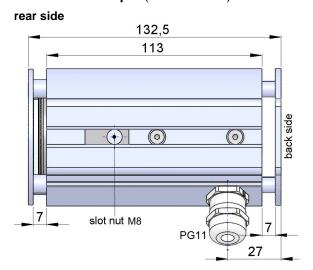
Average power density in dependence on the diameter of a blind placed in the focal point. Depending on the object size the average power density can be four times higher if an additional reflector is used.

All pictures are approximations Last update: 19.12.2023

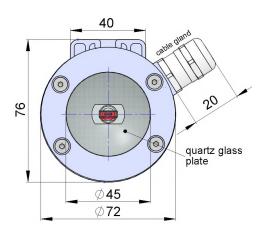
NIR Module



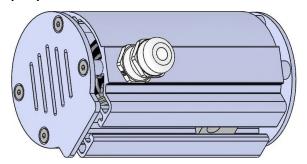
Dimensions IR-Spot (basic version)



front side



perspective



back side

