

ISS-8P-HP

<https://www.gigahertz-optik.com/en-us/product/iss-8p-hp>

Product tags:



Description

The uniform light source ISS-8P-HP is based on a ODM98 coating and offers an 19 mm light entrance port. Furthermore the system is equipped with a LS-OK30 light source and a filter holder which (LS-OK30-HPA) can be loaded by an OD1 and OD2 filter.

Intensity adjustment

With the help of the filters OD1 and OD2 and an empty filter (OD0) the radiance/luminance of the sphere can be adjusted in three steps. A quality measure for the intensity adjustment is a constant color temperature and no change in the homogeneity of the light entrance port. Both is achieved by the ISS-8P. A typical application for this set-up is pixel-uniformity calibration of imaging systems at three different luminance or radiance levels. The filter exchange is faster than intensity adjustment using a variable aperture.

The light source can be equipped with LF-F or LH-F-UV quartz halogen lamps in the range of 5 W to 100 W. The power will be selected according to the needed radiance/luminance.

Calibration

A calibration with included calibration certificate (cd/m^2) and/or spectral radiance ($\text{W}/(\text{m}^2\text{sr})$) which is traceable to a national standard can be optionally purchased. The calibration is done by our internal calibration laboratory.

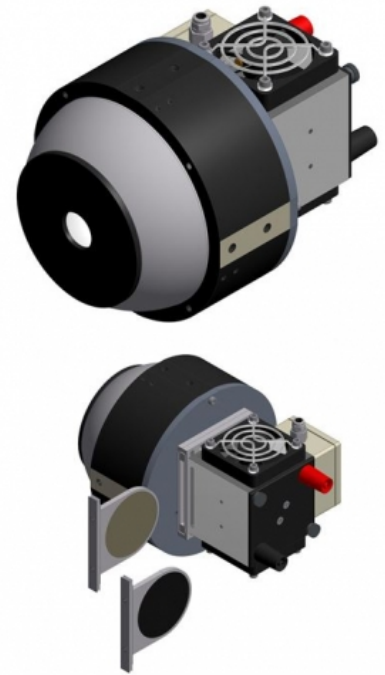
Option

For operation an optional quality current regulated power supply of the [LPS series](#) can be used.

Specifications

General

Short description	Integrating sphere source with 19 mm Diameter light output port. Tungsten halogen lamp up to 100 W. Three steps intensity control.
Main features	Compact size. 19 mm Diameter light output port. Synthetic ODM98 coating of sphere and baffle. External lamp housing for tungsten halogen lamps up to 100 W. Three exchangeable holes-pattern attenuation filter (OD0, OD1 and OD2).
Measurement range	Luminance: OD0: 120000 cd/m^2 , OD1: 12000 cd/m^2 , OD2: 1200 cd/m^2 (at CCT 2960K with LH-100F-UV) Luminance: OD0: 75000 cd/m^2 , OD1: 7500 cd/m^2 , OD2: 750 cd/m^2 (at CCT 2856K with LH-100F-UV)
typical applications	Uniform light source for pixel uniformity calibration and adjustment. Intensity control in three steps (OD0, OD1, OD2) by exchangeable neutral density attenuation filters.



ISS-8P-HP

Calibration	Luminance at 100 % intensity. Optional calibration of the spectral radiance (380 nm to 1100 nm). Calibration certificate with description of the calibration procedure, reference standards applied, traceability and calibration uncertainty.
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Calibration

Calibration uncertainty	luminance (cd/m ²):	± 3,5%
	color temperature [K]:	± 2%

Specification

Light Output Port	19 mm
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Luminance

Range: 3 levels

120000 cd/m², 12000 cd/m², 1200 cd/m² (at CCT 2960K with LH-100F-UV)

75000 cd/m², 7500 cd/m², 750 cd/m² (at CCT 2856K with LH-100F-UV)

OD0:

120000 cd/m² (at CCT 2960K with LH-100F-UV)

75000 cd/m² (at CCT 2856K with LH-100F-UV)

OD1:

12000 cd/m² (at CCT 2960K with LH-100F-UV)

7500 cd/m² (at CCT 2856K with LH-100F-UV)

ΔCCT = -10 K

OD2:

1200 cd/m² (at CCT 2960K with LH-100F-UV)

750 cd/m² (at CCT 2856K with LH-100F-UV)

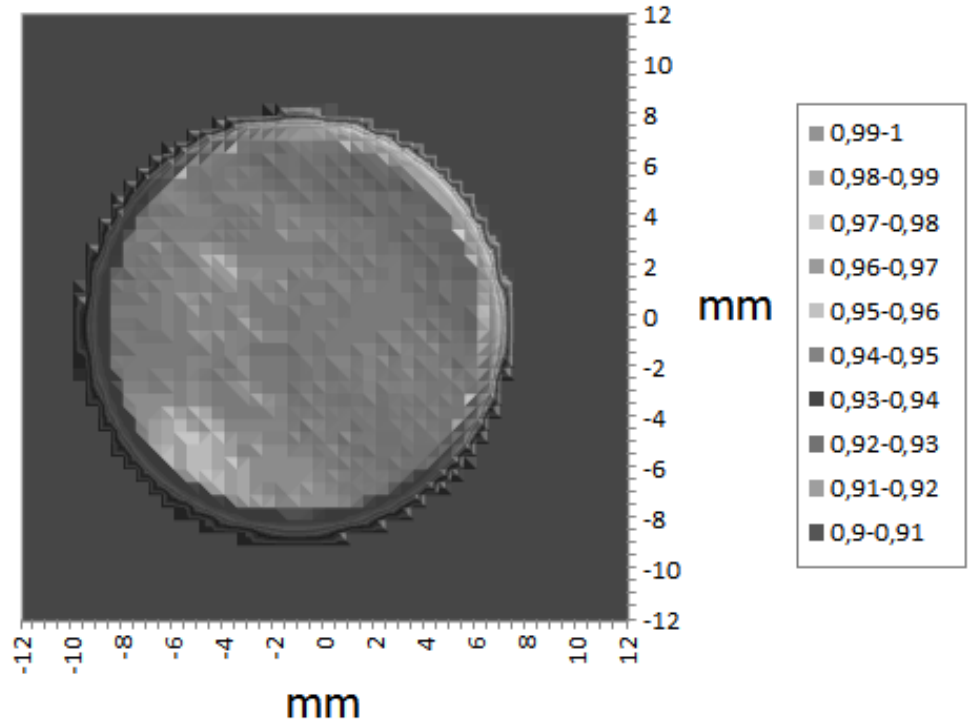
ΔCCT = -20 K

Lamp Connection	Two Banana type plugs
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Specifications	80 mm ODM sphere with 19 mm light entrance port
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Graphs

Uniformity



Configurable with

Product Name	Product Image	Description	Show product
KLW-S3	$L_{(x-y)nm}$	Calibration of the spectral radiance. Features: Factory calibration	https://www.gigahertz-optik.com/en-us/product/klw-s3
KLW-R3	L_e	Calibration of the radiance. Features: Factory calibration	https://www.gigahertz-optik.com/en-us/product/klw-r3
ED-ISS-100-MD		Control electronic for integrating sphere sources. Features: Precise 16D/A power supply for lamps up to 100W. Optometer for intensity or RGB monitor detectors. 19" bench top housing.	https://www.gigahertz-optik.com/en-us/product/ed-iss-100-md

Purchasing information

Article-Nr	Modell	Description
15298235	ISS-8P-HP	Integrating Sphere Source with three OD0, OD1 and OD2 attenuators. Selectable quartz halogen lamp between 5 and 100W. Mains socket plug-in power supply for cooling fans