LDM-C50

https://www.gigahertz-optik.com/en-us/product/ldm-c50/

Product tags:



Description

Precision Spectral Radiance Optic

For the measurement of spectral radiance, Gigahertz Optik GmbH offers the LDM-C50 entrance optics that can be combined with the BTS2048 series. It offers a camera for alignment purposes. This all is implemented in the small and very easy to use LDM-C50 system.

Adjustable Measurement Distance, Aperture, etc.

The integrated camera makes the alignment to the device under test easy for the operator. Each setup can be calibrated and the corresponding calibration is saved in the BTS2048 device. With the help of the e.g. S-BTS2048 software, the operability is also very intuitive. We currently support the spectral range from 360 nm up to 1000 nm.

(In general different F-Mount objectives with different focal length, spectral ranges, etc. are available. Please contact us for further information.)

High-Quality Focus-able Objective

The LDM-C50 is based on a high a high-quality Zeiss objective (f1.4), chromatically corrected lens. The measurement distance ranges from 0.45m to infinity. The camera image is taken by a high quality beam splitter.

Traceable Calibration

Calibration of the spectral radiance is performed by Gigahertz-Optik's calibration laboratory for optical measurands. The details provided in the calibration certificate are as stipulated by the ISO 17025 specifications.

Specifications

General





LDM-C50 with BTS2048-VL-2-TEC



The integrated camera allows easy adjustment of the spectral measurement field (FOV) to the measurement location. In the example, the field of view was positioned to a small aperture. The field of view is displayed in the S-BTS2048 user software.

Calibration	Factory calibration of spectral radiance (spectral sensor) and luminance (photodiode). Traceable to international calibration standards.
Typical applications	spectral radiance measurement of displays, radiance distributions, etc.
Specification	
Optical properties	50 mm / f1.4 Zeiss objective with F-mount and the following aperture settings (f-stop) f1.4 to f16. It is a chromatic corrected high quality objective, focus-able from 0.45 m up to infinity. A beam splitter for the camera is integrated.
Field of View	FOV spectral sensor: 9.4 mm @ 0.5 m distance~ 19 mrad 🛛 1.1° (different spot sizes are available by using different apertures) HFOV camera (horizontal field of view): 32.6 mm @0.5 m distance ~ 65 mrad 🛛 3.7°
	(In general different F-Mount objectives with different focal lenght, spectral ranges, etc. are available. Please contact us for further information.)
Number of pixels	Camera: 1200 x 900

Spectral responsivity

LDM-C50 with BTS2048-VL-TEC (360 nm to 830 nm, OD0 standard to OD2 and up to 1000 nm optional):







Measurement ranges

* Minimum 500/1 S/N. Maximum at full scale control. Irradiation only allowed for a short time so as to avoid thermal damage

Miscellaneous		
Connector	USB 3 micro B direct to PC or USB hub	
Temperature range	Limited by measurement device BTS2048	
Mounting	Radiance optic is fixed to BTS2048 and offers M6 and tripod socket. The objective is mounted by a f- mount.	

spectral sensor for a typical white LED: 40 mcd/m² to 5,5 Gcd/m² *

Purchasing information

Article-Nr	Modell	Description
Product		
15314107	LDM-C50	LDM-C50 Entrance Optic
15314320	BTS2048-VL-TEC / LDM-C50	Spectroradiometer, radiance optic, carry case, users guide, S- BTS2048 software. Calibration available separately.
Calibration		
15315823	K-BTS2048VLTEC-L-S-V02	Calibration of an LDM-C50 with BTS2048-VL-TEC from 360 nm to 1000 nm. Calibration certificate.
15315900	K-BTS2048VLTEC-L-S-V03	Calibration of an LDM-C50 with BTS2048-VL-TEC from 360 nm to 830 nm. Calibration certificate.

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<u>Send us your inquiry</u> or contact us by phone or e-mail. We would welcome your feedback too or review us on <u>Google.</u>

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