ISS-30-TLS Tunable LED Light Source

https://www.gigahertz-optik.com/en-us/product/iss-30-tls-tunable-led-light-source/

Product tags: Multi-Channel ,

Description

Spectral Tunable LED Light Source

The integrating sphere is a “Uniform Light Source” (ISS) and provides an illumination field that exhibits a magnificent level of luminance homogeneity. This special 30 cm ISS version is equipped with a set of LEDs which are controlled by a multichannel power supply in order to control/tune the spectral distribution.

tunable LED light source

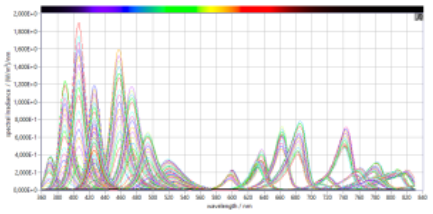
LEDs based light source for Spectral Tuning

Our universal LED module can be directly mounted on the integrating sphere, or used in conjunction with an external spectral light mixer which can itself be equipped with maximum 4 LED modules. By doing so we can add up to 4x12=48 LEDs for the spectral tuning.

ISS-30-TLS tunable light source with spectral CSS-45 reference detector

Based on the Integrating Sphere Construction Kit for User Specific Needs

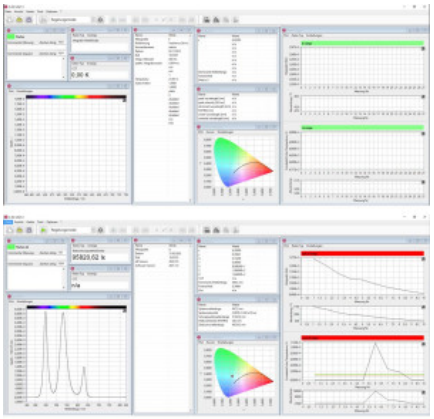
The 30 cm system is an example configuration. Due to the flexibility of our integrating sphere construction kit we are able to offer an individual setup fitting to your user specific application!



The ISS-30-TLS spectral distribution of a examplarily configuration of a tunable LED light source

S-ISS intuitive & powerful control software for intensity and spectral tuning

In addition to active control of CCT and intensity or spectral shape, the S-ISS can also be used with a CSS-45 spectral reference sensor (array-spectoradiometer). The software also allows data exports, control sequences, re-adjustments, etc. The S-ISS is a system controller as software version and runs the electronic device (ED). The performance range of the software will also be continuously increased.



S-ISS software for regulation and control of

Calibration Standard for Spectral Radiance or Spectral Irradiance

Calibration of the spectral radiance of the illumination field makes it possible to use of the integrating sphere light source as a calibration standard for the comparison of spectral radiometers for spectral

radiance. High Dynamic Range Test and Calibration of Imaging and non-Imaging Devices as well as imaging spectrometers or pixel alignment are also major applications. Due to the RGBW LED different CCTs can be used.

As a light source, it can also serve as a spectral irradiance source. If necessary, only the LED unit itself with high irradiance values.

the tunable LED source system

ED-Rack Control Electronic

The control electronic designed and manufactured by Gigahertz-Optik is set-up with a precise multichannel power supply ensures high precision during operation of the integrating sphere light source. The amount of power supplies will be configrued according to you LED configuration.

Traceable calibration of Tunable LED Light Source -ISO 17025 Testing Optional

Calibration of the luminance, spectral radiance and color temperature is performed by the Gigahertz-Optik calibration laboratory for optical measurands. The calibration is done in reference to a calibration standard whose spectral radiance was calibration by the national measurements laboratory. The calibration and its results are confirmed by a corresponding calibration certificate that conforms to the ISO 17025. ISO 17025 testing certificats optional available.

Specifications

Product	
Integrating sphere	300 mm internal diameter with barium sulfate coating (ODP97).
Light Output Port	100 mm
Uniformity	better 98 %
Light Source	multichannel LED, up to 48 channels, depends on customer configuration for spectral LED tuning
Monitor detector	spectral reference sensor CSS-45
Design	S-ISS controls ISS-30-TLS with the help of VAM variable aperture and CSS-45 monitor detector.
Calibration	
Calibration	Spectral Radiance: Spectral range 380 nm to 780 nm in 10 nm steps, including calibration certificate. Luminance: At calibration point *(different calibrations including ISO 17025 testing are optional available)*
Miscellaneous	
Control electronics	ED depends on LED configuration, will be designed accordingly

Power Supply	AC input for (115 - 230) V / (50 - 60) Hz to the ED
Temperature range	(+5 to +30) °C, no condensation

Purchasing information

Article-Nr	Modell	Description
Product		
15317231	ISS-30-TLS	Integrating sphere tunable LED source calibration standard. Including multichannel LED in standard configuration, electronics, CSS-45, S-ISS and calibration certificate.

Contact, Calibration, Service & Support

We are known worldwide for excellent technical consulting and after sales support. Contact us to find together the best solution for you. Our services:

- Technical Consulting & Sales
- After-Sales Support
- Calibrations & Re-Calibrations (ISO/IEC 17025 Calibration Services, factory calibration, Calibration of Third-Party Products)
- Repairs & Updates
- OEM & Feasibility Consulting of Customized Solutions

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

Gigahertz Optik GmbH (Headquarter)

Tel.: +49 (0)8193-93700-0
Fax: +49 (0)8193-93700-50
info@gigahertz-optik.de

An der Kaelberweide 12
82299 Tuerkenfeld, Germany

Gigahertz-Optik, Inc. (US office)

Phone: +1-978-462-1818
info-us@gigahertz-optik.com

Boston North Technology Park
Bldg B - Ste 205
Amesbury, MA 01913 USA