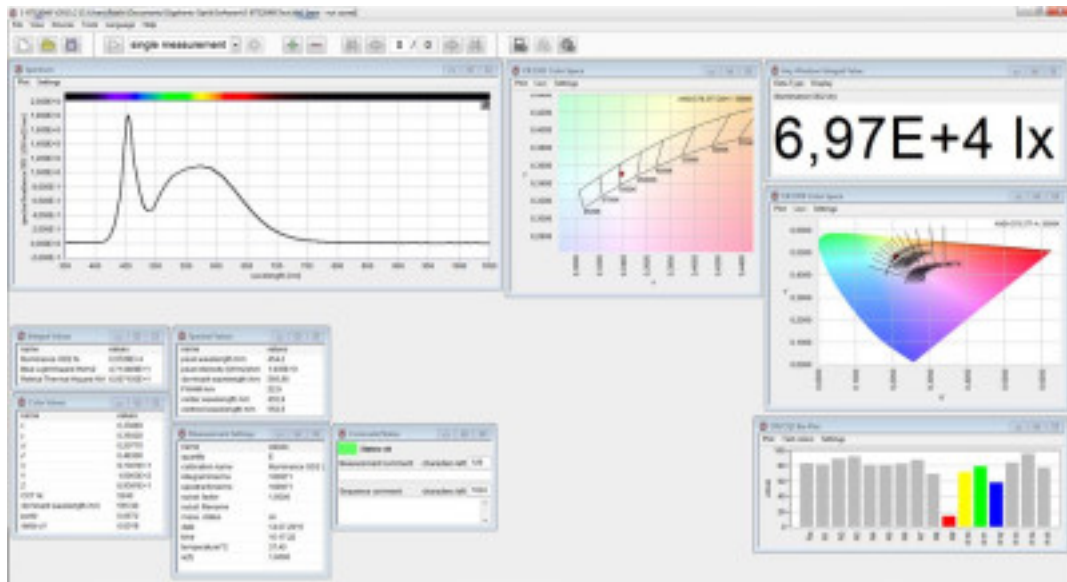


# S-BTS2048

<https://www.gigahertz-optik.com/en-us/product/s-bts2048/>

Product tags:



# Description

The software allows the full control of the device settings like integration time, measurement settings, mathematical corrections, evaluations, etc. We paid great attention to make the software intuitively controllable and provide an state of the art design. Furthermore we improve our software continuously to provide latest standards and evaluation routines.

## Several numerical and graphical displays

The S-BTS2048 software contains several numerical and graphical displays for visualization of your measured data. . These displays are user selected from the view menu and can be positioned anywhere within the application window. Each individual display arrangement can be stored and reloaded. Furthermore two different color schemes are offered, normal and dark room mode with darker background to prevent stray light from the display from reach the detector.

Numerical windows:

- spectral values
- color values (CIE 1931, CIE 1976, CIE 170 (cone fundamental-based evaluation))
- CRI (color rendering index)
- CQS
- intensity and set-up parameters
- comment/status
- measurement settings
- integral values
- TM-30-20 (in older versions TM-30-18 and TM-30-15), CIE224
- etc.

Graphic windows:

- spectral plot
- CIE Chromaticity Diagrams (CIE 1931, CIE 1976, CIE 170)
- polar plot 2D by goniometer measurements
- polar plot 3D by goniometer measurements
- datalogger
- CRI (color rendering index)
- CQS
- TM-30-20 (in older versions TM-30-18 and TM-30-15), CIE224
- $L^*a^*b^*$
- MacLeod-Boynton Chromaticity Diagram
- etc.

## Binning classification

For LED binning additional graphic layers can be shown within the CIE 1931 diagram like the Planckian locus, ANSI or MacAdam Ellipsen. These graphical layers can be used to classify your test samples. Additional layers can be defined by each user individually.

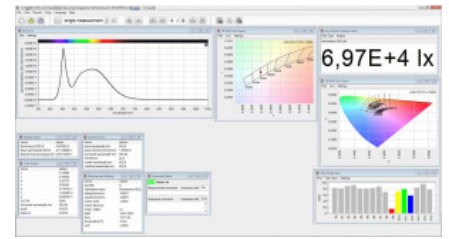
## External devices

In addition external devices like power supplies or goniometers can be controlled with the S-BTS2048. As well external devices like a Keithley 2400.

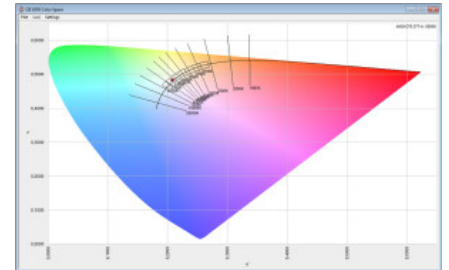
## Self-Absorption Correction (Substitution correction)

The self-absorption correction (often substitution correction called) set-up screen in the S-BTS2048 software prompts the end-user through the self-absorption correction routine for the BTS2048 light meter with an optional integrating sphere. The routine includes automatic control of the integrating sphere auxiliary lamp and Gigahertz-Optik power supply if supplied.

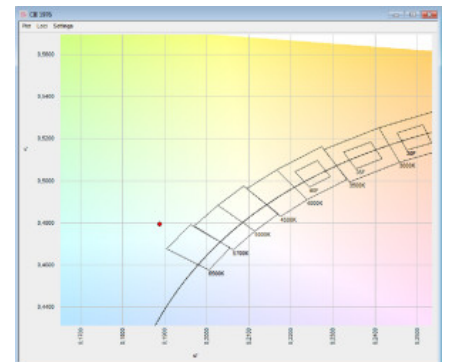
## Re-calibration



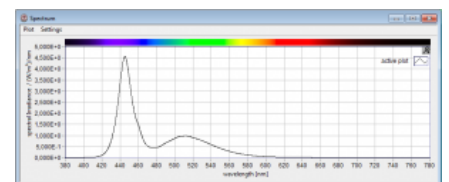
color schemes



CIEuv1976



CIE 1976



spectral plot

In the S-BTS2048 software a re-calibration routine is implemented to perform re-calibrations with optional calibration equipment of Gigahertz-Optik very easy.

**Data Export to common file formats** Data can be exported in different formats (IES, Eulumdat, ASCII, Microsoft Excel)

IES format (only with goniometer): IES stands for Illuminating Engineering Society. IES standard file format was created for the electronic transfer of photometric data. It has been widely used by many lighting manufacturers and is one of the industry standards in photometric data distribution.

EULUMDAT format (only with goniometer): EULUMDAT is a format for electronic transfer of photometric data. The typical file extension is "\*.ldt". The format was created 1990 and is a de facto standard in European industry.

## Database

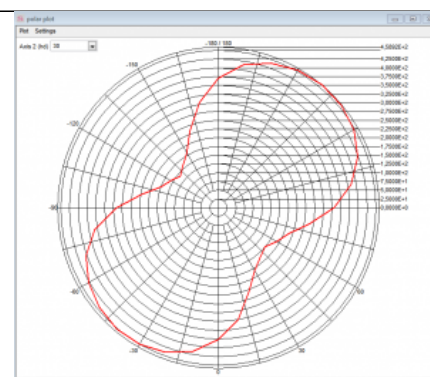
The S-BTS2048 is based on a database architecture, this allows the handling of a large number of measurements. Furthermore datasets can be easily saved, loaded and exported.

## Extension tools

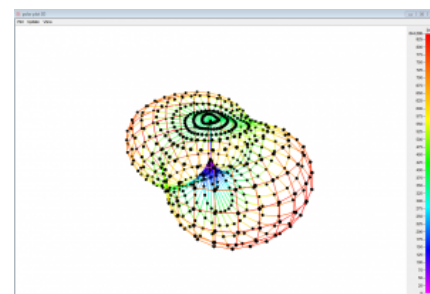
The software can be extended by tools like a user control management, automatic complex measurement sequences, etc. Furthermore customized tools can be developed and integrated.

## Report Generation

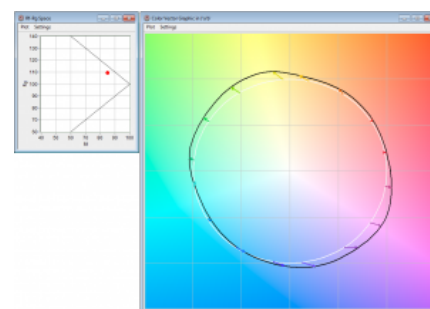
Based on the database an export of measurement data to an Microsoft Word file is provided. The data which is exported is customizable by the user.



2D Polar Plot



3D Plot



TM-30-15










## Specifications

### General



#### System requirements

- Minimum HDD space: 300MB, more space is needed when performing large measurement sequences
- Minimum RAM required: 2 GB , recommended 4 GB or more
- Processor: recommended 2 GHz or more
- Operating System: Windows 11, Windows 10 32-bit, Windows 10 64-bit, Windows 7 32-bit, Windows 7 64-bit
- minimum monitor resolution: 800 x 600 pixel, recommended 1600 x 900 pixel or more
- communication: USB-port or LAN

## Configurable with

| Product Name                 | Product Image   | Description   | Go to product   |
|------------------------------|---|---|---|
| BTS2048-UV-S                 |    | Measure in the UV with this high-quality compact spectroradiometer                          | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-uv-s/">https://www.gigahertz-optik.com/en-us/product/bts2048-uv-s/</a>                             |
| S-SDK-BTS256                 |    | Software Development Kit for BTS256 variants.   | <a href="https://www.gigahertz-optik.com/en-us/product/s-sdk-bts256/">https://www.gigahertz-optik.com/en-us/product/s-sdk-bts256/</a>                             |
| BTS2048-UV-S-WP              |    | Spectroradiometer ideal for high precision outdoor UV measurements                          | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-uv-s-wp/">https://www.gigahertz-optik.com/en-us/product/bts2048-uv-s-wp/</a>                       |
| BTS2048-VL-TEC-WP            |    | Outdoor Spectroradiometer for Solar VIS measurements  | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-vl-tec-wp/">https://www.gigahertz-optik.com/en-us/product/bts2048-vl-tec-wp/</a>                   |
| GB-GD-360-RB40-2-BT S2048-VL |  | System for measurement of the luminous intensity distribution of $2\pi$ spot lamps and LEDs | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-vl-gb-gd-360-v01-2/">https://www.gigahertz-optik.com/en-us/product/bts2048-vl-gb-gd-360-v01-2/</a> |
| BTS2048-BS                   |  | Spectroradiometer for Blue Laser Radiation  | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-bs/">https://www.gigahertz-optik.com/en-us/product/bts2048-bs/</a>                                 |
| BTS2048-VL-TEC-F             |  | Fiber-Coupled Version of the Versatile High Speed BTS2048-VL-TEC                            | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-vl-tec-f/">https://www.gigahertz-optik.com/en-us/product/bts2048-vl-tec-f/</a>                     |
| BTS2048-VL-F                 |  | Fiber-Coupled Version of the Versatile High Speed BTS2048-VL                                | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-vl-f/">https://www.gigahertz-optik.com/en-us/product/bts2048-vl-f/</a>                             |
| BTS2048-VL-TEC               |  | Versatile Temperature Controlled High Speed and High Quality LED Spectroradiometer          | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-vl-tec/">https://www.gigahertz-optik.com/en-us/product/bts2048-vl-tec/</a>                         |

| Product Name                   | Product Image   | Description  | Go to product   |
|--------------------------------|---|--|---|
| TFCT25                         |    | Measurement system for the color transmission of fibers and flux, spectrum and color of cw and pulse operated LEDs.  | <a href="https://www.gigahertz-optik.com/en-us/product/tfct25/">https://www.gigahertz-optik.com/en-us/product/tfct25/</a>   |
| BTS2048-VL-CP-ILED-B-IS-1.0-HL |    | CCD-sensor spectral radiometer for measurement of CIE 127B averaged LED intensity. Features: Measurement Adapter with compact integrating sphere for uniform active area. High-end CCD-sensor spectral Radiometer for CW and pulse measurements. | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-vl-cp-iled-b-is-1.0-hl/">https://www.gigahertz-optik.com/en-us/product/bts2048-vl-cp-iled-b-is-1.0-hl/</a> |
| ISD-25-BTS2048-VL              |    | System for the luminous flux and light color measurement of individual 2π LED lamps up to 76.2 mm.   | <a href="https://www.gigahertz-optik.com/en-us/product/isd-25-bts2048-vl/">https://www.gigahertz-optik.com/en-us/product/isd-25-bts2048-vl/</a>                           |
| ISD-15-BTS2048-VL              |    | Compact integrating sphere spectroradiometer system for LED test and system integration  | <a href="https://www.gigahertz-optik.com/en-us/product/isd-15-bts2048-vl/">https://www.gigahertz-optik.com/en-us/product/isd-15-bts2048-vl/</a>                           |
| BTS256-LED Plus Concept        |    | The Plus concept describes the many applications that are possible with the BTS256-LED   | <a href="https://www.gigahertz-optik.com/en-us/product/bts256-led-plus-concept/">https://www.gigahertz-optik.com/en-us/product/bts256-led-plus-concept/</a>               |
| BTS2048-UVVISNIR               |   | Deep UV to NIR High-End Spectroradiometer  | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-uvvisnir/">https://www.gigahertz-optik.com/en-us/product/bts2048-uvvisnir/</a>                             |
| GB-GD-360-RB40-2-BT S2048-UV   |  | Get high spectral stray light suppression for UV disinfection lamps  | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-uv-gb-gd-360-v01/">https://www.gigahertz-optik.com/en-us/product/bts2048-uv-gb-gd-360-v01/</a>             |
| BTS2048-IR                     |  | Compact IR Spectroradiometer Fulfilling all the Requirements of a High-End Array Spectroradiometer   | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-ir/">https://www.gigahertz-optik.com/en-us/product/bts2048-ir/</a>   |
| BTS2048-UV-2                   |  | UV to Blue Spectral Range High-Quality Compact Spectroradiometer   | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-uv-2/">https://www.gigahertz-optik.com/en-us/product/bts2048-uv-2/</a>                                     |
| TFUV10                         |  | Spectroradiometer for Total Radiant Power Measurements of UV LEDs from 200 nm to 550 nm  | <a href="https://www.gigahertz-optik.com/en-us/product/tfuv10-v01/">https://www.gigahertz-optik.com/en-us/product/tfuv10-v01/</a>   |
| SST-1800 Series                |  |  | <a href="https://www.gigahertz-optik.com/en-us/product/sst-1800-series/">https://www.gigahertz-optik.com/en-us/product/sst-1800-series/</a>                               |

| Product Name  | Product Image   | Description  | Go to product   |
|---------------|---|--|---|
| BTS2048-IR-WP |  | Spectroradiometer ideal for high precision outdoor IR measurements               | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-ir-wp/">https://www.gigahertz-optik.com/en-us/product/bts2048-ir-wp/</a> |
| BTS2048-UV-F  |  | Measure in the UV with this high-quality compact fiber coupled spectroradiometer | <a href="https://www.gigahertz-optik.com/en-us/product/bts2048-uv-f/">https://www.gigahertz-optik.com/en-us/product/bts2048-uv-f/</a>   |

## Purchasing information

| Article-Nr      | Modell    | Description                             |
|-----------------|-----------|---|
| <b>Software</b> |           |   |
| 15298474        | S-BTS2048 | User software for BTS2048 and variants. |

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- OEM & Feasibility Consulting of Customized Solutions

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