

BTS-Solar

<https://www.gigahertz-optik.de/en-us/product/BTS-Solar>

Product tags: UV , Weatherproof



Description

BTS-Solar

Measurement system for direct spectral irradiance measurements of solar radiation. The system consists of a BTS2048-UV-S-WP (Spectroradiometer with tube), SUT-1711 (Suntracker), SUT-Z01 (Sunfinder), SolarRunner (Software) and connection cables. Evaluations like TOC (Total Ozone Column) are supported by the measurement system.

Compact sun tracker design

The SUT-1711 is a compact sun tracker for worldwide use under all weather conditions. It is equipped with a tripod stand and a spirit level for adjustment.

Payload designed for single devices

The accurate motion system does not require maintenance. The maximum payload depends on the resulting leverage and is typically limited to 5.5 kg. The unit is perfectly suited for the BTS2048-xx-WP series.

Fine sun tracking accessory

For extended accuracy sun tracking a direct sun sensor with integrated GPS receiver and four quadrant diode can be used as an accessory (SUT-Z01). This system automatically configures location and provides precise time information. This sensor is usually connected with the measurement device and communicates via the application software with the sun tracker.

Software controlled

The SolarRunner software is the application software for the full measurement system.

In addition the SUT-1711 can be controlled by a software development kit (SDK) or by the application software of the used Gigahertz-Optik GmbH measurement device (e.g. BTS2048-xx-WP series). The software automatically controls the SUT-1711 in order to track the sun position depending on the GPS position and time. For even more precise control and automatic setup the fine sun tracking accessory SUT-Z01 is recommended.



BTS-Solar at Brewer intercomparison in Mazagon/Huelva



SUT-1711 equipped with BTS2048-UV-S-WP and tube for direct sun measurement

Specifications

General	
Short description	Direct spectral irradiance measurement system for e.g. TOC measurements
Main features	accurate TOC determination, compact design, price attractive
Measurement range	depending on quantity, see specific data sheet
typical applications	Sun tracking with the BTS2048 WP series for direct solar spectral irradiance measurements and TOC determination
Calibration	a calibration of the BTS2048-UV-S-WP spectroradiometer is needed
Product	
General	<p>Specifications spectroradiometer see: BTS2048-UV-S-WP</p> <p>Suntracker:</p> <ul style="list-style-type: none"> • Pan resolution of 0.006° • Tilt resolution of 0.003° • IP67 • temperature range:(-30 to 70) °C • Load: 5.5 kg • Solar finder with GPS for fully automatic tracking

Configurable with

Produktname	Product Image	Description	Show product
BTS2048-UV-S-WP		<p>Bi-technology sensor light meter for high quality solar UV measurements.</p> <p>Features: Weatherproofed, high stray light reduction (comparable double monochromator), high spectral resolution, short measurement time, entrance optic with diffusor for irradiance and spectral irradiance, etc.</p>	https://www.gigahertz-optik.de/en-us/product/BTS2048-UV-S-WP
BTS2048-VL-TEC-WP		<p>Bi-technology sensor light meter for high quality solar VIS measurements.</p> <p>Features: Weatherproofed, high spectral resolution, short measurement time, entrance optic with diffusor for irradiance and spectral irradiance, etc.</p>	https://www.gigahertz-optik.de/en-us/product/BTS2048-VL-TEC-WP

Purchasing information

Article-Nr	Modell	Description
Product		

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15310546	BTS-Solar	Full system consistent of BTS2048-UV-S-WP (Spectroradiometer with tube), SUT-1711 (Suntracker), SUT-Z01 (Sunfinder), SolarRunner (Software) and connection cables
Components		
15309077	SUT-1711	Sun tracker
15309861	SUT-Z01	Fine sun tracking unit (4 quadrant diode with GPS)
15307929	BTS2048-XX-WP-Z02	tube for the measurement of the direct solar irradiance
15309878	BTS2048-XX-WP-Z11	adapter for a BTS2048-XX-WP
15310548	SolarRunner	Software for BTS-Solar system