



specbos 1211UV-2

Broadband Radiometer 230 ... 1000 nm

specbos 1211UV-2 is a broadband miniaturized spectroradiometer which can be used for spectral Radiance as well as spectral Irradiance measurements in the wavelength range of

230 ... 1000 nm.

Highlights:

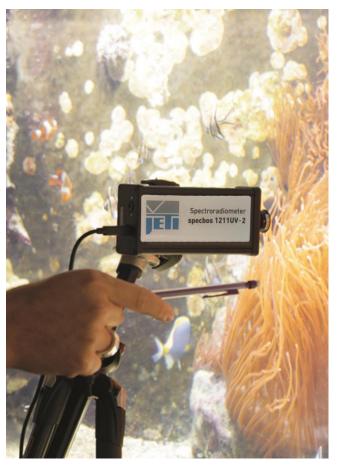
- Wavelength range from UV to NIR
- High sensitivity
- · Radiance as well as Irradiance measuring modes
- Action spectra can be applied
- Small and easy to use
- NIST traceable calibration
- Measurement also possible with DLLs or SCPI compatible commands

Software **JETI LiVal** (for a demo version see www.jeti.com):

- Intuitive operation
- Weighting the obtained spectrum with an action function
- Classification of samples
- Easy data export to Excel and CSV
- · Automatic detection of attached accessories
- Specific calculations as PAR, circadian metrics and metamerism according to ISO 23603

Additional features:

- Pass/ fail decisions
- Ranking function (up to 16 ranks)
- Saving of reference spectra
- Spectral calculations
- · Data export in csv and xls files
- Switching between Si and Imperial units



Advantages:

- USB powered
- · Very fast measurement
- Internal target spot laser (luminance measurement)
- Mechanical shutter for dark signal compensation
- Easy to install
- Start of measurement with external trigger



Specifications

Optical parameters

Spectral range 230 ... 1000 nm

Optical bandwidth 4.5 nm Wavelength resolution 1 nm Digital electronic resolution 15 bit ADC

Viewing angle 1.8° (Luminance mode)

Measuring distance/ diameter (measured from front end of the device)

20 cm - Ø 7 mm: 100 cm - Ø 33 mm

Measuring values Spectral Radiance/ Irradiance, Luminance/ Illuminance,

total Radiance/ Irradiance, x,y, u',v', CCT, color purity, CRI,

RGB, PAR, TLCI, circadian metrics and others

Measuring ranges and typical measuring uncertainties (according to CIE TN 009:2019)

Luminance measuring range 0.2 ... 150 000 cd/m² (Illuminant A)

0.2 ... 100 000 cd/m² (typical warm white LED)

(higher values with optional filter)

± 4.4 % (Illuminant A @ 100 cd/m², k=2) Luminance uncertainty

Luminance repeatability ±1%

Chromaticity uncertainty ± 0.002 x, y (Illuminant A, k=2) ± 0.0005 x, y (Illuminant A) Color repeatability 1 ... 1 800 000 lx (Illuminant A) Illuminance measuring range

1 ... 1500 000 lx (typical warm white LED)

± 2.4 % (Illuminant A @ 2000 lx, k=2) Illuminance uncertainty

CCT repeatability ± 20 K (Illuminant A) Max. wavelength error ± 0.5 nm (HgAr line source)

Polarization error f8 < 1 %

Other technical data

Dispersive element Imaging grating (flat field)

Light receiving element Backthinned CCD array 2048 pixels (binned)

Power supply USB Hub powered

USB 2.0 fullspeed, Bluetooth (specbos 1211UV-2-BT) Interface

RS232 (specbos 1211UV-2-RS), LAN (specbos 1211UV-2-LAN)

Dimensions 180 mm x 82 mm x 53 mm

Weight 450 g

Operating conditions Temperature 10 ... 40 °C

Humidity < 85 % relative humidity at 35 °C

PC software JETI LiVal for Windows 8.1/10. Accessories (included)

> operating instructions and software development kit on BT stick, USB cable, battery charger and trigger connector,

tripod, carrying case, protection cap

Calibration certificate

Accessories (optional) Filters, side view and fiber extended diffusors,

add on optics

Calibration NIST traceable

Recommended interval 1 year