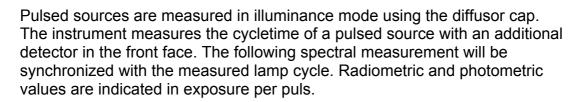




specbos 1201 flash

specbos 1201 flash is a spectroradiometer which can measure continuously pulsed, single pulse as well as cw light sources. It can be used in laboratory and production environment to measure the following quantities:

- Luminous exposure (pulse)
- Luminance, Radiance (cw)
- Illuminance, Irradiance (cw)
- xy and u'v' coordinates
- Dominate wavelength, Color purity
- Correlated Color Temperature
- Color Rendering Index
- Circadian metrics, Photosyntheti-cally Active Radiation (only cw)



Advantages:

- USB powered
- optical synchronisation to continuously pulsed sources, no electrical clock signal necessary
- triggering of single pulses
- easy to install and to operate
- powerful, but easy manageable software
- DLLs and firmware measuring commands

Measuring objects:

- Pulsed sources as emergency lights, flash lamps, shoppered lamps and slowly pulsed LEDs
- Continuous and quasicontinuous sources as TV, Monitors, LCD-, LED-Displays, digital projectors, traffic lights, car lights



Specification

Optical parameters

Spectral range 380 nm ... 780 nm

Optical bandwidth 5 nm

Wavelength resolution 1 nm

Digital electronic resolution 15 bit ADC

Viewing angle 1,8° (luminance)

Measuring distance/ diameter 20 cm - Ø 6 mm; 100 cm - Ø 31 mm (luminance)

Measuring values

Pulsed sources: Spectral radiant exposure

Integral luminous and radiant exposure Chromaticity coordinates x,y; u',v'

Correlated Color Temperature, Color purity,

Color Rendering Index

CW sources: Spectral radiance / irradiance.

Integral luminance / radiance, Integral illuminance / irradiance Chromaticity coordinates x,y; u',v'

Correlated Color Temperature, Color purity,

Color Rendering Index

Circadian metrics, Photosynthetically Active Radiation

Measuring ranges and accuracies

Measuring range luminous exposure per puls (integrated illuminance)

200 ... 5000 lx·s (single flash) 5 ... 5000 lx·s (flash sequence)

Pulse frequence 0.2 ... 20 Hz

Measuring range luminance $2 \dots 7 \cdot 10^4$ cd/m² (higher values with optional filter)

Luminance accuracy $\pm 2 \%$ (@ 1000cd/ m² and 2856 K)

Luminance repeatability \pm 1 %

Chromaticity accuracy $\pm 0.002 \text{ x, y } (@ 2856 \text{ K})$

Color repeatability $\pm 0.0005 \text{ x, y}$ Wavelength accuracy $\pm 0.5 \text{ nm}$

Other technical data

Dispersive element Imaging grating (flat field)

Light receiving element Photodiode array 1024 pixel (binned)

Power supply Hub powered
Interface USB 2.0 fullspeed

Dimensions 140 mm x 58 mm x 34 mm

Weight 350 g

Accessories (included) PC software JETI LiMeS for Windows 2000/XP/ Vista

DLL, LabVIEW VI's

USB cable and trigger connector

2 Cosine diffusors (for irradiance measurement) Calibration certificate, operation instructions

Tripod, transport box

NIST traceable calibration Recommended interval: one year

JETI Technische Instrumente GmbH

Tatzendpromenade 2 D-07745 Jena



〒222−0033

横浜市港北区新横浜1-4-15 石橋ビル TEL:045-478-4633 FAX:045-478-4677