

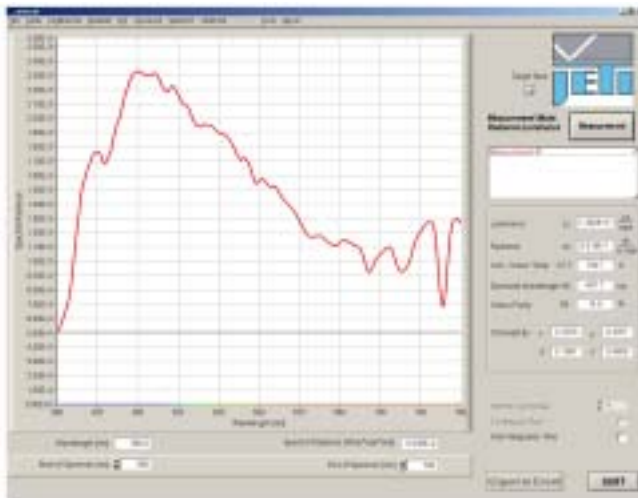
Spectroradiometer specbos 1201/ 1201 M

specbos 1201/ 1201 M are precise and compact VIS spectroradiometers. They can be used in laboratory as well as production environment to measure the following quantities:

- Luminance, Radiance
- Illuminance, Irradiance
- xy and u'v' coordinates
- Dominate wavelength, Color purity
- Correlated Color Temperature
- Color Rendering Index
- Circadian metrics, Photosynthetically Active Radiation



Luminous Intensity and Luminous Flux measuring heads are optional.



Screenshot of the radiometric software (daylight)

The instruments can be operated with the intuitive measuring software LiMes (for a demo version see www.jeti.com). Furthermore it is possible to implement the instruments into individual applications using the virtual COM port directly by the following ways:

- Radiometric DLL
- Radiometric Virtual Instruments for LabView
- Serial commands

Advantages:

- USB powered
- Internal target spot laser (luminance measurement)
- Easy to install
- Start of measurement with external trigger signal (short cut or TTL)

Measuring objects:

- TV, Monitors, LCD-, LED-Displays
- Digital projectors
- Traffic lights, car lights
- Room illumination
- Lamps, LEDs

Specification

Optical parameters

Spectral range	380 nm ... 780 nm
Optical bandwidth	5 nm (specbos 1201), 9 nm (specbos 1201 M)
Wavelengths resolution	1 nm
Digital electronic resolution	15 bit ADC
Viewing angle	1,8°
Measuring distance/ diameter	20 cm - Ø 6 mm; 100 cm - Ø 31 mm (luminance)

Measuring values

Spectral radiance
Total luminance / total radiance
Total illuminance / total 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 luminance	2 ... 7 x 10 ⁴ cd/m ² (higher values with optional filter)
Measuring range illuminance	20 ... 5 x 10 ⁵ lx
Luminance accuracy	± 2 % (@ 1000cd/ m ² and 2856 K)
Luminance repeatability	± 1 %
Chromaticity accuracy	± 0.002 x, y (@ 2856 K)
Color repeatability	± 0.0005 x, y
CCT repeatability	± 20 K (@ 2856 K)
Wavelength accuracy	± 0.7 nm

Other technical data

Dispersive element	Imaging grating (flat field)
Light receiving element	Photodiode array 1024 pixel (binned)
Power supply	USB powered
Interface	USB 2.0 fullspeed
Dimensions	140 mm x 58 mm x 34 mm
Weight	350 g
Operating conditions	Temperature 10 ... 40 °C Humidity < 85 % relative humidity at 35 °C
Accessories (included)	PC software JETI LiMeS for Windows 2000/XP DLL, LabVIEW VI's USB cable and trigger connector Diffusor (for illumination measurement) Calibration certificate, operation instructions Tripod, transport box
Accessories (optional)	Integrating spheres of different diameters, Luminous intensity measurement set up (CIE 127, cond. A and B)
Calibration	NIST traceable
Recommended recalibration interval	1 year



Glen Spectra, 2 Dalston Gardens, Stanmore, Middlesex HA7 1BQ
Tel: 020 8204 9517 Fax: 020 8204 5189
Email: info@glenspectra.co.uk Web: www.glenspectra.co.uk