

Spectroradiometer

JPS -100, JPS -200, JPS -300



- Measures radiation spectra in relative, energy (Watts), or quantity units (moles) and reflected and transmitted spectra
- Ruggedized fiber-optic spectroradiometers
- Designed for portability in a rugged aluminum enclosure without moving parts
- Exclusive cosine-corrected detector accurately measures bw angle light
- Calibrated measurement ranges from 300 to 1000 nm (NIST traceability) with less than 1.0 nm resolution
- All-in-one package including software interface and is powered via USB cable from laptop or desktop computer



NPS -100: Visible to Near Infrared Range



NPS-200: UV to Visible Range
NPS-300: UV to Near Infrared Range

SPECIFICATIONS

Wavelength Sensitivity:

JPS-100: 350 to 1150 nm

JPS-200: 190 to 850 nm

JPS-300: 220 to 1100 nm

Irradiance Calibration Range:

JPS-100: 350 to 1000 nm

JPS-200: 300 to 850 nm

JPS-300: 300 to 1000 nm

Wavelength Resolutions:

JPS-100: 1.0 nm (full width, half maximum)

JPS-200: 0.85 nm (full width, half maximum)

JPS-300: 1.5 nm (full width, half maximum)

Detector Type: CCD, 2048 pixel (14 μm by 200 μm pixel size)

Digitizer: 16-bit

Signal to Noise Ratio: 1000:1

Stray Light: JPS-100: < 0.1 % at 435 nm; < 0.5 % at 600 nm
JPS-200, JPS-300: 0.02 % at 435 nm; 0.2 % at 200 nm

Measurement Repeatability: < 1 %

Calibration Uncertainty: ± 10 % (for irradiance calibration)

Integration Time Range: 1 ms to 65 s

Field of View: Cosine-corrected detector: 180°
Fiber optic cable: 30°

Directional (Cosine) Response: ± 5 % at 80° zenith angle

Operating Environment: 0 to 60 C

Power Requirement: 5 V DC with a nominal current draw of 100 mA via USB

Dimensions: JPS-100: 12.5 cm length, 7.5 cm width, 2.5 cm height
JPS-200, JPS-300: 15.0 cm length, 10.0 cm width, 6.9 cm height

Mass: JPS-100: 500 g
JPS-200, PS-300: 900 g

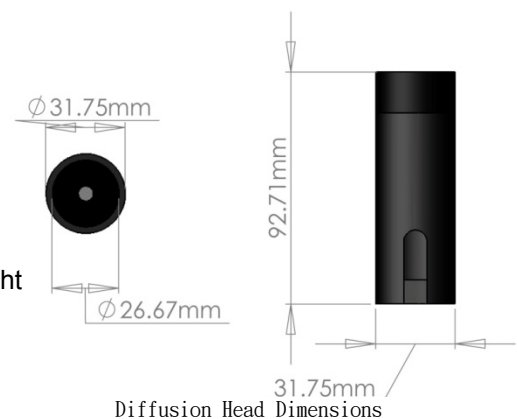
Cable: 2 m of armored, 600 μm diameter single strand, multi-mode fiber optic cable



AS-003: Reflectance Probe



AS-004: Reflectance Standard



Diffusion Head Dimensions