SR-5000N

Remote Sensing Spectroradiometer

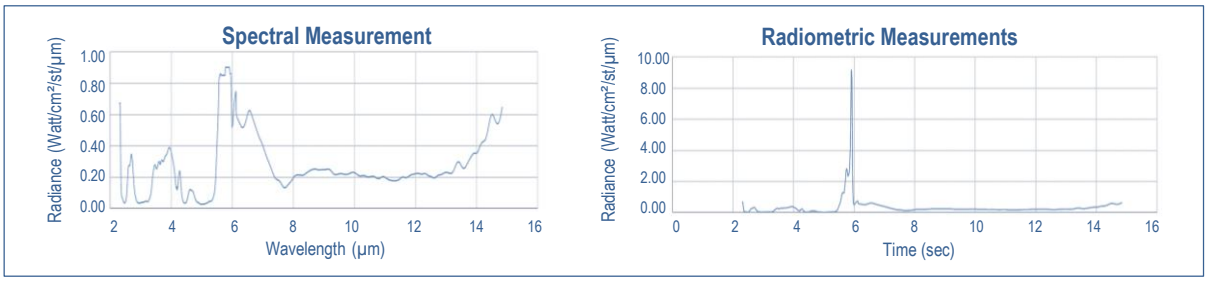
The CI Systems SR-5000N Spectroradiometer is an improved-performance instruments that measures the spectral signatures of objects from a variable distance of between a few meters to tens of kilometers and more.

The measurements can be done either spectrally, yielding radiance as a function of wavelength or radiometrically to obtain radiance as a function of time.

The improved performance comes with an upgraded, compact design and includes all the functionality of its highly successful predecessor.

The SR-5000N is the ideal spectroradiometer for research applications involving Remote Sensing, due to the wide spectral range coverage (from UV to LWIR), the high sensitivity of the cooled detectors used in the system, and the accuracy of the radiometric calibration based on CI Systems' our state-of-the-art blackbodies.

Users can control some of the SR-5000N parameters (such as field of view, focus distance, measurement time and others), making work with the SR-5000N and its user-friendly interface, efficient and easy.



Example for the SR-5000N Measurements

» TYPICAL APPLICATIONS

Monitoring and Measurement of:

- Atmospheric Transmission
- Temperature
- Emissivity
- Reflectivity
- Moisture content
- Air pollution
- Gas-burning byproducts
- Combustion processes

Development and Production of:

- Camouflage Materials
- Electro-Optical Countermeasures
- Electro-Optical Jammers
- Rocket Engines
- Jet Engines
- Electro-Optical Heat Seekers
- Electro-Optical Sensors

Calibration and Testing of:

- Imager Test Systems
- Electro-Optical Simulators
- Electro-Optical Radiation Sources
- Electro-Optical Jammers
- Materials

Distribution in the UK & Ireland

Lambda

Lambda Photometrics Limited
Lambda House Batford Mill
Harpenden Herts AL5 5BZ
United Kingdom
E: info@lambdaphoto.co.uk
W: www.lambdaphoto.co.uk
T: +44 (0)1582 764334
F: +44 (0)1582 712084

SR-5000N

Remote Sensing Spectroradiometer

» ADVANTAGES

- High sensitivity
- High accuracy
- Wide spectral band (from UV to LWIR)
- High reliability
- Modular
- Suitable for Laboratory or Field Use

» FEATURES

- Automatic self-calibration
- Real-time data analysis and display
- Rapid scan rates
- Integrated with an imaging system
- Spectral mode measurements (radiance vs. wavelength)
- Radiometric mode measurements (radiance vs. time)
- Retains accuracy when measuring ambient-temperature objects

» SIGNAL PROCESSING

- Signal averaging for improved sensitivity
- Mathematical computation using spectral data
- Transient analysis of rapidly-occurring events
- 3D plots (radiance vs. time and wavelength)
- Spectral emissivity measurement
- Effective temperature measurement
- Countermeasures analysis

» SPECIFICATIONS

FOV Options	7 mrad (NFOV), 5° (MFOV), 10° (WFOV) and 20° (VWFOV)
Focusing Range:	NFOV: Short-Range Focus: 1 – 2 meters Mid-Range Focus: 1.5 – 4 meters Long-Range Focus: 2.8 meters to infinity 1 meter to infinity for all other optics
Spectral Range:	0.2 to 14.3 µm ***(1)***
Spectral Resolution:	< 3 nm in the 0.2-1.0 µm band < 2% of wavelength in the 1.0-14.2 µm band
Spectral Scan Rate	Various scan rates of up to 50 spectra/sec
Focus and Alignment	Integrated CCD and LCD display
Noise Performance	Example: 5mK for an InSb detector at 5 µm, 100°C blackbody, bandwidth normalized to 1 Hz

(1) *Using multiple detectors and CVFs (Circular Variable Filter)*

CI SYSTEMS
www.ci-systems.com

Distribution in the UK & Ireland

Lambda

Characterisation, Measurement & Analysis

Lambda Photometrics Limited
Lambda House Batford Mill
Harpenden Herts AL5 5BZ
United Kingdom
E: info@lambdaphoto.co.uk
W: www.lambdaphoto.co.uk
T: +44 (0)1582 764334
F: +44 (0)1582 712084