

SVC Spectrometer HR-1024i



Year of Purchase:2017

Cost: 49.19 Lac

HR-1024i Details

Designed for maximum optical performance the SVC HR-1024i has:

- Co-aligned symmetrical and uniform field of view
- Full conical field of view eliminating spectral discontinuities and step discontinuities at the spectrometer sensor interfaces
 - Conical field of view gives better measurement data for all surfaces, especially heterogeneous surfaces

Features

And the HR-1024i delivers the highest quality data with industry leading ease of use:

- Data stored in the built-in computer – no external computer to carry in the field
- Scene photos and GPS coordinates stored with every file, so you know exactly what the conditions were for each scan
- Two Bluetooth devices allow the instrument to receive data from an external sensor suite containing up to 16 separate sensors. The sensor suite can include downwelling sensors supplying instantaneous broad or narrow band solar response. The sensor data is stored with the spectral data file, allowing the researcher to understand changes in solar irradiance and assist in corrections
- Other environmental sensors are available.

Specifications

Feature	Specifications
HR-1024i Specifications	
Spectral Range	350 nm – 2500 nm
Internal Memory	1000 scans
Channels	1024

Linear Array	(1) 512ch Si, 350 – 1000 nm (1) 256ch InGaAs, 1000 – 1890 nm (1) 256ch Extended InGaAs, 1890 – 2500 nm
Spectral Resolution (FWHM)	3.3 nm, 700 nm ≤ 9.5 nm, 1500 nm ≤ 6.5 nm, 2100 nm
Bandwidth (nominal)	≤ 1.5 nm, 350 – 1000 nm ≤ 3.8 nm, 1000 – 1890 nm ≤ 2.5 nm, 1890 – 2500 nm
Minimum Integration	1 millisecond
FOV	4° standard, 8° or 14° optional 25° optional armored fiber optic
Noise Equivalent Radiance	≤ 0.8 x 10 ⁻⁹ W/cm ² /nm/sr @ 700 nm ≤ 1.2 x 10 ⁻⁹ W/cm ² /nm/sr @ 1500 nm ≤ 1.2 x 10 ⁻⁹ W/cm ² /nm/sr @ 2100 nm
Stand Alone Measurements (no computer required)	Standard
Calibration Accuracy (NIST Traceable)	±5% @ 400 nm ±4% @ 700 nm ±7% @ 2200 nm
Wavelength Reproducibility	0.1 nm
Dark Current Correction	Automatic
Spectrum Averaging	Automatic/selectable
Internal Digital Camera	Supplied
Internal GPS	Supplied
Physical Specifications	
Head Size	8.75" x 11.5" x 3.0"
Weight	8.5lbs., 3.8kg
Host Communications Interface	Wireless Bluetooth USB RS232
Sealing	Sealed against dirt and dust
Tripod mounting	Standard 1/4-20 camera mounts
Battery Type	7.4 V lithium ion
Battery Life	3 hours approximately
Sighting	Laser diode