

# SCIVIDI—FULL RANGE SPECTRORADIOMETER

#### Applications

#### Features

- 350-2500nm spectral range covers UV-VIS-NIR range
- Revolutionary 1/8m design
- Ruled diffraction gratings and beam splitting optics
- High speed readout (10 / second)
- 16bit digitization
- TEC cooled sensors
- Variety of optical attachments
  available

- Solar Radiation Measurement
- Solar simulator testing and classification
- Light source metrology



# **PRODUCT NAME**

Sciencetech is proud to offer the Sci-Vidi spectroradiometer. Vidi is a latin word meaning 'I Saw'. With the Sci-Vidi you can finally see your light!

The Sci-Vidi instrument utilizes a unique over-under 1/8 meter spectrometer design to optimize throughput and resolution. For the most reliable system the Sci-Vidi insturment primarily utilizes ruled reflection gratings and first surface coated optics. This instruments optical design keeps aberrations such as chromatic aberration to a minimum.

The Sciencetech SciRunFS software can be used with the Sci-Vidi instrument to perform radiometrically calibrated measurements. Data can be saved in standard comma delimited file formats for easy import into a variety of popular data analysis and spreadsheet software.



# PRODUCT NAME

# **SPECIFICATIONS**

Model	Sci—VIDI
Spectral range	350-2500 nm
Arrangement	Unique triple 1/8 meter fixed grating monochromator design
Spectral resolution	2nm @ 700nm (3001/mm grating) 4nm @ 1500nm (1501/mm grating) 6nm @ 2100nm (1001/mm grating)
Wavelength Uncertainty	<0.5nm
Wavelength reproducibility	0.1nm
UV-VIS Detector	Hamamatsu S8381 Si NMOS detector array, 1024 elements 25um pixel size
SWIR Detectors	and G9214 InGaAs linear array detector, 512 elements 25um pixel size, TE cooled
NIR Detector	Hamamatsu G9208 InGaAs array, 256 elements 50um pixel size, TE cooled
Trigger	Trigger input, TTL
Shutter input	TTL, programmable state and delay (dark current shutter pulse standard) Optional high speed shutter available
Integration time	10ms to 60 seconds
Communications interface	USB
Software	SciRunFS, operates on Windows XP, Vista and 7
Noise equivalent radiance (W/cm2/ nm/sr) at 1 sec.	0.8 x 10 <sup>-9</sup> @ 700 nm ≤ 1.2 x 10 <sup>-9</sup> @ 1500 nm ≤ 3.0 x 10 <sup>-9</sup> @ 2100 nm
Instrument Weight	5Kg
Dimensions	100mm x 450mm x 450mm
Input power	120-230VAC

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# **CALIBRATION OPTIONS**

### **Wavelength Calibration**

All Sciencetech Sci-Vidi systems are calibrated for wavelength for wavelength to the given specifications

#### **Radiometric Calibration**

Sciencetech Sci-Vidi systems can be calibrated to NIST traceable standards using Optronic Laboratories OL220 calibrated reference lamp over the range of 350-2500nm

# **ON BOARD SENSORS**

The Sci-Vidi instrument uses three high sensitivity Hamamatsu linear array sensors to optimize system sensitivity and minimize dark noise.



Contact one of our sales representatives today!



www.sciencetech-inc.com

### **PRODUCT NAME**

#### **INPUT PORT OPTIONS**

#### Motorized Slit SS-80 (120-9035 + 120-9038)

The SS-80 slit has straight, bilaterally adjustable jaws with spacing between 0 and 6.5mm. The motor has an accuracy of 10um. A manual curtain slider can be used to adjust the height of the slit.

Integrating Sphere (various options available) Integrating spheres are used with radiometers to produce uniform angle correct illumination at the entrance port of the monochromator. Sciencetech integrates both 4" diameter and 2" diameter integrating spheres. Spheres with 3 or 4 ports can be accommodated.





#### Fiber Input (SMA or FC)

Fiber optics (with standard 25° field of view) can be mated to the input port of the Sci-Vidi. Fiber optic inputs allow for the greatest flexibility in selecting what the Sci-Vidi instrument is looking at.

