

Laser Wavelength Measurement / Fiber Optic Spectrometer

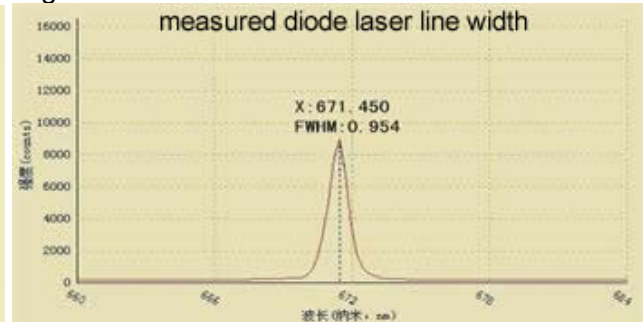
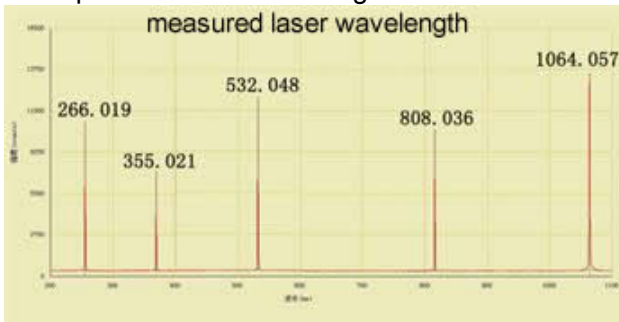
Wavelength is the spatial period of the wave - the distance between consecutive corresponding points of the same phase. Light wave refers to electromagnetic spectrum, which has wavelengths in the range of 0.1mm to 0.1 μ m. The wavelength of the light wave is the light wavelength.

Our fiber optic spectrometers with the characteristics of compact and portable design, plug and play, easy operation and software are widely used in laser wavelength and line width measurement and also the laser excitation fluorescence, Raman and LIBS spectrum measurement.

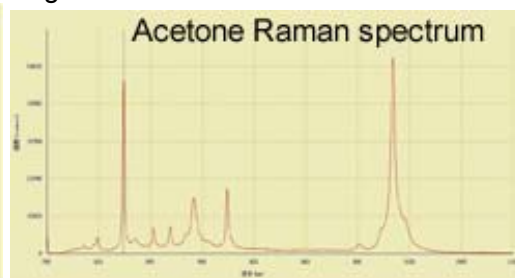
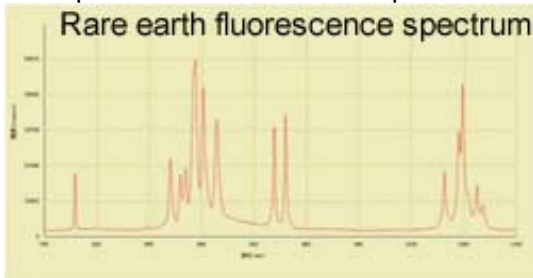


Part number	Features	Resolution	Wavelength Range	Description
STC-A4000 series	High resolution: can be up to 0.1 nm (FWHM)	<0.75nm	200-1100nm (custom design)	Able to measure wavelength, line width of laser, LED and other common light source, and also the laser excitation fluorescence, LIBS spectral characteristics.
STC-F4000 series	Compact: small and portable type	<0.6nm	200-1100nm (custom design)	
STC-S series	High sensitivity: can be up to 80% quantum efficiency	0.035-0.6nm	200-1100nm (custom design)	

Examples of Laser Wavelength and Line Width Testing Results:



Examples of Laser Excitation Spectrum Testing Results:



Laser Wavelength Meter

- Pulse and CW Wavelength Measurement
- 380 nm to 1095 nm Wavelength Range
- RS-232 and Optional GPIB Interfaces
- 0.005 nm accuracy
- 0.001 nm resolution
- Internal self-calibration
- Fiber input with sampling probe



Our laser wavelength meter measures the wavelength of both CW and pulsed lasers of any repetition rate. The wavelength can be displayed in GHz, wavenumbers, or nanometers, with vacuum and air readings available. The meter will read the peak wavelength of sources as wide as 2nm from 380nm to 1095nm. Bandwidths wider than 2nm can be accommodated at the longer wavelengths.

The wavelength meter is easy to use. Just turn on the readout and get the beam within 10 degrees of normal incidence to the sampling probe. The probe has a 2-meter fiber optic cable and takes up a minimum of beam path space. Most intensity variances are automatically accommodated, but for the strongest and weakest signals a front panel attenuator adjustment and intensity readout quickly afford accurate readings. No special triggering modes or setups are required for pulse capture.

The meter is portable with AC and battery power. The large easy-to-read display is backlit and has adjustable contrast control for easy viewing. Configuration settings are maintained in memory and retrieved on start-up for convenience. Communication with the WaveMaster is also easy with built-in RS-232.

The meter is easy to read with front panel adjustments of contrast and back-lighting for the extra-large display. Parameters that have been set-up are clearly displayed in addition to signal intensity and pulse retrieved indicators. When in the CW mode of operation the display is updated at an easy to read 3Hz rate. While in the pulse mode the display is updated at 3Hz and maintained for 15 seconds after a pulse for reading single events.

Calibration is maintained by sophisticated algorithms that monitor the meter's response. Periodically and upon indication from the algorithms the meter is referenced to the fundamental Ne lines.

Wavelength Coverage	380-1095 nm
Accuracy	0.005 nm
Resolution	0.001 nm
Min. Pulse Rep Rate	single shot
Max. Pulse Rep Rate	CW
Max. Signal Bandwidth	2 nm @ 400 nm 3 nm @ 600 nm 5 nm @ 1000 nm
Min. Signal	20 μ W CW @ 632 nm 2 mJ pulsed @ 1064 nm
Max. Signal	100 mW CW @ 632 nm 100 mJ pulsed @ 1064 nm
Display Update	3 Hz
Size	281 mm wide x 105 mm high x 352 mm deep
Storage Relative Humidity Shock	-10°C to 50°C non-condensing and <80% <4 g
Use Conditions	-10°C to 40°C
Relative Humidity Shock	non-condensing and <80% <4 g
Power Supply (supplied)	Universal 90-250 VAC, 40-72 Hz in; 12 VDC out

Ordering Information:

STCT-33-2650 Laser Wavelength Meter

STCT-33-2627 Laser Wavelength Meter with GPIB

