# Sierra



Additional Use Capabilities Shown



# Research Grade Raman Spectrometers

Snowy Range Instruments (SnRI) introduces its Sierra Series spectroscopic readers. Built on a decade of experience in Raman instrument design the Sierra readers address many of the issues of optical analysis. Our readers are constructed from the best components in a solid aluminum body for rugged long-life usage.

### **Features**

- Ruggedized small footprint
- High signal to noise ratio
- High sensitivity using low laser power
- Flexible Three Way Sampling
- XYZ stage, imaging available



# Sierra Series Featuring ORS Sampling









Small Spot Sampling
Small Area = High Resolution

Conventional Raman uses a small spot-size for optimal spectral resolution.



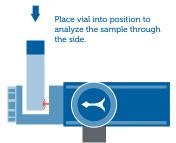
Large Area = Low Resolution

Increasing the spot-size captures more materials, but lowers the spectral resolution.

Orbital Raster Scan (ORS) Large Area + High Resolution

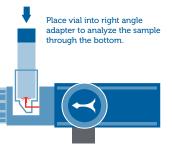
ORS maintains the small spot-size, high resolution, and samples more material.

### Three Way Sampling™ Available On Sierra Series Spectrometers



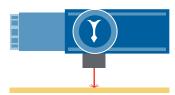
**Side Sampling** 





**Bottom Sampling** 

Rotate the selector switch for analysis of solids, surfaces, and well plates via the bottom aperture port.



**Surface Sampling** 

## **Product Specifications**

Lasers	532 nm	638, 785, 808, 980 nm
Laser Power* (adjustable)	50 mW	35, 100, 100, 50 mW
Detector	2048 pixel, TE Cooled to -10° C	
Spectral Resolution	7 cm <sup>-1</sup>	**4 cm <sup>-1</sup> , 8 cm <sup>-1</sup>
Spectral Range	200-3200 cm <sup>-1</sup>	**200-2000 cm <sup>-1</sup> 200-3200 cm <sup>-1</sup>
Footprint W x L x H	12" x 8" x 3"	9″ x 5.5″ x 2.5″
System Weight	6 lbs	8 lbs

\*Class 3B Laser Product

\*\*High Resolution System