

# **IDRaman reader** Integrated Raman Spectrometer

The IDRaman reader from Ocean Optics is a fully integrated Raman spectrometer system featuring Raster Orbital Scanning technology (ROS). Scanning a tightly focused laser beam over the sample surface maximizes sensitivity and maintains high resolution for the most reliable Raman measurements. A convenient sampling system allows you to measure surfaces below the instrument, in cuvettes, or from the side and bottom of vials.





## At a Glance

Laser wavelengths: 532, 638, 785, or 808 nm

Laser power: 100 mW (≈80 mW at Sample)

**Detector:** 2048 element back-thinned array NIR enhanced TEC cooling to -10° C

Sampling options: Downward looking free space

Vials: Bottom or side measurements

Cuvette: Side measurement

Raster Orbital Scanning for maximum resolution and sensitivity

**Size (l x w x h):** 12 x 8 x 3 in., 30 x 20 x 8 cm

Weight: 6 lb. (2.7 kg)



Learn more online at www.oceanoptics.com/idraman

Contact an Ocean Optics Application Scientist for details and pricing

#### **ROS Sampling Advantage**



A tightly focused beam may give noisy signals or miss the Raman active target completely. Simply increasing the spot size of the laser dilutes the valuable information about the material. This leads to low-resolution data and inconclusive library matches. ROS sampling provides the best possible Raman data by scanning a tightly focused beam over a large sample area.

Frequency

Raman is an average power technique and ROS keeps the laser power high without damaging samples. ROS samples many Raman-active compounds, making it ideal for Surface Enhanced Raman Spectroscopy (SERS) substrates.

### **Convenient Sampling**

The IDRaman reader features three convenient ways to sample. Point the source knob down and measure the area just below the IDRaman reader. Adjust the focus for maximum sensitivity. This configuration is ideal for process Raman measurements or reading SERS substrates.

The adjustable focus sample chamber also allows you to sample vials two ways. The adjustable focus sample holder maintains laser safety while allowing you to measure from the bottom of the vial to get the best results from the smallest amount of sample. Traditional sampling from the side of a cuvette or vial is also available.

#### High Resolution and Laser Line Options

The IDRaman reader is available in a variety of different configurations with the choice of 532, 638, 785 or 808 nm laser excitation each available with two resolution options. The 8 cm<sup>-1</sup> version covers the Raman spectrum from 200 to 3,200 cm<sup>-1</sup> for samples requiring a wide measurement range like aliphatic hydrocarbons. The high-resolution 4 cm<sup>-1</sup> version covers from 200 to 2,000 cm<sup>-1</sup>; use this configuration to get the most detail near the laser line.

Contact an application sales engineer today to find out more.



www.oceanoptics.com | info@oceanoptics.com US +1 727-733-2447 EUROPE +31 26 3190500 ASIA +86-21-6295-6600