

# General Purpose Raman Probe



Ideal for process and laboratory Raman analysis

High collection efficiency and effective laser line filtering

Customizable optical fiber cable and focusing lens shaft

*High throughput optics and a backscattering probe optical design are incorporated into our compact Raman probes, resulting in a highly efficient probe for Raman measurements.*

- **Ideal for Raman** measurements of various samples including solids, liquids and gases.
- **Available in various laser excitation** wavelengths in the visible to the near-infrared.
- **Narrow bandwidth bandpass filter** is utilized in the excitation optical train to filter out unwanted silica background generated by the excitation laser in the optical fiber.

- **High Rayleigh rejection long-pass edge blocking filter** (optical density  $>10^{-6}$ ) is also incorporated into the collection optical train to prevent the laser line from being transmitted into the collection optical fiber.

## Features

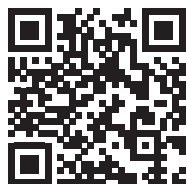
- ✓ **Low-cost Raman probe** that is ideal for routine Raman measurement applications.
- ✓ **Can be used for Raman measurements of all types of samples.**  
*Can be used through **glass and plastic containers.***
- ✓ **Probe body is encased in a hard anodized aluminum housing.**
- ✓ **Focusing lens** is housed in a removable stainless steel tube, allowing the flexibility of using different focal length lenses.
- ✓ **Optical fibers are also removable**, allowing the user the flexibility of using the proper fiber core optimized for a specific Raman instrument.



**OceanOptics**

## SPECIFICATIONS

<b>Excitation Wavelength</b>	532 nm, 638 nm, 785 nm, 830 nm, 1064 nm
<b>Spectral Range</b>	100-4000 cm <sup>-1</sup> (the ultimate range is spectrometer detector dependent)
<b>Focal Length</b>	9 mm standard (12,15 and 18 mm optional). Note: Probe efficiency decreases with increasing focal length.
<b>Spot Diameter at the Sample</b>	100 µm for standard fiber (fiber core dependent)
<b>Working Distance</b>	7 mm for standard lens
<b>Numerical Aperture</b>	0.22 with standard lens
<b>Probe Body Dimensions</b>	2.25" L x 0.96" W x 0.58" H
<b>Probe Body Material</b>	hard anodized aluminum
<b>Probe Shaft Dimensions</b>	3/8" diameter x 2" length (custom lengths available)
<b>Probe Shaft Material</b>	316 stainless steel
<b>Filter Efficiency</b>	OD >6 at laser wavelength
<b>Operating Temperature</b>	0-85 °C
<b>Operating Pressure</b>	15 psi
<b>Fiber Configuration</b>	100/600 µm fiber (standard) to laser and spectrometer, respectively; custom optical fiber cores available
<b>Fiber Optic Cable</b>	1 m stainless steel armor cable standard, custom length available
<b>Coupling System</b>	FC connector standard, SMA connector also available
<b>Part Number</b>	ORP-XXX-B (with Fiber); ORP-XXX (Probe only)



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