

RPS1064

Routine sampling probe for FT-Raman

Customers using FT-Raman spectroscopy at 1064 nm excitation can now benefit from flexible sampling possibilities with a fiber optic probe. The RPS1064 is comparable to our RamanProbeTM for dispersive Raman instruments. The two-fiber probe incorporates micro-lenses and filters to remove silica background from the spectrum. The standard configuration has an attentuation of 10^5 at the laser wavelength.

The RPS1064 can be used to measure samples through glass bottles and reaction vessels, or to measure neat samples.



Features and Specifications

Sampling Head	Stainless-steel, cylindrical probe head, 0.5" in diameter (12.7 mm) x 4" length (76 mm), with integrated fiber optics
Spectral Range	200 - 3200 cm ⁻¹ (Stokes), depending on spectrograph limits
Excitation Wavelengths	1064 nm (see RamanProbe™ data sheet for other wavelengths in the visible and NIR)
Working Distance	5 mm (std.), up to 10 mm (opt.)
Fiber Configuration	Permanently-aligned combination of two single fibers (100 μm excitation fiber, 500 μm collection fiber) with filtering and steering micro-optics, N.A. 0.22, in stainless-steel jacket. Options: Fiber sizes ranging from 50 μm to 500 μm . "Side-viewing" model with optical output perpendicular to cylindrical body
Filter Efficiency	Patented design for complete filtering of the laser line and quartz spectral contributions from both input and output fibers (O.D. > 5 at laser wavelength). Option: O.D. > 8 at laser wavelength
Physical Resistance	Extremely durable sampling head and fiber cable, resistant to physical shock, can be heated to 80°C. Option: High-temperature version resistant to 200°C
Cable Length/ Coupling System	5 m with FC (std.) or SMA 905 connectors
Safety Features	Emission indicator (std.), Class I sample holders available. SAFETY WARNING: When coupled to an FT-Raman spectrometer including 1064 nm laser, the RPS1064 enables invisible laser radiation to be emitted outside of the standard sample compartment, potentially bypassing laser safety interlocks installed by the spectrometer manufacturer. Operation protocols should be designed to avoid laser exposure to the skin and eyes. A written safety plan must be provided to InPhotonics prior to delivery of this product. InPhotonics assumes no liability for direct or consequential damages caused by the use of their products.
Retail Price	\$ 5,875 USD

Specifications and prices are subject to change without notice.