

Raman System



The **AvaRaman Raman System** is a fully integrated, low-cost system for applications requiring Raman techniques.

The **AvaRaman system** consists of a laser diode, an AvaSpec 2048 CCD-array spectrometer and an expanded range of fiber optic probes.

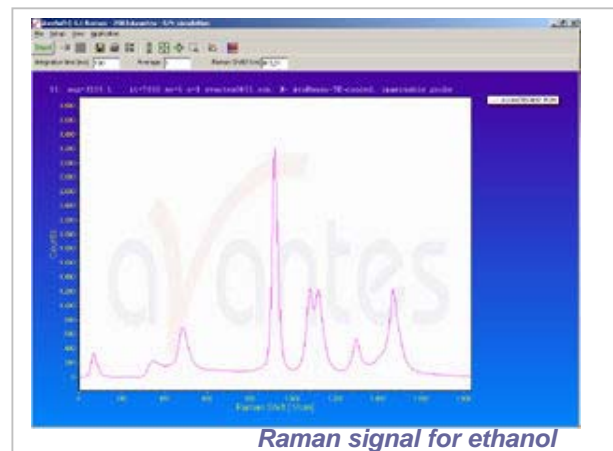
The **AvaRaman System** is available for multiple Raman wavelengths in 2 basic versions:

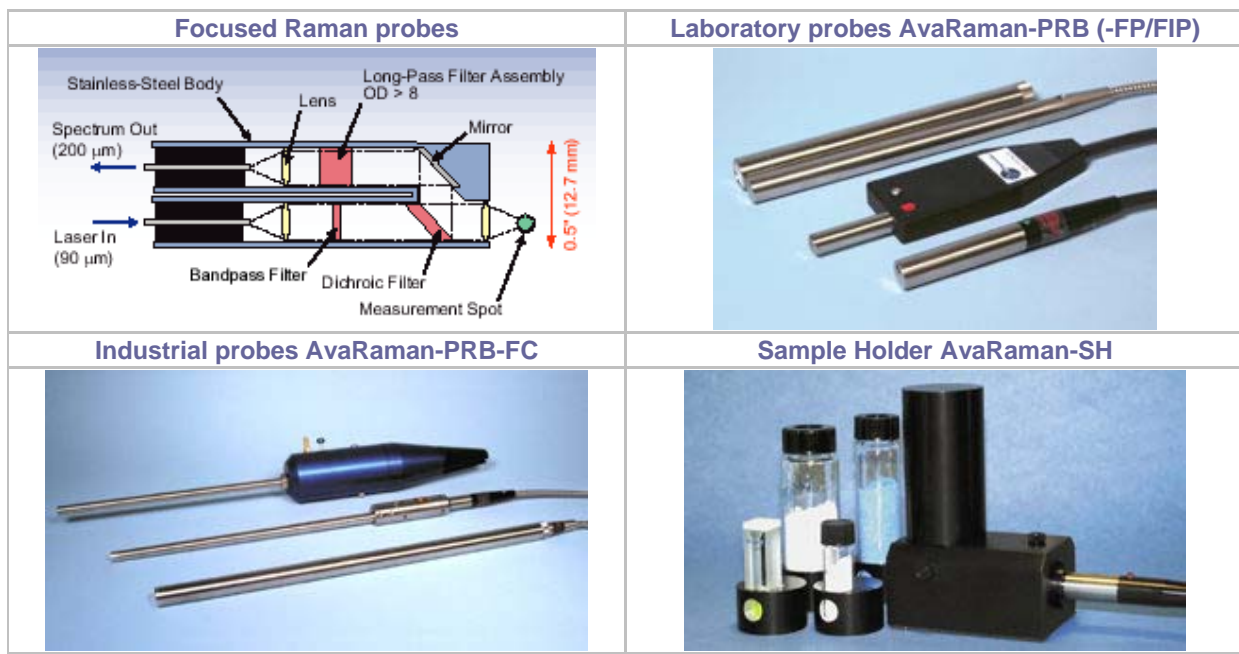
1. *The low-cost non-cooled version with 25 cm^{-1} resolution, standard built-in solid state laser .*
2. *The high performance, TE-cooled version with a stabilized Laser that can achieve an optical resolution of 8 cm^{-1} .*

Both **AvaRaman systems** come with special AvaSoft-Raman software (see software section). The **AvaRaman System** is optimized for maximum sensitivity. The maximum integration time is 60 seconds.

The **AvaRaman** is especially useful for analysis, such as reaction monitoring, product identification, remote sensing, and the characterization of highly scattering particulate matter in aqueous solutions, gels and other media.

The **AvaRaman System** is also available with different Laser types than the standard 785nm, such as Ar-Ion 514 nm, solid-state 50 or 100 mW green (532 nm) lasers or HeNe lasers 633nm.





Technical Specifications

	AvaRaman-785	AvaRaman-785-TEC
Signal to noise Ratio	200:1 for Benzene	300:1 for Benzene
Resolution	25 cm ⁻¹	8 cm ⁻¹
Spectrometer	AvaSpec-2048 with grating IB (780-1100nm), slit-50, DCL-UV/VIS	AvaSpec-2048TEC with grating NC (780-930nm), slit-25, DCL-UV/VIS TE cooled
Spectral Range	100-2700 cm ⁻¹ (790-1050nm)	100-2100 cm ⁻¹ (785-930nm)
Laser output (785nm)	500 mW, Class 3b	500 mW, Class 3b
Laser Wavelength	785 nm, optionally 532nm	785 nm, optionally 514, 633nm
Laser Bandwidth	Ca. 2.5 nm	< 0.2 nm
Fiber optic Probe	Different options available, see ordering information	
Dimensions housing	310 mm x 235 mm x 135 mm	320 mm x 450 mm x 135 mm