

Dual Wavelength Raman Spectroscopy Probe

ATR20106

Features

- Supports two excitation wavelengths: any two of 532, 638, 785, 830, 1064nm
- Dual wavelength excitation wavelength coaxial optical path, same position excitation
- Laser transmission efficiency:>75%
- Raman signal optical efficiency:>82%
- High reliability: All solid state design without mobile optical components
- Compact in size, easy to pick up and place
- Customizable stimulation methods from different angles
- OD>8
- Support invasive long rod probes
- Highly corrosion-resistant: 316L stainless steel, optional Hastelloy alloy
- 300 °C high-temperature resistant version available (ATR20106HT)

Description

ATR20106 is optosky's latest designed dual wavelength Raman probe, which uses a specially designed optical path for dual wavelength Raman spectroscopy and can measure Raman signals of two excitation wavelengths in situ. ATR20106 also has a built-in high-efficiency Raman processing optical path, with a high suppression rate of OD>8 for Rayleigh scattering.

Type	Explain
ATR20106	Standard version
ATR20106CG	Invasive Long Rod Dual Wavelength Raman Probe
ATR20106HT	High temperature resistant version at 300 °C(H igh- T emperature)
ATR20106AC	Corrosion resistant version (A nti- C orrosion)

Application

- Raman spectrometer
- Reaction process monitoring
- Detection of substances at the bottom of the container



1. ATR20106 Wavelength List and Selection Guide

Type	Adaptive Raman excitation wavelength
ATR20106-532+785	Dual wavelength Raman probe : 532nm+785 nm
ATR20106-532+1064	Dual wavelength Raman probe : 532+1064 nm
ATR20106-532+638	Dual wavelength Raman probe : 532+638 nm
ATR20106-785+1064	Dual wavelength Raman probe : 785+1064 nm
ATR20106-638+1064	Dual wavelength Raman probe : 638+1064 nm

2. ATR20106 Parameter

Project	Index	Remark
Pre excitation working distance	5.5 ± 0.5 mm	
Excitation wavelength	Any two wavelengths in 532, 638, 785, 830, 1064nm	
Excited luminescence insertion loss	<25%	
Signal light insertion loss	<18%	
Wavenumber range	150~8000 cm-1	
Exciting light spot size	Ø150±30 mm	
Ruili scattering suppression ability	OD>8	
Raman signal fiber	200/220 um multimode fiber; SMA905 interface	Fiber optic coupling
Laser fiber	105/125 um multimode fiber FC/PC fiber optic interface	Fiber optic coupling
Fiber length	1.5m	Other lengths can be customized, up to 100m in length

3. Physical image of ATR20106 dual wavelength Raman probe



4. ATR20106 Boundary Dimensions

