

Endoscopic Raman Probe

ATR20101

Features

- Excitation Wavelength: 785 nm, customized
- Medical nylon coating, stainless steel casing.
- Probe Diameter: <3 mm, custom 1 mm available.
- Metal Length: >6 mm.
- Laser Interface: FC.
- Laser Core Diameter: 200 μm , single core.
- Spectrometer Interface: SMA.
- Core Diameter: 200 μm , 6 fibers in a row.

Application

- Medical endoscopic Raman spectroscopy
- Gastrointestinal tract examination
- Surface analysis of biological samples

Description

The ATR20101 Endoscopic Raman Probe, is a high-performance tool for advanced diagnostics. With a diameter under 3 mm and customizable to 1 mm, it combines medical-grade nylon optical fibers with a stainless steel casing. Featuring 785 nm band-pass and long-pass filters, it excels in Raman signal collection and excitation light enhancement.

Ideal for gastrointestinal cancer diagnostics and biomedical research, this probe integrates seamlessly with endoscopes for real-time, non-invasive tumor assessment. It represents a significant advancement in endoscopic technology, offering precise, minimally invasive solutions.

Model	Description
ATR20101	Standard Version
ATR20101-1	1mm Ultra-Thin Probe Version

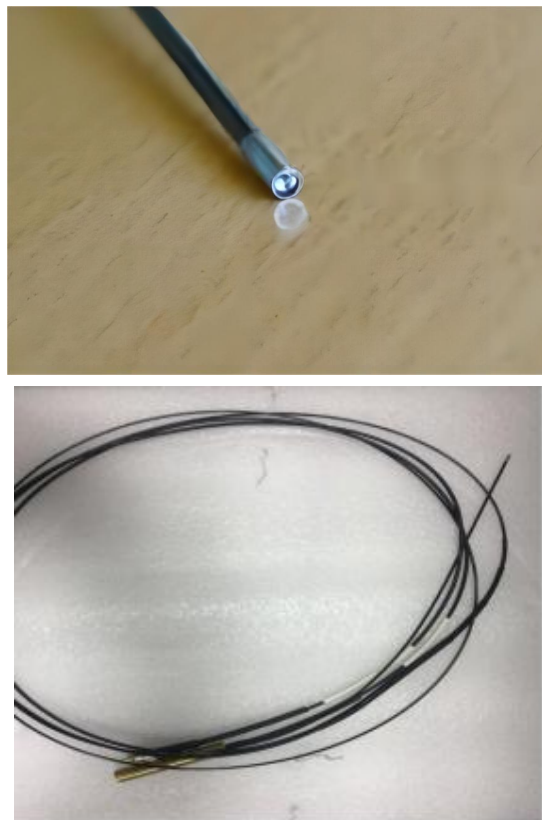
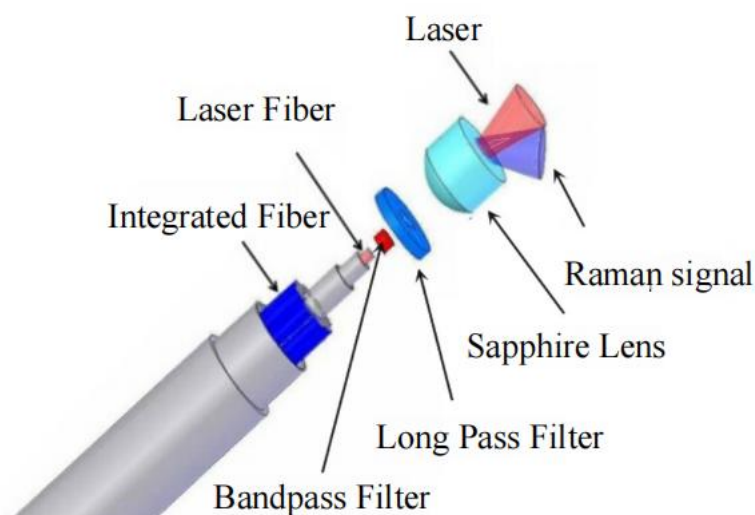


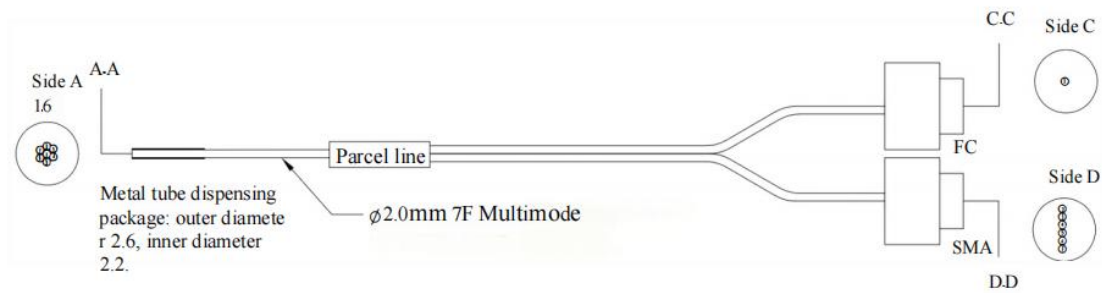
Figure 1 ATR20101 endoscopic Raman spectroscopy probe outline diagram

1. Parameter

Item	Specification
Excitation Point Working Distance	1-3mm
Excitation Wavelength	785nm, customizable with other wavelengths
Wavenumber Range	200-3000 cm^{-1}
Probe Diameter	<3mm, customizable, minimum 1mm
Probe Packaging	Stainless steel
Probe Metal Material Length	>6mm
Fiber Cladding Material	Medical-grade nylon
Raman Signal Fiber	200 μm core diameter, customizable sizes; 6 fibers, arranged in a single row; SMA905 connector
Laser Fiber	200 μm core diameter, customizable sizes; single-core; FC/PC fiber connector
Fiber Length	1.5m, customizable to other lengths

2. Structural Diagram





3. Application

