

## Long Raman Probe

## ATR20108

### Features:

- Raman probe length up to 5 meters  
Auto-Switch on four channels
- Slim length for easy to operate
- OD > 8
- Raman probe of 785, 1064, 532, 830, 473nm
- Highly resistant to corrosion of acidic and alkaline, optional stainless steel 316L, Hastelloy alloy.
- Resist to high temperature up to 300°C (ATR20108HT)

### Application:

- Raman spectrometer
- In process reaction monitor
- Liquid materials dip on the bottom container

### Description:

ATR20108 is the latest long Raman probe designed by Optosky. It has a long arm of up to 5 meters, which can easily measure samples at the bottom of the reactor with a depth of 5 meters, which cannot be achieved in traditional Raman spectroscopy. This long arm Raman probe built-in high efficient optical path can resist Rayleigh scattering with OD>8.

It adopts the special optical path design of the patent technology of Optosky, which avoids the shortcomings of low optical efficiency of the traditional long rod probe and high requirements for the application occasions.

ATR20108 is configured to ATR7010 in-situ Raman spectrometer, especially fit to any in process monitor.



**Figure 1 Outline drawing of ATR20108**

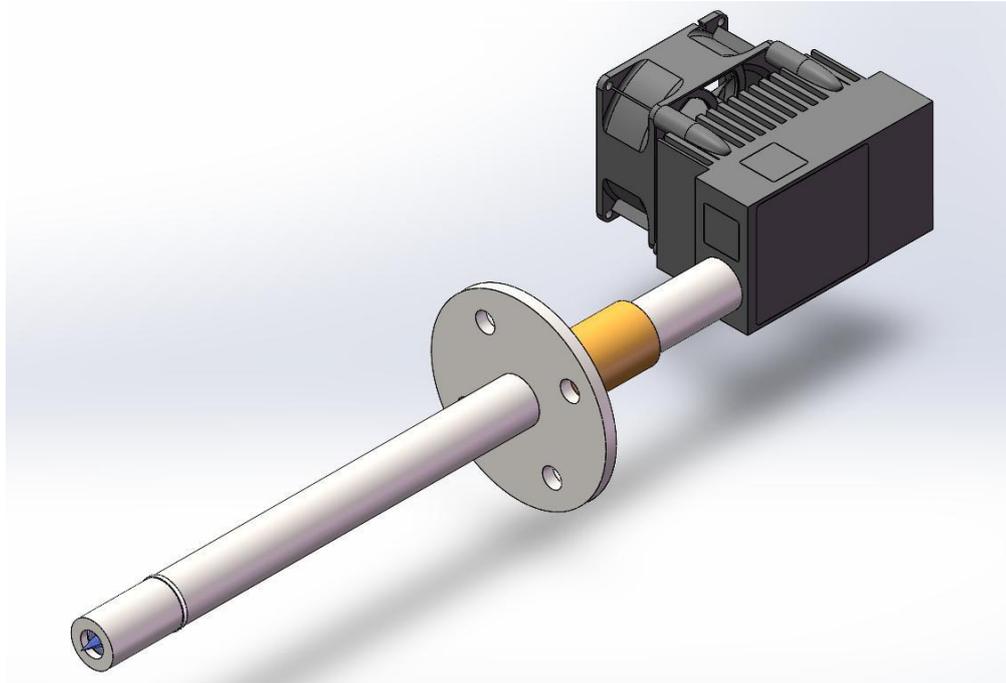


Fig 2 ATR20108HT

## 1. Performance

Items	Description	Remarks
Working Distance	3.5 ± 0.5 mm	
Probe Length	25 cm	Customized length
Probe arm diameter	12.5 mm	
Max Length	5 m	Max Length up to 5 m
Rayleigh scattering	OD > 8	
Raman signal fiber	200/220 μm optical SMA905 port	Multi-mode Fiber coupling
Laser fiber	105/ 125 μm Multi-mode fibers FC/PC port	Fiber coupling
Fiber Length	1.5 m	Customized , Maximum up to 100 m

## 2. ATR20108 wavelength list and selection guide

Model	Adapted Raman excitation wavelength
ATR20108-785	For 785 nm Raman Spectrometer
ATR20108-1064	For 1064 nm Raman Spectrometer
ATR20108-532	For 532 nm Raman Spectrometer
ATR20108-830	For 830 nm Raman Spectrometer
ATR20108-638	For 638 nm Raman Spectrometer

The full name of the actual ordered model is: ATR20108HT-785, a high temperature resistant long rod Raman probe with a wavelength of 785nm.

## 3. ATR20108 and ATR20108HT physical picture

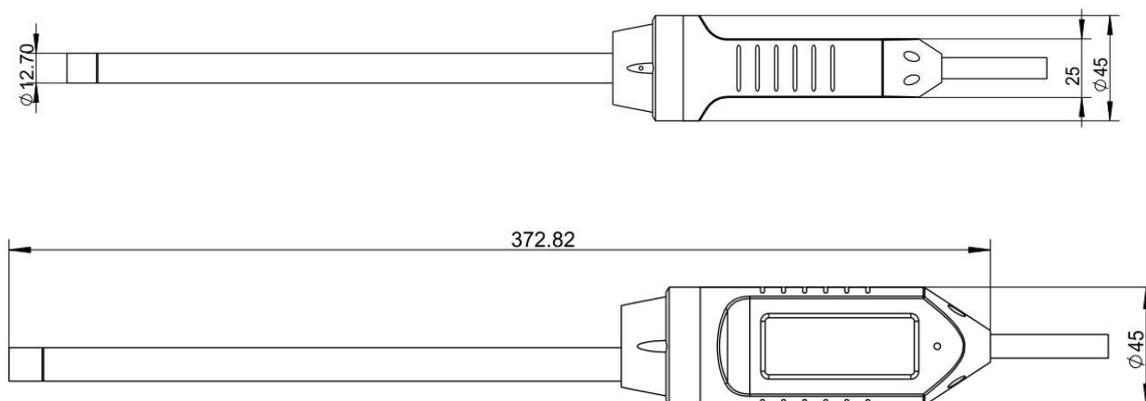


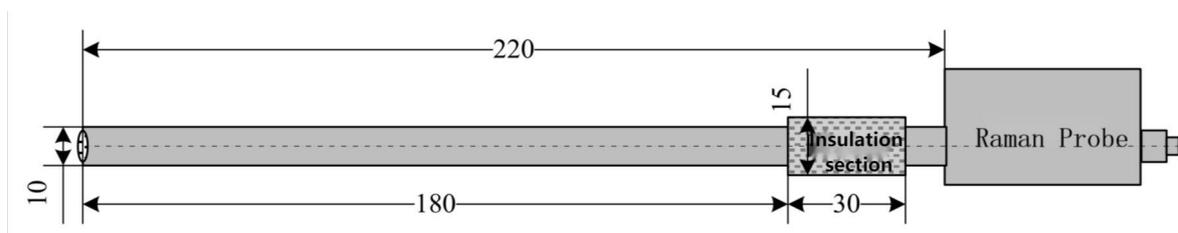
Fig 3 ATR20108 physical map



Fig 4 ATR20108HT physical map

## 5.ATR20108 Dimensions





## 6.ATR20108 Order Guide

Models	Raman Wavelength
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ATR20108-1064	For 1064nm Raman Spectrometer
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ATR20108-830	For 830nm Raman Spectrometer
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