

Raman Accessory

## BAC102 Raman Probe



The BAC102 Raman Trigger Probe is an add-on accessory designed for use with B&W Tek, Inc. Raman Systems. With state-of-the-art telecom packaging techniques (patent pending) and optimized optical lenses, the excitation laser emits from the probe's end where Raman signal is then collected from the sample. Flexible fiber coupling and durable protective jacketing material with SMA905 (collection) and FC (excitation) terminations are standard.

A trigger button is located on the probe's head, where internal wires run the length of the fibers and terminates with a stereo plug designed to connect to B&W Tek, Inc. Raman systems that have a trigger input port, providing the convenience of point-and-shoot operation.

The BAC102 comes with a detachable distance regulator designed for direct contact on solid samples which prevents contaminants from coming in contact with the lens of the probe. The BAC102 has three standard designs for 532nm, 785nm, or 1064nm excitation Raman systems, with custom wavelengths available upon request. The BAC102 shaft material and length, window material, seal material, and working distance can be customized to suit your application needs.

### Features:

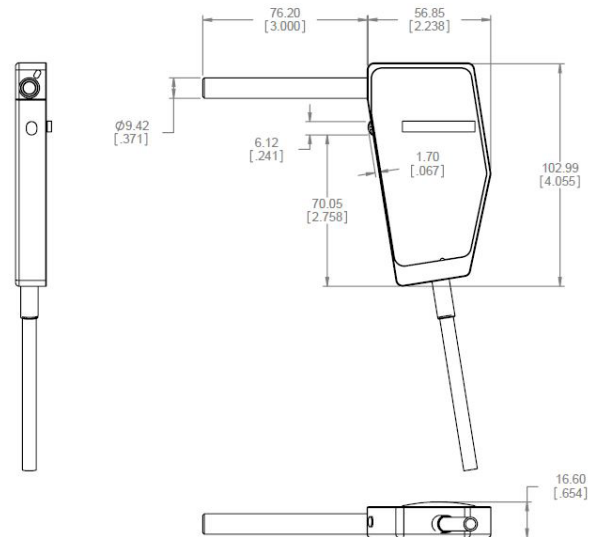
- State-of-the-art Packaging
- Optimized Optical Design
- Hand Trigger for Data Acquisition
- High Throughput
- Excellent Long-term Stability
- Distance Regulator

### Specifications:

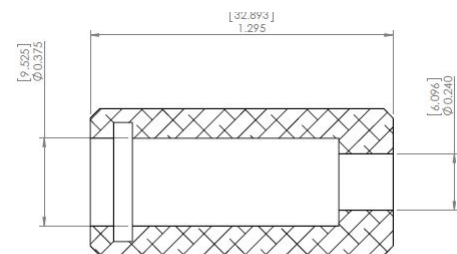
Fiber for Excitation	105µm Core with FC/PC Connector
Fiber for Collection	200µm Core with SMA 905 Male Connector
Fiber Length	1.5m
Excitation Wavelength	532nm for BAC102-532 785nm for BAC102-785 1064nm for BAC102-1064
Laser Blocking	OD6 default, OD8 Optional
Shaft Diameter	3/8" (9.5 mm)
Shaft Material	316L Stainless Steel; Hastelloy C276 or Titanium Optional
Shaft Length	3" (76.2 mm)
Trigger Switch	SMD Light Touch Switch
Window Material	Flat Quartz; Flat Sapphire or Sapphire Ball Optional
Seal Material	For Lab: Epoxy Sealed For Industrial: Kalrez® O-ring or Customer Specified
Working Distance	5.90 mm
Spot Size at Sample Surface	85 µm
Maximum Operating Pressure	Lab Version: 30 psi; Industrial Version: 150 psi
Maximum Operating Temperature	Lab Version: 80°C Industrial Version: 150 °C at the Tip of the Probe
Storage Temperature	-10°C – 60°C
Humidity	10% – 85%

### Dimensions:

#### Probe (mm):



#### Distance Regulator (mm):



SECTION A-A