

Raman Accessory

## BAC201 Fiber-Optic Raman Needle Probe



The BAC201 is a fiber optic Raman probe designed to analyze samples at hard-to-reach places, such as inside small cavities, tissues, and miniature reactors. The probe end is constructed with a single 200  $\mu\text{m}$  core laser fiber surrounded by nine 200  $\mu\text{m}$  core return fibers, all encased in a 3.0 mm OD stainless steel needle tube. The tip is sealed with a fused silica ball lens, which

allows for high throughput and easy cleaning. The optical elements inside the needle are permanently fixed in alignment, with no possibility of movement due to impact or vibrations. At the spectrometer end, the collection fibers are formed into a linear array of 2 mm length in a SMA905 terminal, and the laser fiber is terminated in FC/PC.

The probe can be used for immersion or direct contact measurements. Avoid strong acids, bases, or other chemicals that might attack fused silica or stainless steel.

### Specifications:

Model	BAC201-785	BAC201-1064
Raman Excitation Wavelength	785 nm	1064 nm
Probe Tip Shaft Diameter	3.0 mm	
Probe Tip Shaft Length	15.6 cm	
Overall Length	1.5 m	
Working temperature range	-50°C to +100°C	
Rayleigh Rejection	>>OD3	
Spectral Cut-off	500 $\text{cm}^{-1}$	

### Dimensions:

