

ATTENUATED TOTAL REFLECTANCE (ATR) PROBE ACCESSORY

For measurements of high concentration fluids



Avantes, North America now offers ATR probe options for use with the AvaSpec instruments. This probe is suitable for nearly any industrial process environment and operates at temperatures ranging from -30°C to 280°C and pressures up to 1200 psi. This sapphire crystal three-bounce design affords a total path length of approximately 1.5 microns and allows response down to 250 nm in samples with a refraction index up to 1.5 or choose the ATR probe option with cubic zirconia crystals for use with samples with an RI up to 1.9.

The body of the ATR probe is made of 316 stainless steel and the jacketing is a PVC-coated stainless-steel armored BX. The single crystal, lacking complex internal optical elements is a rugged option that produces a more stable, flatter baseline and linear response.

Consult with your US sales engineer to inquire about your specific requirements. **Available in North America only.**

ATR PROBE TECHNICAL SPECIFICATIONS

Name	AvaPRB-ATR-SAvaPRB-ATR-Z
Optical Path Length	3 bounce (~1.5 microns) Also Available: 1 Bounce
ATR Material	Sapphire (250 nm-220 nm) Or Cubic Zirconia (380-2200 nm)
Maximum Sample Refractive Index	Sapphire 1.5 Cubic Zirconia 1.9
Quantum Efficiency Typical	20% at 500 nm*
Guaranteed	15% at 500 nm
Optical Fiber Type	UV (high OH) 6 around 1 200 micron core
Fiber Packaging	Black PVC Si coated BX
Jacketing	PVC (to 80 °C) or Teflon® (to 300 °C)
Fiber Length	3m standard**
Fiber Termination	SMA 905
Temperature Range	-30 °C to 280 °
Maximum Pressure	1200 psi/83 bar
Probe Body Dimensions	146 mm x 50 mm
Seal Material	Kalrez®6375 or 4079



* Efficiency measured relative to direct fiber connection between light source and detector using a 400 micron-core fiber

** Other fiber lengths available upon request

Other materials available on request- allow 8 weeks for delivery of custom materials