

ATR Fiber Optic Probe Accessory

ATR Probe

Features

- High light throughput
- Easy to test — simply insert the probe into the system
- Continuous monitoring via online software
- Optional crystals available (e.g., diamond, ZnSe, germanium) to suit the reaction system
- Easy installation and removal, no adjustment required
- Compatible with various FTIR main units (requires MCT detector)
- Connecting rods of different materials and diameters can be customized for more demanding environments

Description

The ATR fiber optic probe accessory adopts a novel optical design, perfectly coupling the fiber optic probe with the adapter to effectively enhance light throughput. This accessory is installed in the sample compartment of a Fourier transform infrared (FTIR) spectrometer for real-time online monitoring of liquids during reactions. It is simple to use and easy to install and remove.

The ATR fiber optic probe accessory can be equipped with optional crystals such as diamond, ZnSe, ZrO₂, Si, and Ge, and allows selection of different temperatures and pressures.

Applications

- Pharmaceutical Industry, Fine Chemicals
- Medicinal Chemistry
- Early-Stage Process Research
- Process Development
- Pilot Plant Laboratory, Reaction Engineering
- Pilot Plant
- Catalytic Reactions (High Pressure, Homogeneous Reactions)
- Polymer Chemistry
- Organic Synthetic Chemistry
- Bioreactor Monitoring



1. Parameter

Probe Type	ATR-probe
Tip Protection	crown sized (optional)
Probe Shaft	L=300±5mm
Shaft Material	Hastelloy C22
Total Length	1.5±0.05m
Flexible fiber	1.2m,2 legs of 0.5m length each 1.2m,2legs of 0.5m length each
Terminations	2×SMA905
Protection tubing	Stainless Steel with polymer coating

2.Effect Diagram

