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EDUCATIONAL AND RESEARCH INSTITUTE
DEEMED TO BE UNIVERSITY

University with Graded Autonomy Status
(An ISO 21001 : 2018 Certified Institution)

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ATR-IR (Attenuated Total Internal Reflectance)



Description: ATR-IR (Attenuated Total Internal Reflectance) module is a single Reflection module which allows the direct measurement of samples for FTIR. The method involves pressing the sample against a high refractive-index prism and measuring the infrared spectrum using infrared light that is totally internally reflected in the prism. The QATR-S is a single-reflection ATR measurement attachment. The prism is made of diamond, so the measurement wavenumber range is up to 400 cm^{-1} (wide-band). With a liquid sample, simply place a drop on the prism to measure spectra. For other samples, clamp the sample closely against the prism surface before measurement on the sample surface

Major Specifications:

Spectral Range: $400\text{-}4700\text{ cm}^{-1}$

Resolution: 2 cm^{-1}

Sample Required: 10-50 mg (Solid), 1-3ml (Liquid)

Light Source: Thermal Source

Detector: IRSpirit-L model: LiTaO₃ detector