

Classic VATR – Variable Angle ATR for Analysis of Solids, Films and Coatings



FEATURES

- 30 to 60 degree – continuously variable angle of incidence
- Full control over the number of reflections and depth of penetration
- Unique mechanism for fine-tuning mirror positions and precise and repeatable alignment
- High energy throughput
- Stainless steel, easy to remove crystal mounts and anvils
- Economical introduction to ATR techniques – excellent R&D and teaching tool

The Variable Angle ATR is a traditional in-compartment accessory with the ATR crystal mounted vertically with respect to the spectrometer baseplate. Its optical layout is based on an optimized Gilby configuration and allows continuous adjustment of the incident beam angle between 30 to 60 degrees. This accessory is suitable for the analysis of solids, films and coatings, but for obvious reasons, it cannot be used for working with liquids. For enhanced sensitivity the sample may be mounted on both sides of the crystal. A unique mirror adjustment mechanism which utilizes mirror placement and proportional pivoting allows precise and repeatable alignment. PIKE Technologies' Variable Angle ATR offers flexibility when the frequent replacement of ATR crystals is required. VATR is an excellent, low-cost tool for teaching the principles of internal reflection spectroscopy, and for basic research.

ORDERING INFORMATION

VATR BASE OPTICS

(must select)

PART NUMBER DESCRIPTION

021-19XX	VATR Variable Angle, Vertical ATR
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Notes: Replace XX with your spectrometer's Instrument Code listed on page 164. VATR Base Optics includes plate for mounting in FTIR spectrometer slide mount.

CRYSTAL OPTIONS FOR VATR

(must select 1 or more)

P/N	PART NUMBERS		DESCRIPTION
	50 MM	25 MM	
160-5528	160-5530		KRS-5, 45° Parallelogram
160-5529	160-5531		KRS-5, 60° Parallelogram
160-5532	160-5533		ZnSe, 45° Parallelogram
160-5543	160-5540		ZnSe, 60° Parallelogram
160-5541	160-5538		Ge, 30° Parallelogram
160-5534	160-5536		Ge, 45° Parallelogram
160-5535	160-5537		Ge, 60° Parallelogram
160-5544	160-5539		Si, 45° Parallelogram

Notes: VATR crystals are available in lengths of 25 and 50 mm. All are 3-mm thick and 10-mm wide. Select crystal length and type based upon desired sample absorbance and spectral range.

CRYSTAL HOLDER AND CLAMP FOR VATR

(must select 1 or more to hold ATR crystals)

PART NUMBER DESCRIPTION

021-5050	50-mm VATR Crystal Holder and Clamp
021-5020	25-mm VATR Crystal Holder, Clamp and Mirror

Note: The pressure clamp is selected for the ATR crystal length.

VATR REPLACEMENT PARTS

PART NUMBER DESCRIPTION

021-5040	25-mm VATR Crystal Holder and Clamp
021-5030	Set of 25-mm and 50-mm Pads

Note: Please contact PIKE Technologies for items not described in this list.