



VARIABLE ANGLE TRANSMISSION ACCESSORY

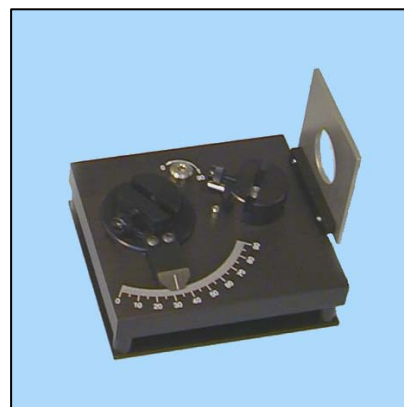
This Variable Angle Transmission Accessory is excellent for examining thick samples at any angle using transmission spectroscopy. This makes it an excellent tool for examining optical coatings on substrates and other thick samples. This accessory is designed for transmission studies of samples up to 6mm thick with the standard sample holder and up to 10mm thick with its thick sample holder. When light enters a thick sample at an angle, the light reflects from both surfaces of the sample. The transmitted light exits the sample parallel to the incident light but slightly shifted. The magnitude of the shift depends on the incident angle, the sample thickness and the refractive index of the sample. The resulting transmittance measured is altered by the misalignment of the beam. This Variable Angle Transmission Accessory eliminates this misalignment by allowing a sample and a blank to be placed in the beam at the same incident angle but in opposing orientations. Using a properly selecting blank, matching the sample in thickness and refractive index, shifts the transmitted beam back to the original position. Since transmittance is a function of polarization, this accessory incorporates a holder for an optional polarizer. Note that spectrometers with a monochromator have an inherently polarized beam. For measurements at both polarizations with maximum energy throughput, the accessory itself can be rotated 90° around the axis of the beam.

APPLICATIONS

- ▶ Qualitative and quantitative analysis of optical coatings on substrates.
- ▶ Analysis of thick flat samples via transmission spectroscopy.

FEATURES

- ▶ Accommodates samples up to 6mm thick and at least 25 mm high with the standard sample holder.
- ▶ Secures both sample and matched blank for optical thickness compensation.
- ▶ Fully rotatable for incident angles from 0° and up to 90°.
- ▶ Angular scale from 0° to 90° marked in 1° increments.
- ▶ Maximum angle achievable depends on sample thickness and width.
- ▶ Useful for angles up to 60° with 6mm thick, 43mm wide samples. Wider samples can reach a higher maximum angle.
- ▶ Mountable in two positions to maximize performance with inherently polarized incident radiation.
- ▶ Includes sample holder set for use with samples up to 10mm thick.
- ▶ Compatible with both FT-IR and UV-VIS polarizers.



ORDERING INFORMATION

Variable Angle Transmission Accessory..... **CATALOG NO.**
 VAT2-XXX
XXX denotes the spectrometer code

OPTIONS

Infrared Wire Grid Polarizer, KRS-5 Substrate..... PWG-U1R
 UV-VIS Glan Taylor Polarizer..... PGT-S1V
 UV-VIS Glan Thompson Polarizer..... PTH-SMP