

Double-Beam Infrared Spectrophotometer

Computer-controlled infrared scanning for identification and material analysis. Direct-ratio recording and a dual-blaze grating cover the stated infrared wavenumber range.



Technical Information

Model	PT-IRS-001
Wavenumber range	4000-400 cm^{-1}
Wavenumber accuracy	$\pm 4 \text{ cm}^{-1}$ (4000-2000 cm^{-1}); $\pm 2 \text{ cm}^{-1}$ (2000-400 cm^{-1})
Wavenumber repeatability	$\leq 2 \text{ cm}^{-1}$ (4000-2000 cm^{-1}); $\leq 1 \text{ cm}^{-1}$ (2000-400 cm^{-1})
Resolution	1.5 cm^{-1} (~1000 cm^{-1})
Transmittance accuracy	$\pm 0.2\%T$ (noise excluded)
Transmittance repeatability	$\leq 0.5\%T$ (1000-930 cm^{-1})
Baseline flatness	$\leq \pm 2\%T$ (I $\square$)
Stray light	$\leq 0.5\%T$ (4000-650 cm^{-1}); $\leq 1\%T$ (650-400 cm^{-1})
Measurement modes	Transmittance / absorbance / single beam
Scan speeds	5
Response speeds	4
Slit program	Continuous action
Scan modes	Continuous / repeat / fixed wavelength

Technical Information

Communication	USB
Operating systems	Windows 10, 64-bit
Data functions	Baseline memory/correction, smoothing, peak detection, derivatives, arithmetic, %T/Abs conversion, axis expansion and file management.

Standard configuration

Instrument and control/data software; powder pellet press, agate mortar, pellet die, spectroscopy-grade KBr, polystyrene reference plate, spoon/tweezers tools and demountable liquid cell with windows, one set each.

Optional configuration

Other accessories are not specified. Confirm the computer supply and any additional sampling accessories.

Selection and ordering

Specify solid or liquid sampling requirements. Control software is described in Chinese; confirm language and Windows compatibility before ordering.