

Fourier Transform Infrared Spectrometers

FT/IR-4000 Series



With over forty years of experience in infrared spectroscopy, JASCO introduces a new series of advanced FT-IR instruments and sampling accessories. We now offer the most complete selection of FT-IR capability from education and routine analysis to high performance research systems. The new JASCO FT/IR-4000 Series consists of two distinct models, the FT/IR-4100 and FT/IR-4200 for a wide variety of analytical requirements. Each compact model offers reliable operation with the highest signal-to-noise ratio for this instrument class. Featuring a highly stable interferometer and AccuTrac™ DSP technology enabling rapid and accurate tracking of mirror position and velocity for optimum signal-to-noise performance. The FT/IR-4000 Series is controlled by JASCO's exclusive Spectra Manager™ II cross-platform software. This enables the instruments to be operated with other complimentary spectroscopic techniques and provides complete 21 CFR Part 11 compliance with Spectra Manager™ CFR.

- Compact size
- Auto-alignment
- Excellent sensitivity
- Quick start system
- IQ accessory recognition
- Purgeable optics
- Applicable to FT-IR microscopy and IR imaging



SPECIFICATIONS

	FT/IR-4100	FT/IR-4200
Measurement wavenumber range:	7,800 to 350 cm ⁻¹	
Measurement wavenumber extended range:	15,000 to 2,200 cm ⁻¹ , 5,000 to 220 cm ⁻¹ (optional)	
Display wavenumber range:	7,900 to 0 cm ⁻¹ (standard), 15,000 to 0 cm ⁻¹ (optional)	
Wavenumber accuracy:	Within ± 0.01 cm ⁻¹ (theoretical value)	
Resolution	0.9 cm ⁻¹	0.5 cm ⁻¹
Optical system:	Single beam	
Sample chamber	Size: 200 mm (W) × 260 mm (D) × 185 mm Optical path: Center focus, light axis 70 mm high	
Interferometer:	45° Michelson interferometer	
Drive method:	Corner cube mirror interferometer, with auto-alignment mechanism, sealed structure, DSP control Mechanical bearing, electromagnetic drive	
Drive speed:	AUTO, 1, 2, 3, 4 mm/sec AUTO DLATGS 2.0 mm/sec. MCT (optional) 4.0 mm/sec.	
Beam splitter substrate material:	Ge/KBr (standard) Si/CaF ₂ , Ge/CsI (optional)	
Light source:	High-intensity ceramic source (standard) Halogen lamp (optional)	
Detector:	DLATGS (with Peltier temperature regulation) (standard) W-MCT, M-MCT, N-MCT, Si, InSb, InGaAs (optional) Two detectors may be mounted at any one time.	
Purging:	Interferometer, Sample compartment/Detector	
Signal-to-noise ratio:	22,000:1 (4 cm ⁻¹ , 1 min, near 2,200 cm ⁻¹)	30,000:1 (4 cm ⁻¹ , 1 min, near 2,200 cm ⁻¹)
Gain switching:	AUTO 1, 2, 4, 8, 16, 32, 64, 128	
100%T line flatness:	Within 100 ± 1.0%T (4,000 to 700 cm ⁻¹ , continuous repetitive measurement)	
Communication	USB2.0	
FTIR main unit	Dimensions: 460 (W) × 645 (D) × 290 (H) mm Weight: 33 kg	
Power supply unit	This unit can be placed on its base or on side. Dimensions: 200 (W) × 285 (D) × 90 (H) mm	

STANDARD COMPOSITION

Parts name	Number	Remarks
Power supply	1	
Connecting cable	1	Cable for connecting the main unit to the power supply
AC cable	1	AC cable for the power supply
USB cable	1	Cable connecting the main unit to the PC
Sample holder	1	
Standard sample	1	Polystyrene film
Stepped pin	2	Used when installing optional accessories into the sample compartment.
Purge tube	1	Used for supplying purge gas.
Instruction manual	1	
Back-up installation disk	1	
Fuse	2	



● Specifications are subject to change without notice.

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