

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

The JASCO logo is displayed in a stylized green font. A colorful, multi-colored wave (red, orange, yellow, green, blue) curves under the letters 'SCO'.

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.

JASCO INTERNATIONAL CO., LTD.

4-21, Sennin-cho 2-chome, Hachioji, Tokyo 193-0835, Japan
Tel: +81-426-66-1322 Fax: +81-426-65-6512 Internet: <http://www.jascoint.co.jp/english/index.html>
Australia, China, Hong Kong, India, Indonesia, Iran, Korea, Malaysia, New Zealand,
Pakistan, Philippines, Russia, Singapore, South Africa, Taiwan, Thailand

JASCO INCORPORATED

8649 Commerce Drive, Easton, Maryland 21601-9903, U.S.A
Tel: +1-800-333-5272 Tel: +1-410-822-1220 Fax: +1-410-822-7526 Internet: <http://www.jascoinc.com>
Canada, Costa Rica, Mexico, Puerto Rico, Argentina, Brazil, Chile, Colombia, Paraguay, Peru, Uruguay

JASCO EUROPE s.r.l.

Via Confalonieri 25, 23894 Cremella (Lc), Italy
Tel: +39-039-956439 Fax: +39-039-958642 www.jasco-europe.com
JASCO Deutschland www.jasco.de, JASCO UK www.jasco.co.uk, JASCO France www.jascofrance.fr,
JASCO Benelux www.jasco.nl, JASCO Spain www.jasco-spain.com, JASCO Scandinavia www.jascoscandinavia.se
Austria, Finland, Greece, Hungary, Poland, Portugal, Romania, Switzerland, Algeria, Cyprus,
Egypt, Israel, Jordan, Kuwait, Lebanon, Morocco, Saudi Arabia, Syria, Tunisia, Turkey, U.A.E.



Serving the global marketplace
with Analytical Instrumentation
JASCO Corporation
2367-6, Ishikawachino, Hazhiki, Tokyo 152-8537, Japan
<http://www.jasco.co.jp>
LFT01-0511 Printed in Japan