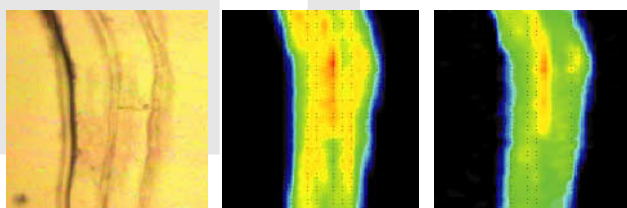


Infrared Multichannel Viewer

IR Microscope for rapid IR Imaging

IMV-4000



The JASCO IMV-4000 Infrared Multichannel Viewer can be easily interfaced with either the FT/IR-4000 or FT/IR-6000 instrument offering an infrared (IR) Imaging system. The IMV-4000 allows IR Imaging of a specific spatial area with extremely high spatial resolution and excellent sensitivity in a short time by using a linear array MCT detector. The IMV-4000's rapid area scanning mechanism allows a user to complete the IR Imaging of a 100 x 100 μm area in just 1.6 seconds, while point-by-point mapping with a single element detector can take several hours. The integration of an IMV-4000 microscope with a step-scan equipped FT/IR-6000 offers IR Dynamic Imaging, an advanced capability for time-resolved measurements of a specific area.

- Wavenumber range 7000-750 cm^{-1}
(10000-1900 cm^{-1} optional)
- Linear array MCT (16 elements std., Max.96)
- Highest signal-to-noise ratio available
- High speed IR Imaging with high spatial resolution
(1.6 sec collection time for 100 x 100 μm , 6.25 $\mu\text{m}/\text{pixel}$)
- 4 Cassegrain Objectives
- 2 Onboard Detectors
- Advanced visualization software

The JASCO logo, featuring the word 'JASCO' in a bold, green, sans-serif font. A stylized, multi-colored wave (yellow, orange, red, blue) curves under the letters.

SPECIFICATIONS

Detector	Linear array MCT, Mid-band MCT (Single)
Number of elements	1 x 16 (Linear array MCT)
Spatial resolution	6.25, 12.5, (20 optional) μm
Wavenumber range	7000 ~ 750 cm^{-1} (Linear array MCT) 7800 ~ 650 cm^{-1} (Mid-band MCT)
S/N	800:1 (near 2,000 cm^{-1} , 16 cm^{-1} resolution, 1 min, 12.5 μm^2)
Image acquisition time	1.6 Sec (FT/IR-6100, 16 cm^{-1} , 100 x 100 μm , 6.25 μm^2)
Measurement method	Transmission and reflection
Observation method	Direct View optical system
Observation	CCD camera (standard), 10X binocular with micrometer (optional)
Objective mirror	16X or 32X cassegrain, 10X refractive objective (optional)
Objective selection	Up to 4 objectives can be computer selected
Condenser mirror	16X, 32X Automated adjustment
Sample stage	Automatic X, Y, Z, θ axis X-axis: 80 mm (1 μm increments) Y-axis: 70 mm (1 μm increments) Z-axis: 25 mm (1 μm increments), depending on objective and condenser mirrors θ -axis: 100° (minimum movement: 1°) Sample weight : 5kg (Max) 500g (standard)
Aperture	Automatic adjustment, X-axis and Y-axis, Rotation function
Purge	Option
Liquid N2 hold time	Approximately 8 hours
Illumination	Halogen lamp with PC controlled intensity adjustment
Dimension	630 mm (669 mm including MCT) x 280 mm (345 mm including lamp cover) x 690 mm
Weight	73 kg
Power Input voltage	AC 100V 50/60Hz max75VA

STANDARD COMPOSITION

Measurement display function	
IR imaging display	Real time imaging display of peak height, peak area, or peak ratio
Spectrum display	Real time spectrum display of specified channels or all detector channels
Monitor mode display	Monitor sample data for verification of peak height, peak area and peak ratio values
Stage control function	
Stage drive speed	Multi-step control
Stage drive setting	Keyboard entry of coordinate values or optional joy-stick control Coordinates can also be designated using the software control window.
Observation screen display	
Single screen display	Displays the CCD observation image
Multi-screen display	Side by side image display of multiple sample images for a wide area
Overall screen display	Displays the overall image of the mapping area
Auto focus function	Automatically adjusts the Z-axis focal position
Data analysis function	
Calculation function	Smoothing, Deconvolution, Offset adjustment, Subtraction, Arithmetic, KK conversion, Vertical axis conversion, Horizontal axis conversion, Data cut, Spectrum cut, Integration, Water vapor reduction, CO ₂ reduction, Curve fitting, Peak height, Peak height ratio, Peak area, Peak area ratio, Peak shift, Half band width
Vertical axis calculation	Bird's eye view, Contour line view, 3D view, 2D view
Display model	
Image analysis function	
Analysis	Arithmetic, Baseline correction, 2D FFT, Data cut, Cross sectional analysis
Image edit	Filter treatment, Color edit, Format conversion



● 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.jascoinc.co.jp/english/index.html>

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>

JASCO EUROPE s.r.l., Via Confalonieri 25, 23894 Cremella (Lc), Italy Tel: +39-039-956439 Fax: +39-039-958642 Internet: <http://www.jasco-europe.com>

JASCO Labor-und Datentechnik GmbH Deutschland, Robert-Bosch-Strasse 11, 64823 Gross-Umstadt, Germany Tel: +49-6078-93420 Fax: +49-6078-74006 Internet: <http://www.jasco.de>

JASCO (UK) Ltd., 18 Oak Industrial Park, Chelmsford Road, Great Dunmow, Essex, CM6 1XN, U.K. Tel: +44-1371-876988 Fax: +44-1371-875597 Internet: <http://www.jasco.co.uk>

JASCO Eastern Europe Information Office, H-1113, Karolina UT 29-31, Budapest, Hungary Tel: +36-1-4669549 Fax: +36-1-2093538

JASCO France s.a.r.l., 60 Bd du Maréchal Juin, 44100-Nantes, France Tel: +33-2-40430043 Fax: +33-2-40432437 Internet: <http://www.jascofrance.fr>

JASCO Benelux B.V., Industrieweg 68-3606 AS Maarssen, Netherlands Tel: +31-346-556699 Fax: +31-346-554619 Internet: <http://www.jasco.nl>

JASCO Analitica Spain S.L., Emiliano Barral 13-B, 28043 Madrid, Spain Tel: +34-91 41 311 82 Fax: +34-91 41 322 90 Internet: <http://www.jasco-spain.com>

JASCO Scandinavia AB, Ågatan 32, 431 35 Mölndal, Sweden Tel: +46-31-27 03 60 Fax: +46-31-746 85 90 Internet: <http://www.jascoscandinavia.se>

Serving the global marketplace with Analytical Instrumentation

JASCO Corporation

2967-5, Ishikawa-cho, Hachioji, Tokyo 192-8537, Japan
<http://www.jasco.co.jp>