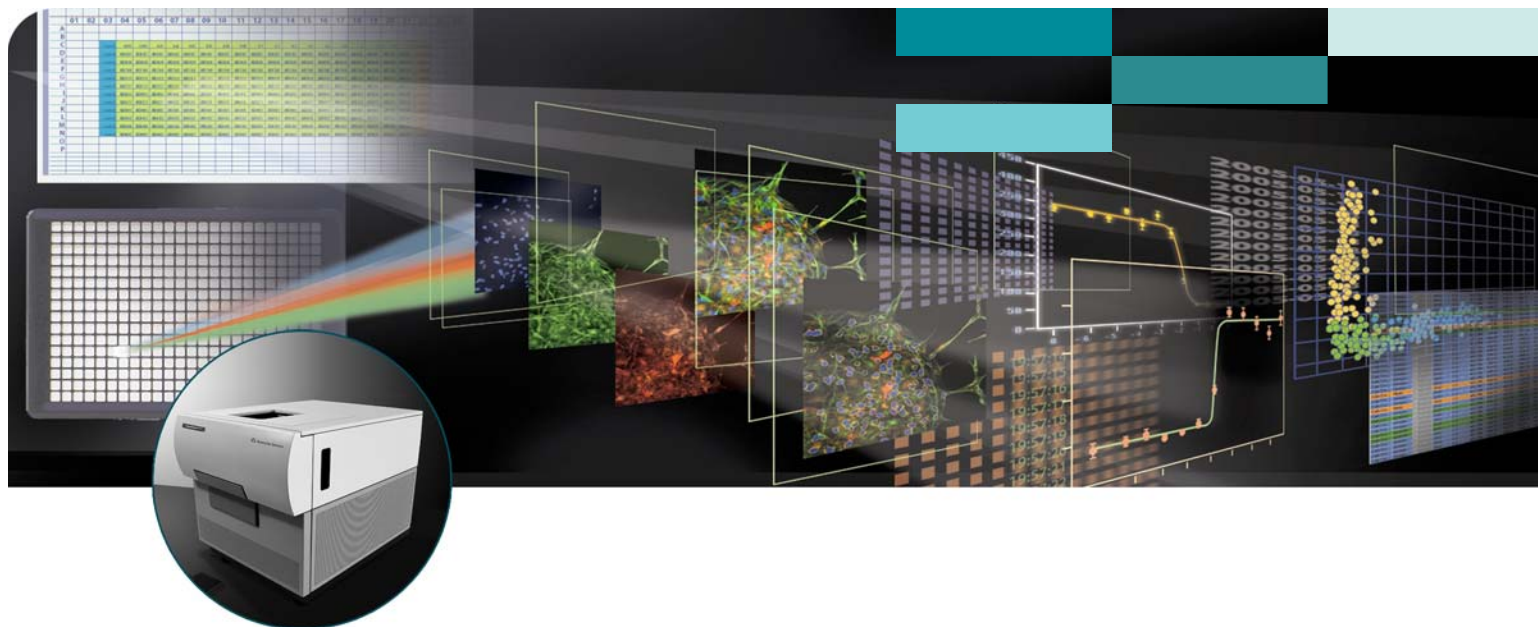


ImageXpress^{MICRO} system

AUTOMATED ACQUISITION AND ANALYSIS OF HIGH CONTENT ASSAYS



→ FULLY AUTOMATED ACQUISITION AND ANALYSIS IMAGING SYSTEM FOR HIGH CONTENT SCREENING

→ LASER AUTO-FOCUS OPTION

→ POWERED BY METAEXPRESSTM SOFTWARE

→ SEAMLESS INTEGRATION WITH MDCSTORETM DATABASE

→ OPTIONAL ACUTYXPRESSTM CELLULAR DATA MINING SOFTWARE

The ImageXpress^{MICRO}TM imaging system from Molecular Devices is a fully-integrated hardware and software system for automated acquisition and analysis of images for high throughput cell-based screening.

The inverted epifluorescent microscope is designed for scanning standard multi-well microplates or slides, for live cell or end-point assays. It is compatible with 6-, 12-, 24-, 48-, 96-, 384- and 1536-well plates. The system design is optimized for speed, utilizing a high-speed laser auto-focus option. Its small footprint enables benchtop imaging requiring minimal lab space. The system has an automated door for robotic plate-loading access.

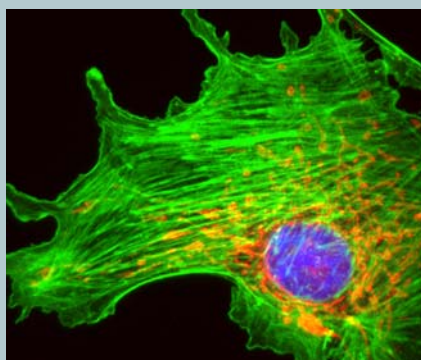
ImageXpress^{MICRO} was designed with custom optics for the most efficient light path and highest resolution possible. The xenon arc lamp provides illumination for imaging from ultra-violet (UV) to near infrared (IR).

The automated objective and filter cube changers allow imaging with up to five different filter sets and four different objectives during a single experiment. The system may be configured with optional environmental control and/or transmitted light source to provide brightfield and phase contrast imaging capabilities.

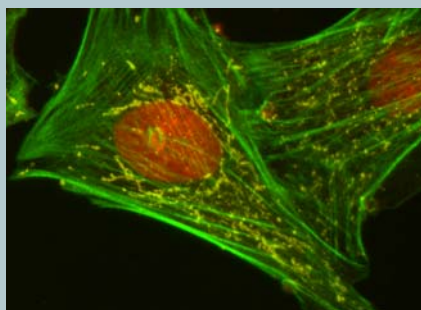
ImageXpress^{MICRO} features image-based auto-focus and optional high-speed laser auto-focus with dedicated image sensor for increased throughput. The high precision design provides better than 100 nm resolution from its fully automated stage and focus control. The system comes with the Photometrics[®] CoolSNAP^{ES} digital CCD camera, which can be upgraded to the CoolSNAP^{HQ} camera.

ImageXpress^{MICRO} is powered by MetaXpressTM, a complete software solution for screening acquisition, image storage and analysis. MetaXpress enables users to select a standard image analysis routine or develop custom protocols to fit the researcher's specific needs.

multi-wavelength acquisition

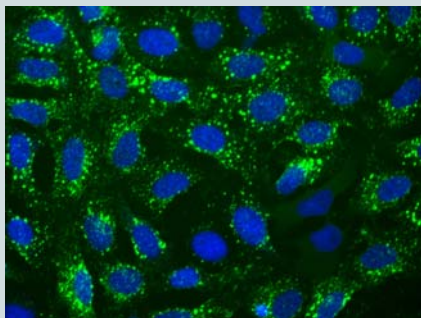
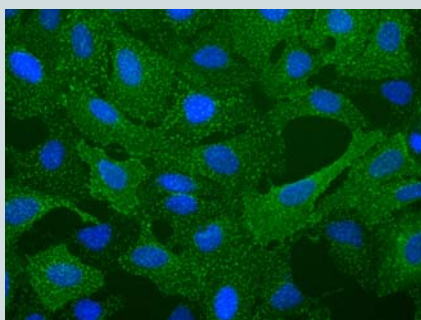


Molecular Probes FluoCells[®] slide imaged on ImageXpress^{MICRO} with 100x Plan Fluor 1.3 NA oil objective. BP3AE cells with MitoTracker[®] Red CMXRos, BODIPY[®] FL phalloidin and DAPI.



Molecular Probes FluoCells[®] slide imaged on ImageXpress^{MICRO} with 100x Plan Fluor 1.3 NA oil objective. Muntjac cells with mouse anti-OxPhos Complex V inhibitor protein, Alexa Fluor[®] 555 goat anti-mouse IgG, Alexa Fluor[®] 488 phalloidin and TO-PRO-3.

optimized for speed and precision



ImageXpress^{MICRO} is optimized for speed, utilizing a high-speed laser auto-focus option. The fully automated X-Y sample stage and Z focus stage provide up to 100 nm accuracy. Above: the Transfluor[®] assay is imaged on the ImageXpress^{MICRO} system. Top: pits, bottom: vesicles.

ANALYSIS MODULES FOR METAEXPRESS

Optional analysis application modules are available and do not require specialized microscopy or image analysis knowledge. Results are generated without the need for programming. The modules provide dedicated dialog boxes, improved segmentation, and field-by-field and cell-by-cell data logging.

DATABASE FUNCTIONALITY

MetaXpress is seamlessly integrated with the MDCStore[™] enterprise-level database for data management and image storage, automatically linking analysis results to original images, segmentation overlays and annotations. The fully scalable database has an open architecture, allowing integration with existing corporate databases.

SYSTEM SPECIFICATIONS

- ImageXpress^{MICRO} automated epifluorescent imaging system
- MetaXpress software with integrated MDCStore database
- CoolSNAP_{ES} digital CCD camera
- Computer workstation for instrument control

FEATURES

- 4-position automated objective changer
- 5-position automated filter cube changer
- 300W xenon arc-lamp
- Fully automated X-Y sample stage and Z focus stage with better than 100 nm resolution

OPTIONS

- Nikon objectives (4x-100x supported)
- Filter cubes configured for specific dye excitation and emission
- High-speed laser auto-focus
- Environmental control
- Transmitted light
- CoolSNAP_{HQ} digital CCD camera
- MetaXpress offline analysis packages
- Analysis application modules for MetaXpress
- AcuityXpress cellular informatics software

ROBOTIC OPTIONS

- Thermo CRS CataLyst Express[™]
- POLARA[™] software
- Generic robotics interface
- Barcode reader

SPECIFICATIONS

The ImageXpress^{MICRO} system measures approximately 20" H x 18" W x 27" D and weighs 180 lbs (not including options).

ORDERING INFORMATION

ImageXpress^{MICRO} Imaging System with MetaXpress Software and Integrated Database
Part Number: IXM IMAGING MSCOPE

High-Speed Laser Auto-Focus
Part Number: 1-2300-1037

Transmitted Light - Phase Contrast
115VAC Part Number: 1-2300-1076
230VAC Part Number: 1-2300-1077

Environment Control
115VAC Part Number: 1-2300-1113
230VAC Part Number: 1-2300-1114

Environment and Transmitted Light
115VAC Part Number: 1-2300-1115
230VAC Part Number: 1-2300-1116

CoolSNAP_{HQ} digital CCD camera
Part Number: 1-2300-1060

Robotic External Control for MetaXpress
Part Number: 9500-0024

AcuityXpress[™] Cellular Informatics Software
Part Number: 9500-0105

MetaXpress Offline Analysis Package with Integrated MDCStore Database
Part Number: 9500-0100

SALES OFFICES

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- China +86-21-6887-8820
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Check our web site for a current listing of our worldwide distributors.

www.moleculardevices.com

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