MOLECULAR DEVICES

ImageXpress Pico Automated Cell Imaging System

## Compact system with intelligent image acquisition and analysis

Automated acquisition and analysis of cell images

Replace tedious manual microscope manipulations with the fully automated ImageXpress® Pico Automated Cell Imaging System. Simply place samples into the system and follow the icon-driven, step-by-step workflow to capture and analyze images. The system software features over 25 preconfigured analysis protocols ranging from simple cell counting to sophisticated neurite tracing, removing the guesswork from optimizing parameters. Results can be visualized in various formats including heat maps, scatter plots, tables, bar charts, and movies.
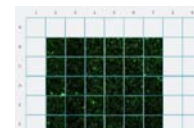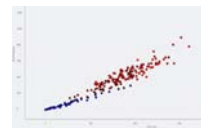
Place sample into the system

Automatically capture and analyze images

mask off   mask on
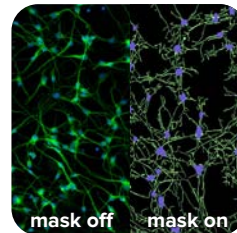
Segment cells/objects

Review thumbnail images

Scatter plots

Key features

- Minimize experiment set-up time using optimized, preset acquisition and analysis modules for fast and accurate assay results

- Easily generate heatmaps, scatter plots, and bar charts from analyzed image data in just a few clicks

- Enhance contrast of images during acquisition with the Digital Confocal* 2D on-the-fly deconvolution option, increasing resolution and improving assay quality

- Perform live cell experiments while maintaining optimal conditions with environmental control

- Generate sharper images for more accurate segmentation using z-stack acquisition

Significantly increase resolution

Significantly increase resolution and assay quality with Digital Confocal* 2D on-the-fly deconvolution. The Digital Confocal Option restores light to its original point of origin, allowing you to decrease exposure time and improve statistical significance of your observations. Digital Confocal is seamlessly integrated into the ImageXpress Pico's fluorescent image acquisition workflow allowing you to capture images with higher signal-to-noise data for more precise segmentation and analysis.

Standard widefield imaging

Digital Confocal
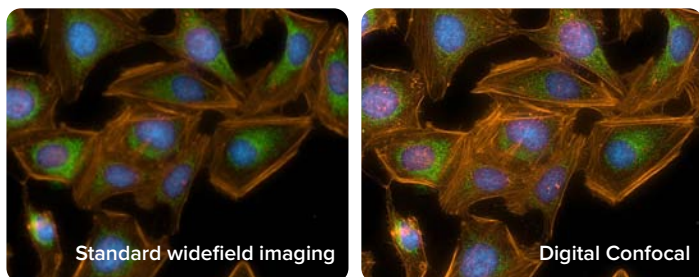
Specifications

Modes of operation	White light/brightfield, colorimetric, fluorescence, Live Preview
Objectives	6 position automated turret with user-exchangeable objectives. Optics by Leica Microsystems: 2.5X N Plan/NA 0.07, FLUOTAR 4x/NA 0.13, 10x/NA 0.32, 20x/NA 0.40, 40x/NA 0.60, 63x/NA 0.70
Channels	Cy5, TRITC, FITC, DAPI, Texas Red, CFP, white light, and RGB
Imaging method	Single color, multi-color, time-lapse, and z-stacking, digital confocal 2D on-the-fly deconvolution*
Autofocus method	Hardware or Image with hardware assist
Supported labware	6- to 384-well plates, slides, and 35 mm culture dishes
Supported operating systems	Windows 10 (main computer), Windows 10 and macOS (clients)
Dimensions (cm)	45.3 (H) x 55.1 (W) x 43.5 (D)
Weight (kg)	38 kg including options
Temperature control	Ambient +8°C to 40°C
Temperature control homogeneity	37°C ± 0.5°C at 23°C ambient
Gas control	O_2 control, 1-15% and ambient, CO_2 control, ambient to 15%
Humidity control	Active humidity control. Sample compartment controlled to 85% nominal humidity.

The ImageXpress Pico system features optics by Leica Microsystems.

*ImageXpress Pico Digital Confocal uses AutoQuant 2D Real Time Deconvolution

Configurable options support a wide range of assays

With a software-selectable range of objectives and filters, integrated white light and colorimetric imaging, and over 25 preconfigured protocol templates available, the ImageXpress Pico system has the flexibility to support a wide range of assays. Capable of generating publication-ready data in just a few clicks of the mouse, the system is an intelligent addition to any lab.

Some of the commonly used analysis protocols are listed here.

Angiogenesis	Apoptosis	Autophagy	Cell count
Cell count – transmitted light	Cell differentiation	Cell scoring	Cell scoring – transmitted light
Double marker expression	Endocytosis	Internalization	Live cells
Lysosomes	Mitochondria	Mitotic index	Multi-wavelength cell scoring
Neurite tracing	Phagocytosis	Pits and vesicles or endosomes	Protein expression index
Translocation	Viral infectivity	Custom Mimetas 2-lane protocol	Custom Mimetas 3-lane protocol

For more information, please visit **moleculardevices.com/pico**

Contact Us

Phone: +1.800.635.5577
Web: www.moleculardevices.com
Email: info@moldev.com
Check our website for a current listing of worldwide distributors.

Regional Offices

USA and Canada	+1.800.635.5577	Taiwan/Hong Kong	+886.2.2656.7585
United Kingdom	+44.118.944.8000	Japan	+81.3.6362.9109
Europe*	00800.665.32860	South Korea	+82.2.3471.9531
China	+86.4008203586	India	+91.73.8661.1198

*Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal, Spain, Sweden and Switzerland