

# ImageXpress Pico

## Automated Cell Imaging System

Go from sample to results in minutes

## Simply amazing.

*Better data, better value, clear choice.*

The ImageXpress® Pico Automated Cell Imaging System is more than a digital microscope, combining high-resolution imaging with powerful analysis. Whether running fluorescence imaging or brightfield assays, the automated imager features comprehensive preconfigured protocols for cell-based assays to shorten the learning curve, so you can start running experiments quickly.



### Get started in a snap

With the icon-driven, user-friendly CellReporterXpress® Image Acquisition and Analysis Software, you can capture and analyze images with minimal training.



### Do more than cell counting

Expand your assays with various preconfigured templates optimized for many cell-based experiments including apoptosis, mitochondrial evaluation, 3D cell models, live cell/ timelapse, and neurite tracing.

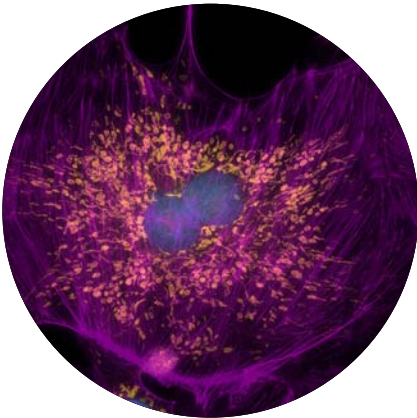


### Automate imaging affordably

Alleviate the hassle of going to the core lab to run your samples. The system's lab-friendly price allows researchers to afford the convenience of automated imaging and analysis on their lab bench. With options like environmental control and z-stack acquisition, the system can be ordered to fit your research needs.

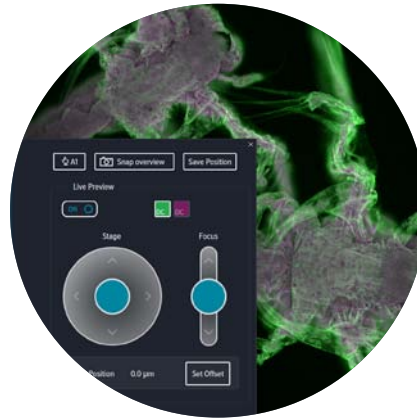
# Intelligent cellular imaging and analysis

The ImageXpress Pico Automated Cell Imaging System does more than imaging—it offers unparalleled analysis capabilities that simplifies image analysis for cell-based assays.



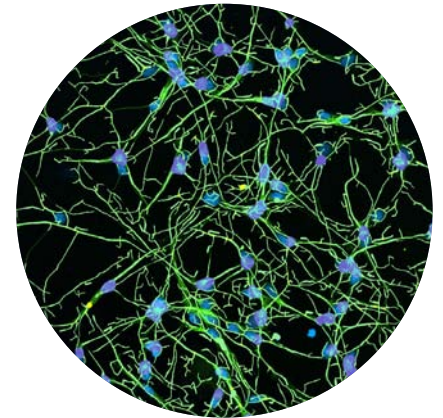
## Increase resolution with on-the-fly deconvolution

Enhance contrast of images during acquisition with the Digital Confocal\* 2D on-the-fly deconvolution option, allowing you to increase resolution and improve assay quality.



## Identify regions of interest quickly and easily

Live Preview simplifies identification of regions of interest, letting you pan around the sample and interactively adjust focus with a virtual joystick, saving time and effort.



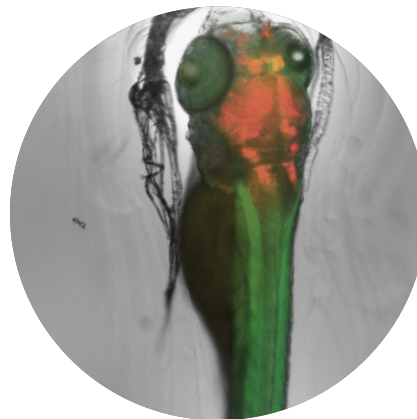
## Remove the guesswork with preconfigured analysis protocols

CellReporterXpress offers over 25 preconfigured analysis protocols ranging from simple cell counting to sophisticated neurite tracing analysis removes the guesswork from optimizing parameters.



## Monitor live-cell assays with on-board environmental control

Multi-day, time-lapse, and live-cell assays can be run using the on-board environmental system with options for humidity, CO<sub>2</sub>, and O<sub>2</sub> control. Optimized to prevent z-drift, the software also provides real-time monitoring of environmental state, ensuring optimal assay conditions.



## Capture deeper insights with z-stack acquisition

Generate sharper images for more accurate segmentation using z-stack acquisition. Acquire a series of images at different focal points to capture more detail than with a single slice. Users can include all slices or select which slices to include in the final projection.

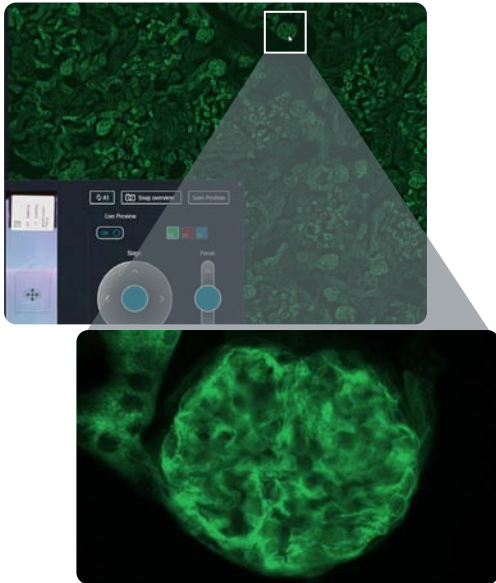


\*ImageXpress Pico Digital Confocal uses AutoQuant 2D Real Time Deconvolution

# KEY FEATURES

## Live Preview

Simplify the identification of ROIs (regions of interest). Visualize your sample prior to acquisition using the virtual joystick to pan around the sample, and interactively adjust focus. Live Preview, featuring “click-to-center” functionality, continuously updates the image so you can easily navigate your sample to find the desired field of view. Whether you’re working on 96-well microplates, slides, or 35mm culture dishes, Live Preview helps you to quickly and easily focus on what’s important to your research.

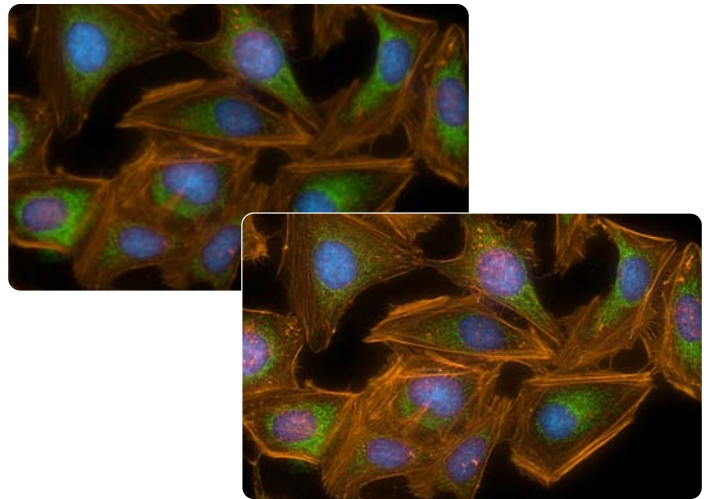


Easily find, zoom, and save regions of interest

## Digital Confocal

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



On-the-fly image deconvolution decreases exposure time while increasing resolution with Digital Confocal Imaging

## Environmental control

Environmental control mimics the cell environment and enables you to run multiday studies, time-lapse, and live-cell assays. With CellReporterXpress software, the ImageXpress Pico Automated Cell Imaging System provides visibility of environmental control settings during acquisition to ensure that the system is running at peak performance during your assay.

The environmental control system integrates directly into the rear of the ImageXpress Pico saving precious lab bench space. Easily add water without disrupting your ongoing experiments to support multiday studies. The unique magnetically-sealed environmental control cassette chamber introduces and maintains gas and humidity while reducing gas usage as compared to flooding the entire system.



Integrated humidity column is easily refilled without disrupting ongoing experiments



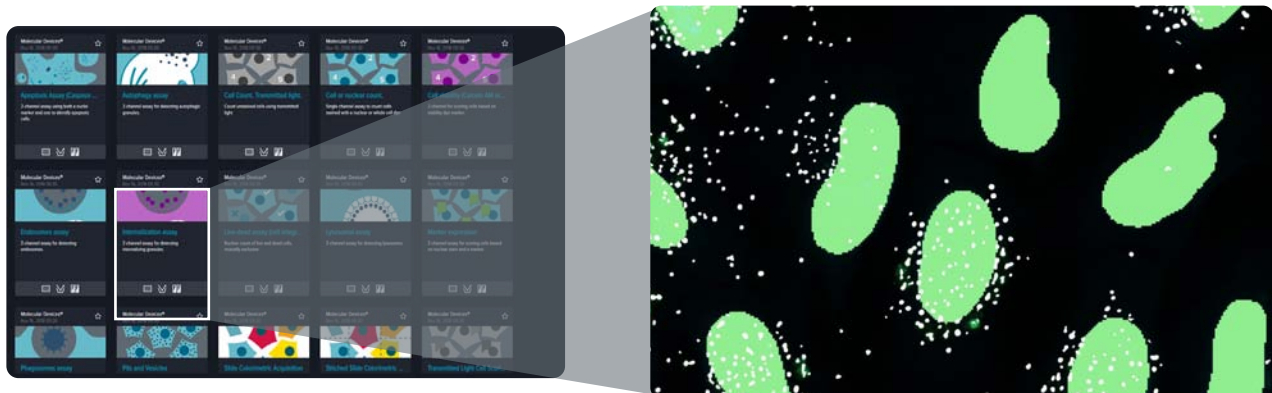
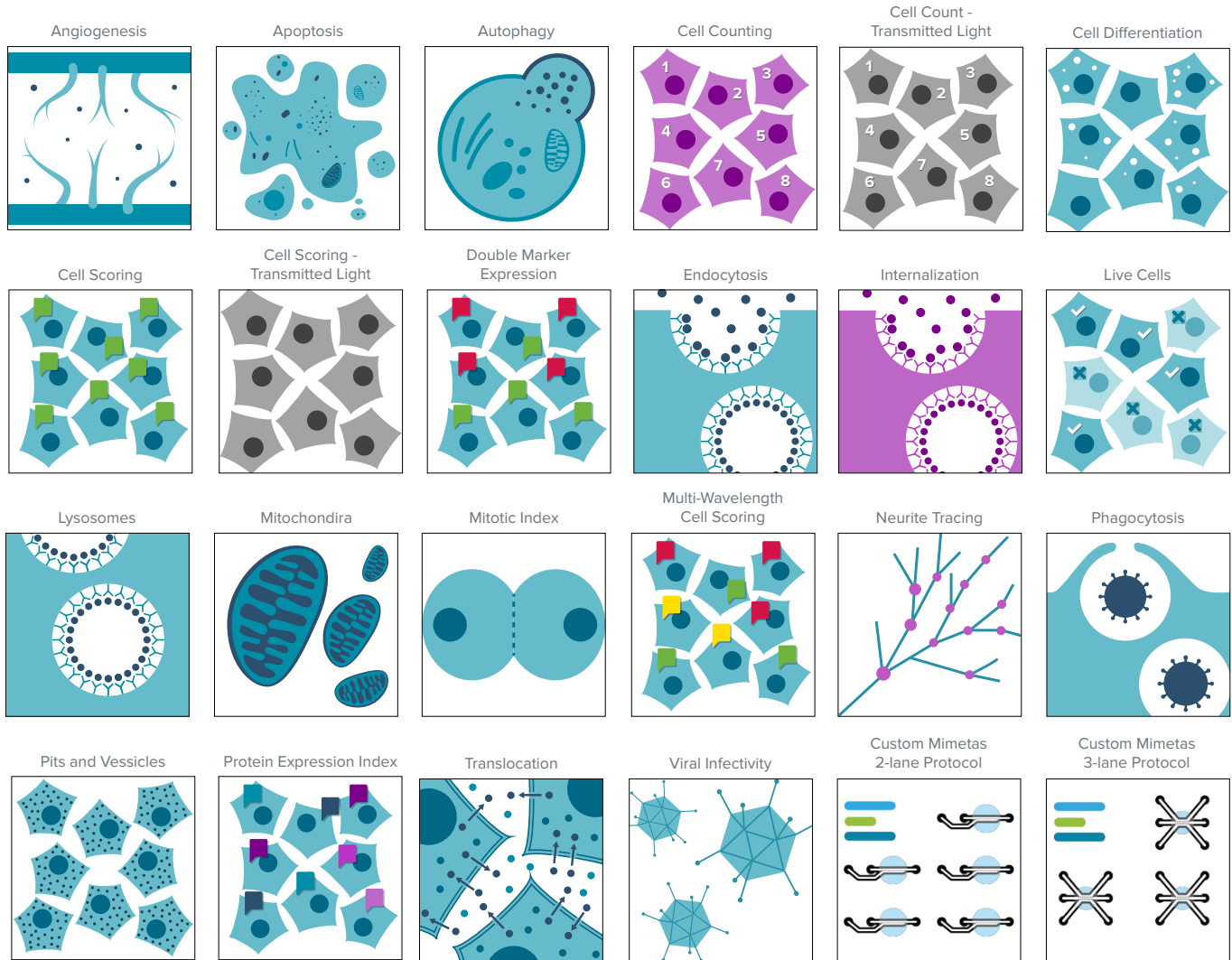
Magnetically sealed environmental control cassette reduces gas usage



# APPLICATIONS

## From samples to results in minutes

CellReporterXpress features over 25 preconfigured acquisition and analysis templates optimized to collect the most pertinent information for various cell-based assays, removing the guesswork from optimizing parameters.



Icon driven step-by-step workflow guides you to your first image and data in minutes

# SPECIFICATIONS

Specifications	
Imaging modes	Transmitted light (brightfield), colorimetric, fluorescence, live-preview
Illumination	High power LEDs with >20,000 hour life
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
Camera	Sony CMOS, 5 megapixel
Channels	Cy5, TRITC, FITC, DAPI, Texas Red, CFP, white light, and RGB
Stage resolution	0.625 $\mu$ m
Imaging method	Single color, multicolor, time lapse, z-stacking, and Digital Confocal* 2D on-the-fly deconvolution
Autofocus method	LED autofocus or image autofocus with LED assist
Supported labware	6- to 384-well plates and 25 mm x 75 mm (1 in. x 3 in.) slides, 35 mm culture dishes
Supported operating systems	Windows 10 (main computer), Windows 10 and macOS (clients)
Image output	16-bit TIFF, JPG, MP4
Dimensions (in)	17.8 (H) x 21.7 (W) x 17.1 (D)
Dimensions (cm)	45.3 (H) x 55.1 (W) x 43.5 (D)
Weight (kg)	38 kg (84 lb) including options
Power	100 VAC to 240 VAC, 50/60 Hz, 1.6A nominal at 115V, 200 Watts Max
Ambient operating temperature	18°C to 30°C (59°F to 86°F)
Temperature control	Ambient +8°C to 40°C
Temperature control homogeneity	37°C $\pm$ 0.5°C at 23°C ambient
Gas control	O <sub>2</sub> control, 1-15% and ambient, CO <sub>2</sub> control, ambient to 15%
Humidity control	Active humidity control. Sample compartment controlled to 85% relative humidity.

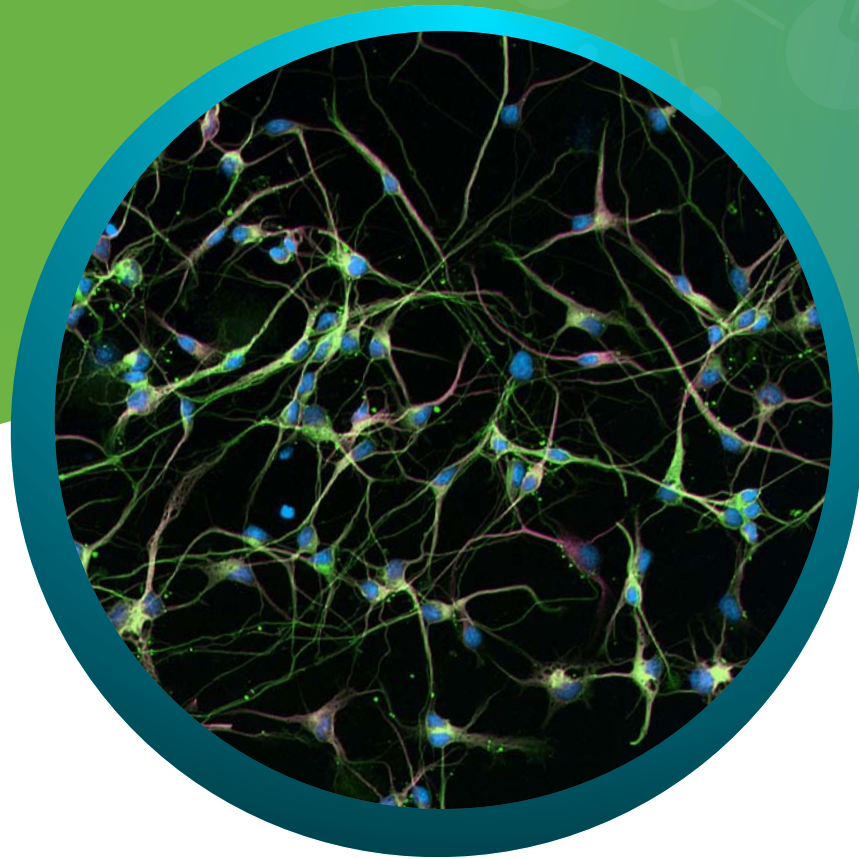
## Flexibility to expand

The ImageXpress Pico system accommodates various labware options including slide holders, 35mm culture dish holders, and more.



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

moleculardevices.com/pico



To request pricing information, scan the code below:



The ImageXpress Pico system features optics by Leica Microsystems.

#### Contact Us

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