



ACCUVA CeLLimager

**FAST, PRECISE, AUTOMATED
CELL IMAGING & ANALYSIS**



**ADVANCING IMAGING SOLUTIONS
FOR CELLAR RESEARCH**

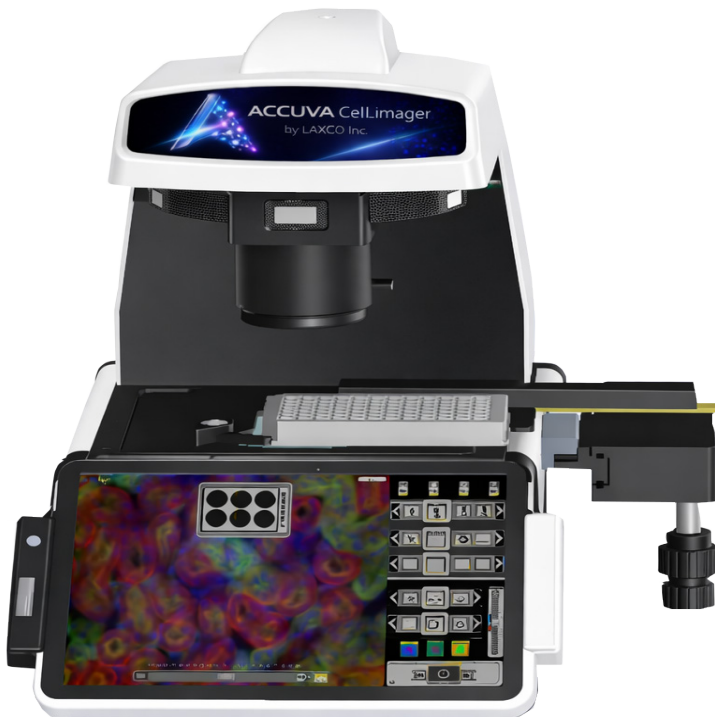
The Accuva™ CeLLimager™ Fluorescence Imaging Platform from Laxco is a next-generation integrated microscopy system designed to simplify advanced cell imaging while delivering the performance required for modern life science research.

By combining high-quality optics, automated imaging, multi-channel fluorescence capability, and an intuitive touchscreen interface, the CeLLimager enables researchers to capture high-resolution images quickly and efficiently, without the complexity of traditional microscope systems.

From routine cell culture monitoring to advanced fluorescence-based research, CeLLimager provides laboratories with a compact, powerful, and easy-to-use imaging solution that accelerates experimental workflows and improves research productivity.

Designed for Modern Life Science and Spatial Biology Research

The Accuva™ CeLLimager™ supports a wide range of biological applications, making it an ideal imaging platform for academic laboratories, biotechnology companies, pharmaceutical research, and teaching environments.



Key Applications Include:

- Cell culture monitoring and live-cell imaging
- Immunofluorescence detection and protein localization
- Cancer biology and cellular pathway research
- Neuroscience studies, including neuronal imaging
- Multicolor fluorescence imaging of labeled biomolecules
- Cell-based assays and drug discovery research

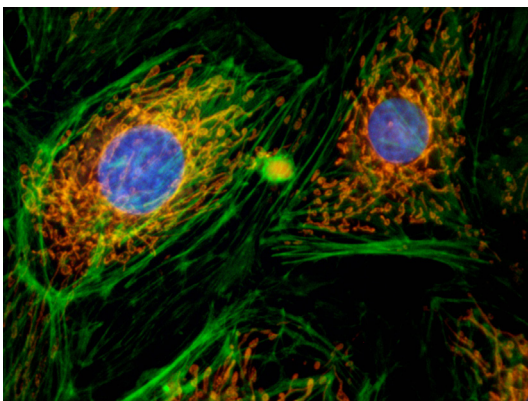
All-in-One Intelligent Imaging System

Unlike conventional microscope systems that require external computers and complex setup, the CeLLimager integrates optics, automation, camera, software, and touchscreen control into a single compact platform.

Researchers can perform image acquisition, adjust imaging parameters, and manage experimental data directly on the instrument, dramatically simplifying the imaging workflow.

Key Advantages

- Fully integrated standalone imaging system
- Embedded operating system with no external PC required
- 10.5" high-resolution touchscreen interface
- Compact design optimized for laboratory bench space
- Portable system with integrated carrying handle



Advanced Multi-Channel Fluorescence Imaging

The CeLLimager is engineered to deliver high-sensitivity fluorescence imaging across multiple channels, enabling researchers to visualize complex biological processes and molecular interactions.

The system features a 6-position automated fluorescence filter turret and a high-stability LED illumination system, supporting a wide range of fluorescence dyes and reporters.

Fluorescence Capabilities

- Up to 4 single-color fluorescence channels
- Expandable to 6-channel multiplex fluorescence
- Flexible channel configuration
- Live multi-channel live 3 colors fluorescence imaging color camera.
- High-sensitivity scientific camera for low-light detection

Note: This configuration allows researchers to simultaneously observe multiple fluorescence channels performing sophisticated, real-time fluorescence experiments with ease.

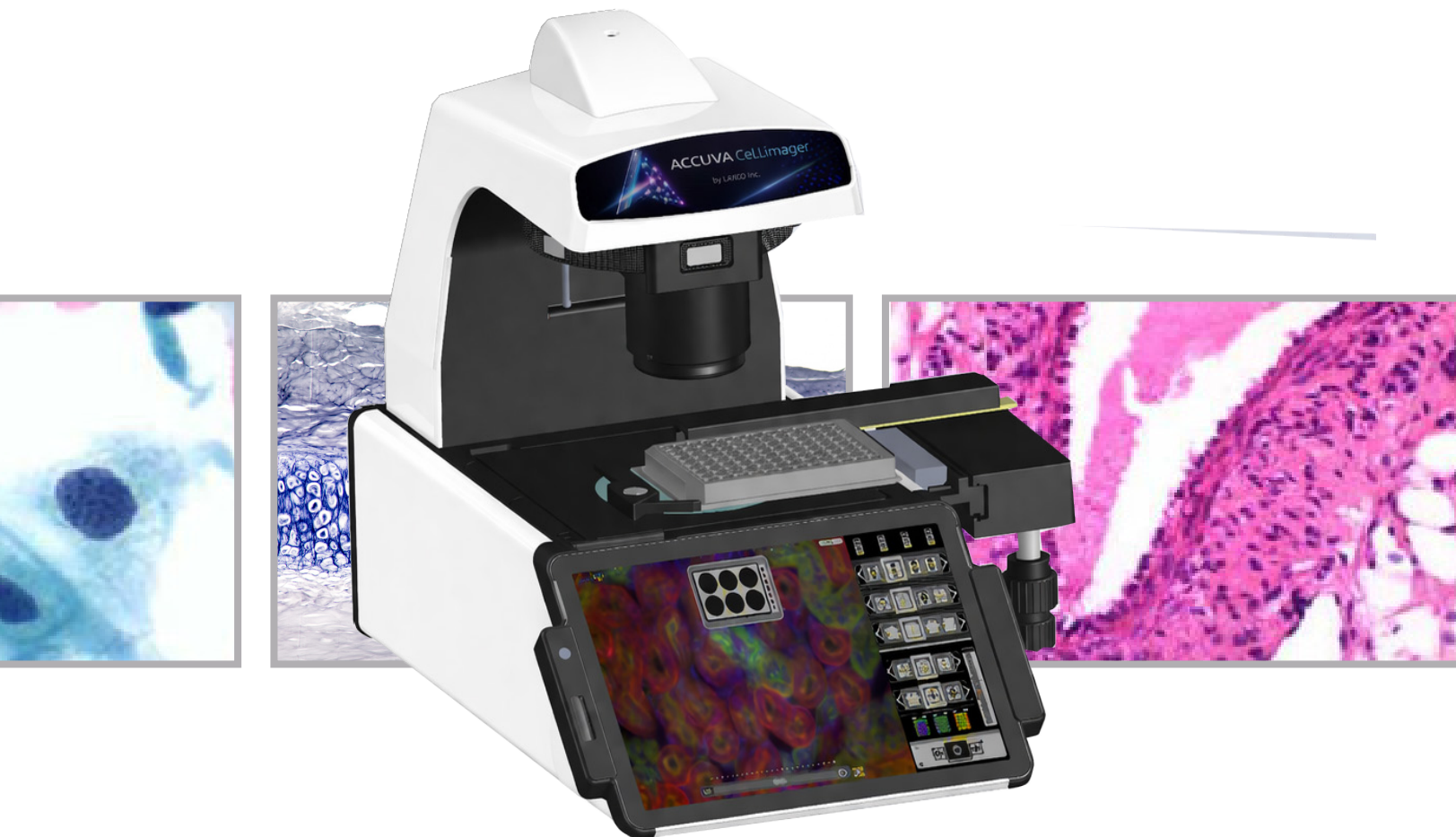
High-Resolution Scientific Imaging

At the core of the CeLLimager is an 8.3-megapixel high-sensitivity scientific camera, designed to capture detailed cellular structures with excellent contrast and clarity. Combined with precision optics and automated focusing, the system ensures reliable imaging performance for demanding biological applications.

Imaging Performance Features

- 8.3 MP scientific-grade camera
- High-resolution imaging for cellular and molecular studies
- Motorized Z-axis with autofocus
- Z-stack imaging for 3D analysis
- Time-lapse imaging for dynamic experiments
- Multi-channel live fluorescence imaging

These capabilities enable researchers to capture complex biological events with speed, precision, and reproducibility.



Multiple Imaging Modes in One Platform

TheCeLLimager integrates multiple observation methods and a wide range of samples to support diverse research needs. An automated 5-position phase contrast turret and automated condenser control allow seamless switching between observation modes. The system also features a flip-out high-numerical-aperture condenser, enabling high-resolution imaging when needed.

Imaging Modalities

- Brightfield imaging
- Phase contrast imaging
- Epi (discopic) illumination
- Fluorescence imaging

Sample Compatibility

- Culture plates
- Petri dishes
- Flasks
- Microscope slides
- Well Plates



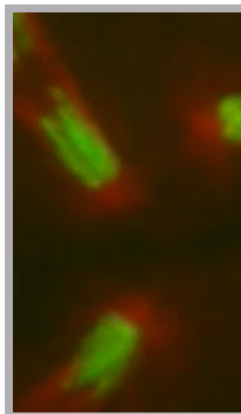
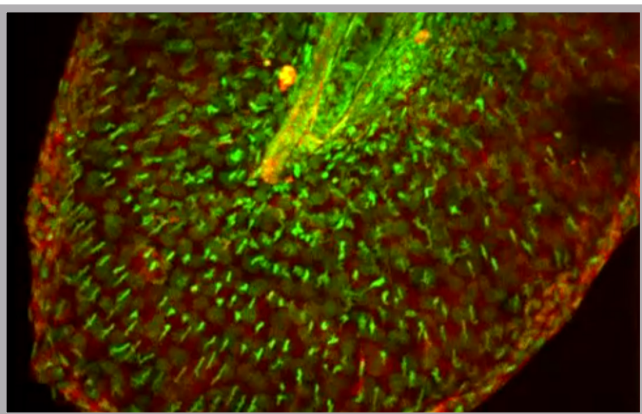
Flip-out high-numerical-aperture condenser



Automated 5-position phase contrast turret



Attachable Mechanical Stage



Popular LED Modules and Their Common Compatible Dyes

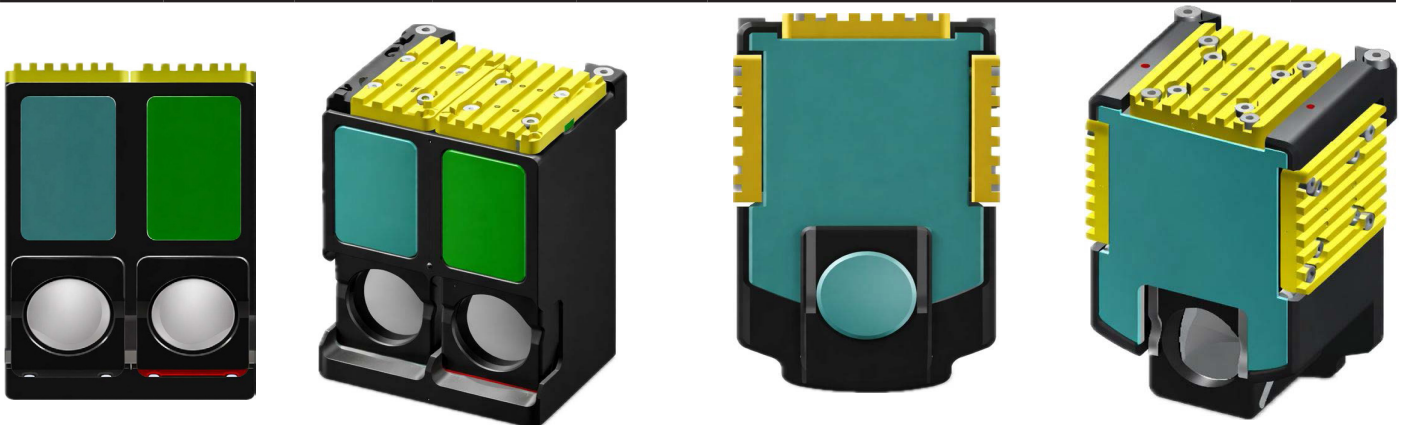
Motorized Turret Accommodates Up To Four Cubes

Key Features

- 3-Color multiplexing (DAPI / FITC / TRITC)
- Expandable with 1-2 additional single-color modules
- Free channels available (TxRED, Cy5)
- High signal-to-noise optimized filter sets
- Custom cube configurations available

Available Filter Cubes

Laxco Category Number	Light Cube	Color	Excitation (nm)	Emission (nm)	Compatible Dyes	Price
SS3P-M1	DAPI	Blue	357/44	447/60	DAPI, Hoechst, NucBlue, Alexa Fluor 350, BFP	Pre-Installed
SS3P-M2	FITC	Green	470/40	525/50	FITC/Alexa Fluor 488/Fluo3/Oregon Green	Pre-Installed
SS3P-M3	TRITC	Red	530/40	605/70	TRITC/Cy3/TagRFP/AlexaFluor 546	Pre-Installed
SS3P-M4	CFP	Cyan	445/20	510/40	CFP, ECFP, Cerulean	
SS3P-M5	YFP	Yellow	500/20	535/30	YFP, Venus, Alexa Fluor 514™, Fluo-3, 6-JOE, Gold 525, TO-PRO-1	
SS3P-M6	GFP	Green	470/22	525/50	GFP, Alexa Fluor 488, Calcein, SYBR Green, FITC, Fluo-4, MitoTracker Green, pHrodo Green	
SS3P-M7	RFP	Orange	531/40	593/40	RFP, Alexa Fluor 546/555, PE, Cy3, MitoTracker Orange, Rhodamine Red, SYTOX Orange	
SS3P-M8	Texas Red	Red	585/29	628/32	RFP, Alexa Fluor 546/555, PE, Cy3, MitoTracker Orange, Rhodamine Red, SYTOX Orange	
SS3P-M9	Cy5	Deep Red	628/40	685/40	Cy5, Alexa Fluor 647/660, DRAQ5	
SS3P-M10	Cy7	Near-IR	716/40	794/32	Cy7, IRDye® 800CW, DyLight 750	
SS3P-CMxx	CUSTOM	User Defined	User Defined	User Defined		



Typical Configuration

1× 3-Color Multiplex (DAPI/FITC/TRITC) + 1-2 Single Color Modules (e.g., Cy5, AF594)

Laxco fluorescence modules are protected by one or more patents and/or pending patent applications. Unauthorized use, reproduction, or duplication of this product or its underlying technology is strictly prohibited.

Intelligent Automation for Efficient Workflows

The CeLLimager integrates automated imaging technologies that simplify microscopy while improving reproducibility. These automated functions allow researchers to focus on scientific discovery rather than manual microscope adjustments.

Automation Features

- Automated 6-position objective turret
- Motorized Z-axis focusing
- Autofocus functionality
- Z-stack imaging capability
- Time-lapse experiment control
- Light intensity memory recall

Built-In AI Software and Data Management

The CeLLimager includes embedded AI-assisted imaging software designed to streamline image capture and experiment management.

Users can easily control imaging parameters, review captured images, and export data directly from the system.

Data and Connectivity Features

- Onboard AI-enabled imaging software
- Wireless image transfer
- Remote access via secure tunnel connection
- Image export in JPEG and TIFF formats
- Internal storage: 64 GB / 128 GB / 256 GB
- External USB storage support
- AuditSafe 21 CFR Compliant Software available

Compact Design, Powerful Performance

Despite its powerful capabilities, the CeLLimager maintains a compact and portable design suitable for any laboratory environment.

Dimensions:

(D × W × H): 44.5 × 27.7 × 34.8 cm (17.5 × 10.9 × 13.7 in)

Weight:

Approximately 19 kg (42 lbs).

The integrated rear carrying handle allows the system to be easily moved between laboratory workstations, making it ideal for shared research facilities

Accuva CeLLimager Fluorescence Imaging Microscope

System Overview

CATEGORY	SPECIFICATION
Product Name	Accuva CeLLimager Fluorescence Imaging Microscope
Manufacturer	Laxco
System Type	Integrated automated fluorescence imaging microscope
Imaging Modes	Brightfield, Phase Contrast, Epi (Discopic), Fluorescence
Operation	Standalone system with embedded operating system
External PC Required	No

Optical System

FEATURE	SPECIFICATION
Objective Nosepiece	Automated encoded turret, 6-position
Preinstalled Objectives	4X, 10X, 20X Phase Contrast
Additional Objective Support	Compatible with standard RMS thread microscope objectives of varying magnifications
Phase Contrast Turret	Automated, 5-position
Condenser Options	0.4 NA automatic 5-position condenser
	0.3 NA long working distance condenser
	High NA Flip-down 1.2 NA condenser

Fluorescence System

FEATURE	SPECIFICATION
Fluorescence Filter Turret	Automated, 6-position
Fluorescence Channels	Up to 6 channels with custom cube configurations available
Illumination Source	High-stability LED illumination
LED Modules	6 interchangeable LED cubes
Channel Configuration	Field Upgradeable
Supported Applications	Multiplex fluorescence imaging with real-time visualization

Accuva CeLLimager Fluorescence Imaging Microscope

Imaging System

FEATURE	SPECIFICATION
Camera	Scientific CMOS camera
Resolution	8.3 MP
Sensor Type	High-sensitivity scientific CMOS sensor
Imaging Capabilities	Multi-channel fluorescence imaging
	Z-stack acquisition
	Time-lapse imaging
	Live-cell imaging
Autofocus	Supported in brightfield, phase contrast, and fluorescence imaging modes

Stage and Mechanical System

FEATURE	SPECIFICATION
Stage Type	Detachable manual stage
Focus Control	Motorized Z-axis with autofocus and software control
Automation	Motorized objective switching with position encoding
Transport Design	Integrated rear carrying handle

Display and User Interface

FEATURE	SPECIFICATION
Display Type	Integrated touchscreen display
Display Size	10.5 inches (26.7cm)
Resolution	1920 X 1280
Pixel Density	220 PPI
Aspect Ratio	3:2
Touch Capability	Multi-touch interface with glove compatibility
Input Support	Touch and stylus compatible

Accuva CeLLimager Fluorescence Imaging Microscope

Software and System Control

FEATURE	SPECIFICATION
Operating System	Embedded system
User Interface	Integrated touchscreen control
AI Functions	Built-in AI-assisted imaging software
Image Acquisition	Onboard control
Image Analysis	Basic AI-assisted analysis
21 CFR Capability	AuditSafe 21 CFR Compliant Software (optional)

Data and Connectivity

FEATURE	SPECIFICATION
Image Formats	JPEG, TIFF
Internal Storage	UFS 64 GB / 128 GB / 256 GB
External Storage	USB flash drive
Network	Gigabit Ethernet
Remote Access	Secure remote tunnel connection
Wireless Transfer	Supported

Ports and Interfaces

INTERFACE	SPECIFICATION
HDMI	1 X HDMI 2.0
Display Port	2 X DP 1.2
USB-C	1 X USB-C 3.2 Gen2 with DisplayPort 1.4 Alt Mode
USB-A	2 X USB 3.2 Gen2 (1 with PowerShare)
Ethernet	1 X Gigabit Ethernet

Accuva CeLLimager Fluorescence Imaging Microscope

Physical Specifications

FEATURE	SPECIFICATION
Dimensions (D × W × H)	44.5 × 27.7 × 34.8 cm (17.5 × 11.0 × 13.8 in)
Weight	~42lbs. (19kg) with optional components
Installation	Bench-top system
Transport	Integrated rear carrying handle

Electrical Requirements

FEATURE	SPECIFICATION
Output Voltage	130W 19.5V 6.67A - 6.7A
Input Voltage	AC 100-240V, 50/60Hz
Connector Size	Barrel Tip (7.4mmx5.0mm) three pins

Optional Configurations

FEATURE	SPECIFICATION
Additional Fluorescence Channels	Expandable up to 6 channels
Additional Objectives	Compatible with standard RMS objectives, including higher magnification options
External Storage	USB storage expansion

A Smarter Imaging Solution for Everyday Research

The CeLLimager Fluorescence Imaging Platform brings together advanced optics, intelligent automation, and user-friendly software in a single streamlined system. Whether used for cell culture monitoring, fluorescence-based molecular research, drug discovery, or teaching laboratories, the CeLLimager provides researchers with a reliable, high-performance imaging solution that accelerates discovery and simplifies microscopy workflows.



LAXCOTM
MICROSCOPES REDEFINED

LAXCO, Inc.
18303 Bothell-Everett Hwy
Suite 140
Mill Creek, WA 98012
sales@laxco.com
www.laxcoinc.com

Contact us:
425-686-3081
sales@laxcoinc.com

SS3-MKT-DOC-1700243(4)