

Leica HCS A

High Content Screening Automation
 Technical Documentation

Living up to Life

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High Content Screening Automation

LAS AF MATRIX M3 Software Platform

Amplify the power of your imaging system by HCS A and convert your confocal into a High Content Screening System. Maximum flexibility is provided for universal applications and easy automation enables efficient screening. Computer Aided Microscopy allows external system control and turns your Leica imaging system into an intelligent microscope.



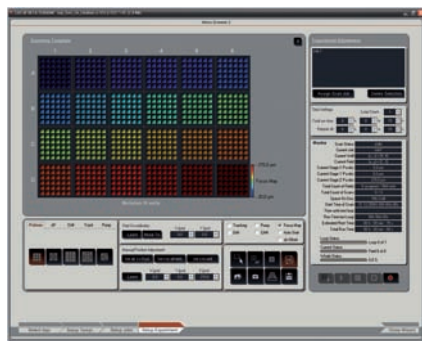
Leica TCS SP5



Leica TCS SPE



Leica TCS LSI



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Product Overview				
Imaging automation	LAS AF MATRIX Mosaic Advanced		156602501	
Remote system control	LAS AF MATRIX Mosaic+Multiwell Advanced		156602502	
	LAS AF MATRIX Mosaic Full Version		156602504	
	LAS AF MATRIX Multiwell Full Version		156602505	
	LAS AF MATRIX Full Version w/o CAM		156602511	
	LAS AF MATRIX Developer Entry		156602512	
Accessory Tools	LAS AF MATRIX Developer Full w. CAM		156602514	
	LAS AF MATRIX Single Object Tracking		156602507	
Upgrades	LAS AF MATRIX Pump ²		156602508	
	LAS AF MATRIX Z-Drift Compensator		156602509	
	LAS AF MATRIX Advanced Trigger ²		156602510	
	LAS AF MATRIX Upgrade Mosaic Adv. to Mosaic Full Version		156602515	
	LAS AF MATRIX Upgrade Developer Entry to Full Version		156602519	
Technical Data				
Platforms	System support ¹		TCS SP5, TCS SPE, TCS LSI	
	LAS AF version		2.2.1 or higher	
Image acquisition	Imaging technologies		True confocal point scanner	
Export formats	Image types		TIF, OME.TIF, LIF	
	Image data		OS platform independent	
Network	Protocol		TCP/IP	
	Administration		Local system admin	
Remote system control	Control via network		Yes, with CAM	
	Control interface		Computer Aided Microscopy, CAM	
Compatible software (examples)	Not included in the packages			
	Programming languages		C++, C#, VB LabVIEW™, MATLAB™	
	Image programming		Adobe Photoshop®	
Limitations	Image analysis software		ImageJ ² with LOCI plugins Definiens® Challenger® MetaMorph®, Leica MM AF®	
	LAS AF MATRIX M3, version 2.2.1		Hardware excluded:	TCS SP5 X, MP, STED, DMI 6000 CFS
			Software excluded:	TCS SMD FCS, FLIM, FLCS FRAP, FRET, Electrophysiology
System Requirements				
Imaging systems Computing	Platform		TCS SP5, TCS SPE, TCS LSI	
	Operating System		Windows® XP, SP2	
	Recommended			
	Processor speed	Mhz	3	
	Memory	GB	4	
	Hard disc	GB	500	
	Network		Yes	
Motorized Stages	Platform	Stand	Part No.	XY-Travel Range³
	TCS SP5	DM	15 6504 150	100 x 80 mm
		DMI	15 6504 141	127 x 83 mm
	TCS SPE	DM	15 6605 200	72 x 38 mm
		DMI	15 6605 201	127 x 83 mm
	TCS LSI	LSI-Base	15 6905 202	127 x 83 mm

Annotations:

¹ Supports technology within the range of the product specification.

² Supported by TCS SP5 only with additional external hardware.

³ Please note that depending on different well plate formats and platforms the outer wells might not be scanned due to mechanical restrictions. Test is recommended.

Open Microscopy Environment (OME) is a multi-site collaborative effort among academic laboratories and a number of commercial entities that produces open tools to support data management for biological light microscopy. Designed to interact with existing commercial software, all OME formats and software are free, and all OME source code is available under GNU public copyleft licenses. OME is developed as a joint project between research-active laboratories at the Dundee, NIA Baltimore and Harvard Medical School and LOCI.

C++ is a programming language standardized by ISO. C# is a programming language developed by Microsoft, Inc. LabVIEW™ is a registered trademark of NI National Instruments Inc.

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“With the user, for the user”

Leica Microsystems

Leica Microsystems operates globally in four divisions, where we rank with the market leaders.

• Life Science Division

The Leica Microsystems Life Science Division supports the imaging needs of the scientific community with advanced innovation and technical expertise for the visualization, measurement, and analysis of microstructures. Our strong focus on understanding scientific applications puts Leica Microsystems' customers at the leading edge of science.

• Industry Division

The Leica Microsystems Industry Division's focus is to support customers' pursuit of the highest quality end result. Leica Microsystems provide the best and most innovative imaging systems to see, measure, and analyze the microstructures in routine and research industrial applications, materials science, quality control, forensic science investigation, and educational applications.

• Biosystems Division

The Leica Microsystems Biosystems Division brings histopathology labs and researchers the highest-quality, most comprehensive product range. From patient to pathologist, the range includes the ideal product for each histology step and high-productivity workflow solutions for the entire lab. With complete histology systems featuring innovative automation and Novocastra™ reagents, Leica Microsystems creates better patient care through rapid turnaround, diagnostic confidence, and close customer collaboration.

• Medical Division

The Leica Microsystems Medical Division's focus is to partner with and support surgeons and their care of patients with the highest-quality, most innovative surgical microscope technology today and into the future.

The statement by Ernst Leitz in 1907, “with the user, for the user,” describes the fruitful collaboration with end users and driving force of innovation at Leica Microsystems. We have developed five brand values to live up to this tradition: Pioneering, High-end Quality, Team Spirit, Dedication to Science, and Continuous Improvement. For us, living up to these values means: **Living up to Life.**

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