Leica HCS A

High Content Screening Automation

Technical Documentation

Living up to Life

Leica

MICROSYSTEMS

Leica HCS A
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.
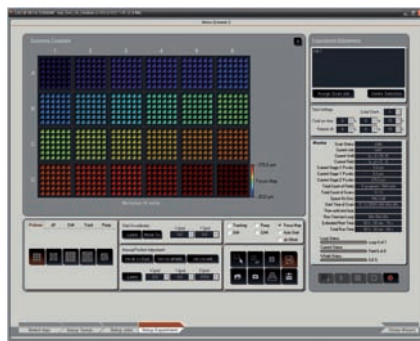

Leica TCS SP5

Leica HCS A

Leica TCS SPE

Leica TCS LSI

Leica HCS A

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 indpendent
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®
	Image analysis software		ImageJ[2] with LOCI plugins Definiens® Challenger® MetaMorph®, Leica MM AF®
Limitations	LAS AF MATRIX M3, version 2.2.1	Hardware excluded: Software excluded:	TCS SP5 X, MP, STED, DMI 6000 CFS TCS SMD FCS, FLIM, FLCS FRAP, FRET, Electrophysiology

System Requirements

Imaging systems	Platform		TCS SP5, TCS SPE,TCS LSI
Computing	Operating System		Windows® XP, SP2
	Recommended		
	Processor speed	Mhz	3
	Memory	GB	4
	Hard disc	GB	500
	Network		Yes

	Platform	Stand	Part No.	XY-Travel Range[3]
Motorized Stages	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 mechancial 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.

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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 micro-structures 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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