





Product Information

LD Plan-APOCHROMAT 20x/1.0

Ultra Deep Imaging for Confocal Laser Scanning
and Multiphoton Microscopy

INTERNET-LINK 

VIDEO/ANIMATION 

Release 1.0



We make it visible.

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20x/1.0**

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› **In Brief**

› The Advantages

› The Applications

› The System

› Technology and Details

› Service

Experience a New Depth

LD Plan-APOCHROMAT 20x/1.0 opens up a new dimension of optical penetration depth into cleared biological samples – particularly into the brains of mammals. Look deeper into the tissue than ever before - up to six times deeper than with a conventional multiphoton microscope and up to 60 times deeper than with conventional laser scanning microscopy.

You will be impressed by the quality of structural information you retrieve, even from the deepest layers: expect a big push forward, especially in basic neurobiological research and mapping of neuron networks.



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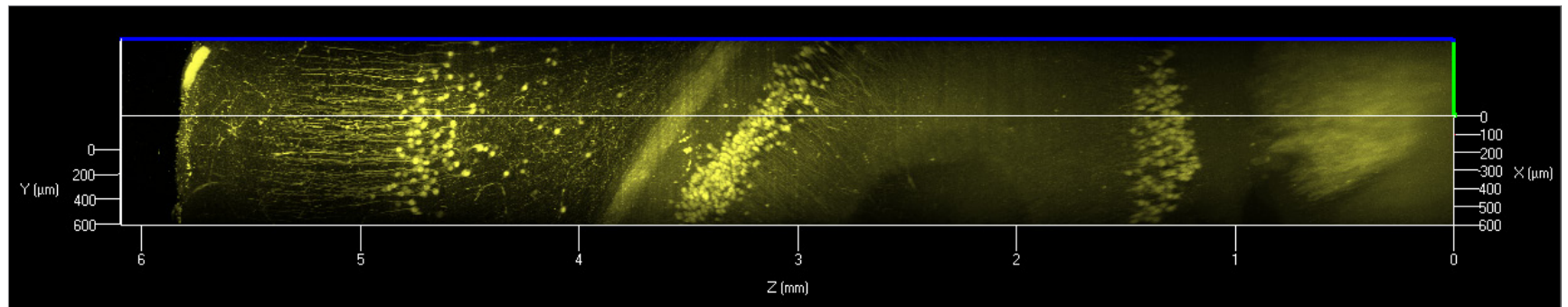
› Service

Reconstruct in 3D – Fast and Reliable

LD Plan-APOCHROMAT 20x/1.0 is optimized for the Scale method. Use this objective for both laser scanning and multiphoton microscopy and you will appreciate how little hardware you need to set up for multi-fluorescence microscopy, for example - you can even conduct spectral imaging.

Histological cutting procedures are a thing of the past with the LD Plan-APOCHROMAT 20x/1.0. Reconstruct tissue elements such as cell groups and cellular components more clearly, faster and more reliably in 3D. There's no need to apply mechanical cuts so you will avoid gaps that could impede or even prevent reconstruction.

The new LD Plan-APOCHROMAT 20x/1.0 is the convenient and cost-efficient upgrade for your Axio Examiner system. It only takes the newly designed lens holder to make use of it on your existing system.



*Maximum intensity projection, brain of 7-week old YFP-H mouse, fixed and cleared with Scale clearing technique
(Hama et al, Nat Neurosci. 2011) LSM 780 NLO @ ex. 920nm; detection BIG NDD
Hiroshi Hama, Fumiyoshi Ishidate, Atsushi Miyawaki, RIKEN BSI, Wako, Japan*

Technical Specifications

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Objective LD Plan-Apochromat 20x/1.0 Corr M32 85mm

Magnification	20x
Numerical Aperture	1.0
Parfocal length	85 mm
Overall length	105 mm
Working Distance	5.6 mm VIS-IR
Apochromatic correction of the longitudinal chromatic aberration for the wavelength range	450 to 650 nm
Flattened field of view	20mm
Correction collar for compensation of spherical aberrations by different variants of Sca/e	
To be used only with 1-position objective mount M32 for Axio Examiner (changeable by customer)	
Objective lifting range of 22mm	
Can be used for multi photon microscopy (LSM 710 NLO, LSM 780 NLO, LSM 7 MP) and for single photon microscopy (LSM 700, LSM 710, LSM 780)	
10-20x deeper than in uncleared tissues	

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Count on Service in the True Sense of the Word

Because the Carl Zeiss microscope system is one of your most important tools, we make sure it is always ready to perform. What's more, we'll see to it that you are employing all the options that get the best from your microscope. You can choose from a range of service products, each delivered by highly qualified Carl Zeiss specialists who will support you long beyond the purchase of your system. Our aim is to enable you to experience those special moments that inspire your work.

Repair. Maintain. Optimize.

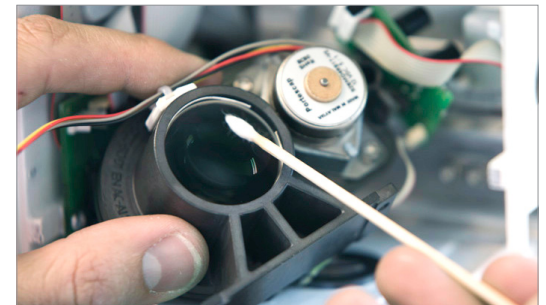
Attain maximum uptime with your microscope. A Carl Zeiss maintenance contract lets you budget for operating costs, all the while avoiding costly downtime and achieving the best results through the improved performance of your system. Choose from service contracts designed to give you a range of options and control levels. We'll work with you to select the service program that addresses your system needs and usage requirements, in line with your organization's standard practices.

Our standard preventative maintenance and repair on demand contracts also bring you distinct advantages. Carl Zeiss service staff will analyze any problem at hand and resolve it – whether using remote maintenance software or working on site.

Enhance Your Microscope System

Your Carl Zeiss microscope system is designed for a variety of updates: open interfaces allow you to maintain a high technological level at all times. As a result you'll work more efficiently now, while extending the productive lifetime of your microscope as new update possibilities come on stream.

Please note that our service products are always being adjusted to meet market needs and may be subject to change.



Profit from the optimized performance of your microscope system with a Carl Zeiss service contract – now and for years to come.

www.zeiss.com/microservice

The moment your data change scientific minds.
This is the moment we work for.

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// RECOGNITION
MADE BY CARL ZEISS

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