From Eye to Insight

Leica
MICROSYSTEMS

CLINICAL MICROSCOPY SOLUTIONS

DM1000 – DM3000 ERGONOMIC SYSTEM MICROSCOPES

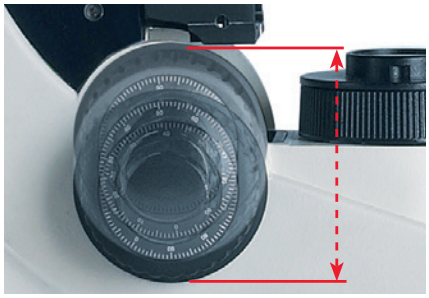
MYcroscopy: Designed to adapt to Your individual Daily Routine

DM1000

The DM1000 is ideally suited for screening clinical laboratory applications, such as histopathology, cytology, hematology, and microbiology.

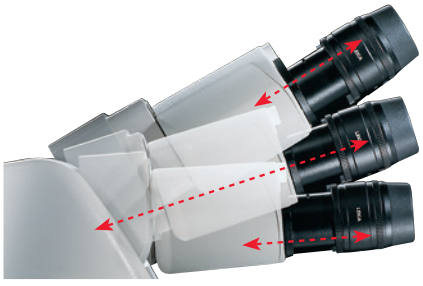
DM2000

The DM2000 is designed for more complex routine pathology and cytology laboratory applications.



Height-adjustable focus knobs allow hands and forearms to rest comfortably on the bench, independent from individual hand sizes.

One hand operation of focus knob and stage drive to speed up your operation, and to free one hand for other tasks.



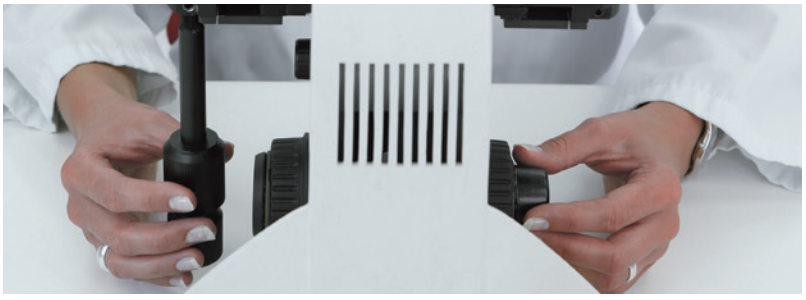
0-35° tiltable ergo observation tube with eyepiece extension is an optimized solution that enables you to change the working position multiple times during the day.

DM2500

The DM2500 is especially suited for applications in pathology or biomedical research that frequently require special contrast methods, such as fluorescence or interference contrast.

DM3000

With its intelligent automation, the DM3000 is designed primarily for cytology and pathology laboratories in which fast work is the order of the day without sacrificing user comfort.



Experience optimal ergonomic operation of a microscope thanks to symmetrical layout of coaxial drive and focus knobs. Shoulders are level, the spine is straight and arms are resting at a comfortable angle without stretching.

Telescopic ergo module between stand and observation tube allows for easy adjustment of the microscope height.

DM4 B – DM6 B MICROSCOPES

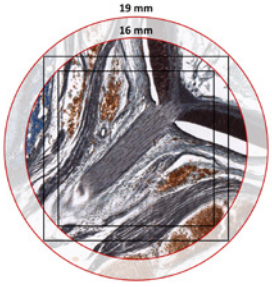
Take the Strain out of the Pathology Slide Review

DM4 B

The consultant's microscope

Ergonomic Design: The easy to reach stage, magnification and focus controls, plus fully automatic condenser head movement, enables you to work in comfort.

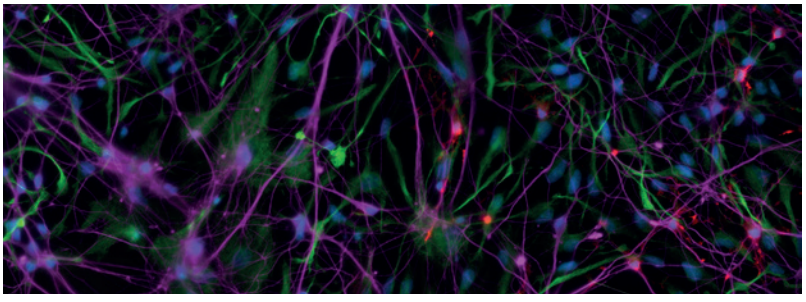
Intelligent Automation: One-button switching between contrast methods provides quick and easy changing from brightfield to fluorescence.



High Performance: The large, 19mm field of view camera port supports highly sensitive, high speed and larger format sCMOS cameras for brilliant imaging.

DM6 B

Powerful clinical upright microscope solution



Fluorescence Imaging: The unique and patented Fluorescence Intensity Manager (FIM) facilitates easy and reproducible regulation of the excitation light, which helps protect your sample from photo bleaching.

Rapid Measurements: The 1.25x objective coupled with a wide field of view enables users to view large specimens in a single overview.

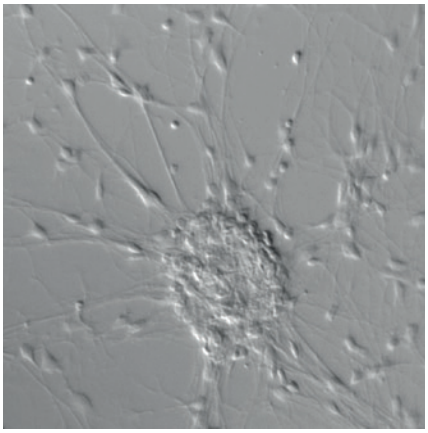
SPECIFICATIONS

Product	 DM1000	 DM2000	 DM2500
Transmitted light contrasting methods	Brightfield, Phase Contrast, Darkfield, Polarization		
Differential interference contrast option	✖	✓	✓
Light source	LED or 30 W Halogen	LED or 30 W Halogen	Extra bright LED or 100 W Halogen
Light and contrast manager (TL and FL)	✖	✖	✖
Nosepiece movement	Manual	Manual	Manual
Objective lens positions	5	6 or 7	6 or 7
Mechanical focussing	Coarse/Fine/Focus stop	Coarse/Fine/ Medium/ Focus stop/ Adjustable torque	Coarse/Fine/ Medium/ Focus stop/ Adjustable torque
Motorized focussing	✖	✖	✖
FL option - number filter cubes	3	5	5
Programmable function buttons	✖	✖	✖
Display/Touch screen	✖	✖	✖

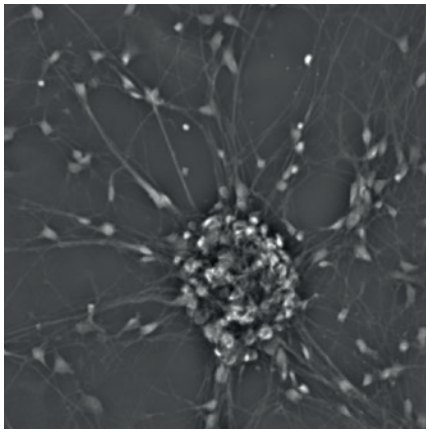
Key facts:

- Convenience with LED transmitted light illumination for constant color temperature
- DM2000-3000 feature a sophisticated focus mechanism –2-gear or optional 3-gear focusing, with torque adjustment and adjustable stage height stop.
- The DM2500 also offers powerful LED or 100 W halogen illumination and is well-suited for pathology that require specialized contrast methods such as differential interference contrast (DIC).
- The “intelligent automation” of the DM3000 supports greater efficiency and enhanced user comfort.
- The DM4 B ergonomic design coupled with automation provides an optimal platform for high volume case review, plus the confidence of brilliant imaging.

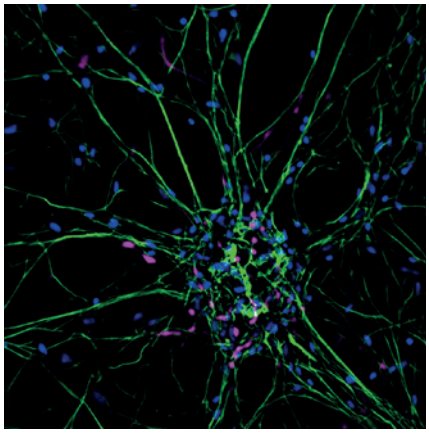
Product	 DM3000	 DM4 B	 DM6 B
Transmitted light contrasting methods	Brightfield, Phase Contrast, Darkfield, Polarization		
Differential interference contrast option	✓	✓	✓
Light source	LED or 30 W Halogen	Extra Bright LED (100W comparable)	Extra Bright LED (100W comparable)
Light and contrast manager (TL and FL)	✗ (✓TL)	✓	✓
Nosepiece movement	Motorized plus toggle mode	Manual plus absolute coded	Manual and motorized
Objective lens positions	6	6 or 7	7
Mechanical focussing	Coarse/Fine/Medium/ Focus stop/ Adjustable torque	Coarse/Fine	Coarse/Fine
Motorized focussing	✗	✗	✓
FL option - number filter cubes	5	5	5 or 8
Programmable function buttons	4 plus optional foot switch	6	6 plus 11 with additional control panel STP8000
Display/Touch screen	✗	Status Display	SmartTouch screen



Neurons: Differential Interference Contrast (DIC)



Neurons: Phase Contrast (PH)



Neurons: Fluorescence (FL)

DM MULTIPLE VIEWING SYSTEMS

Multiple header systems are flexible and highly modular. They attach to a single microscope and allow simultaneous viewing of high resolution images of the same specimen live.

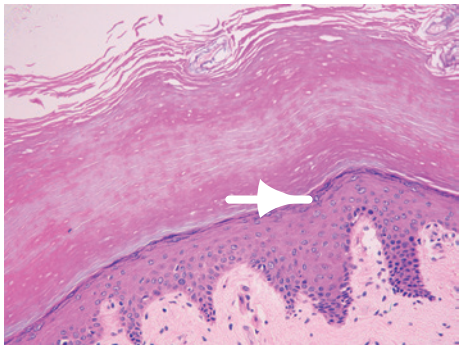
The vision to point the way

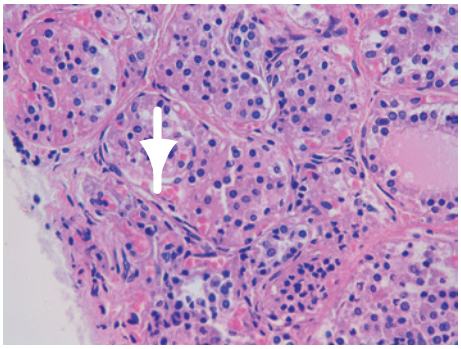
A bright white LED illuminated arrow can be positioned to point out areas of interest anywhere in the field of view, clearly visible to all viewers at each station.

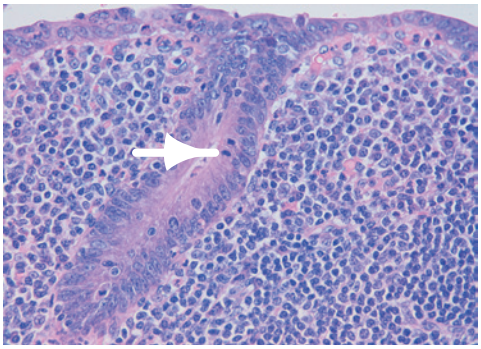
The vision to make experience count

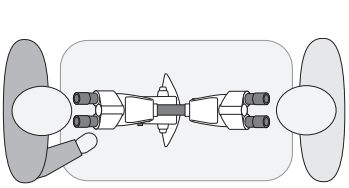
DM Multiple Viewing Systems are perfect devices for obtaining a second opinion, consultation or training, as all viewers see the same superb sample image live.

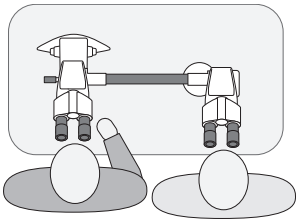
- Outstanding color and intensity balance from station.
- Whole metal housings and sturdy metal pillars to securely support the external viewing tubes giving exceptional stability and durability.
- All stations are 360 degree rotatable whether you choose a two, three or twenty station model.
- Up to 22 mm field of view.

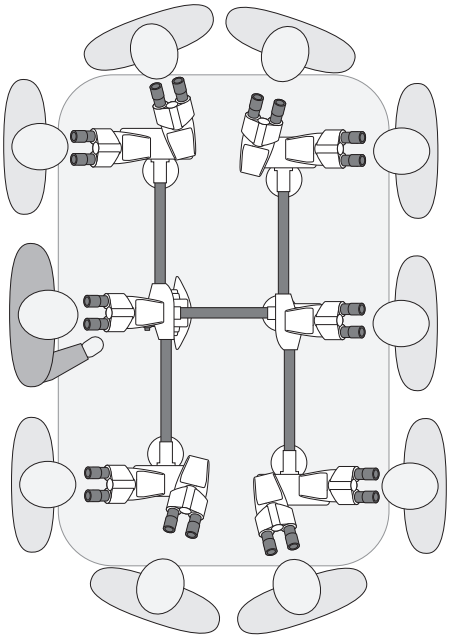


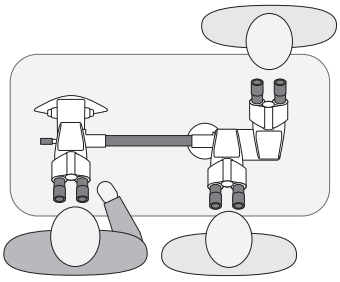


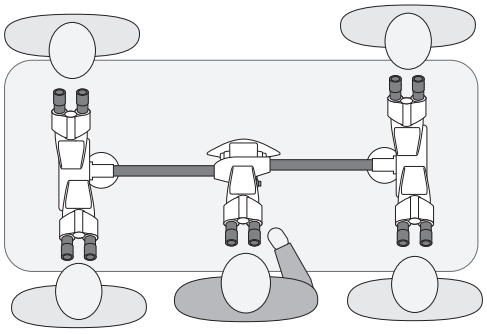


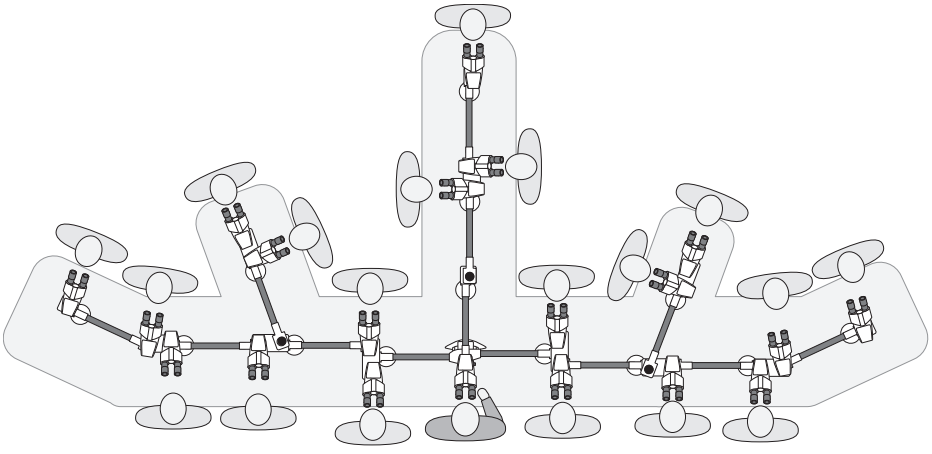












- 2 Stations, face to face
- 2 Stations, side by side
- 3 Stations
- 5 Stations
- 10 Stations
- Large and small custom configurations can be designed easily to accommodate unique requirements such as different numbers of stations and room size or shape.
- 20 Stations

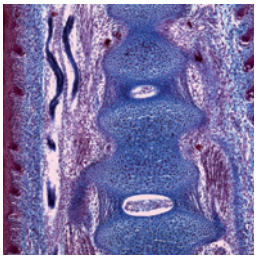
BRIGHTFIELD DOCUMENTATION CAMERAS

MYcroscopy: Designed to adapt to Your individual Daily Routine

Camera	IC90 E/ICC50 E/ICC50 W Integrated HD CMOS cameras	FLEXACAM C1 10 MP CMOS camera	DMC2900 High-Speed CMOS camera
Performance	HD BF All cameras can be seamlessly integrated with either compound or stereo microscope systems. All of them generate HD color images, which can be displayed directly on a monitor. The ICC50 W features in addition Wi-Fi and the ICC50 E/IC90 E Ethernet capabilities.	HD BF This camera delivers fast 4k live images, which can be directly displayed on a monitor or stored on an USB Stick. The acquisition is controlled via USB mouse or application software.	BF Fast CMOS camera with excellent color fidelity and fast live imaging. With extended camera settings and features such as a look-up table, gain, etc., this camera thus accommodates demanding microscope brightfield techniques.
Sensor	10 MP/5.0 MP CMOS Pixel size 1.7 x 1.7/2.3 x 2.3 µm 3648 x 2736/2592 x 1944 pixels 8 bit A/D converter 38 fps (HDMI 1280 x 760) IC90 E 28 fps (640 x 480) 12 fps (1440 x 1080)	12 MP CMOS Pixel size 1.55 x 1.55 µm 4000 x 3000 pixels 8 bit A/D converter 60 fps (HDMI 3840 x 2160 – 4k) 30 fps (USB 1920 x 1080 – FHD)	3.1 MP CMOS Pixel size 3.2 x 3.2 µm 2048 x 1536 pixels 10 bit A/D converter 12 fps (full frame) 30 fps (2 x 2 binning)
Application	Ideal cameras when both – moderate resolution documentation and **fast live display** on a monitor are needed.	Developed for **high speed live display** of stained specimens or macroscopic model organisms for educational purposes or group consultations in pathology departments.	Suited for **good color documentation** of brightfield, phase contrast, and DIC techniques. It is the camera of choice for fast brightfield documentation in combination with a dedicated fluorescence camera.

Flügel eines Schmetterlings (*Charaxes zingha*)

Hippocampus, Maus



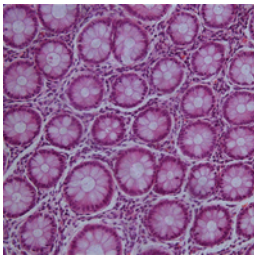
Untersuchung einer Gewebeprobe (H&E-Färbung)

Camera	DMC4500/DFC450 C Color CCD cameras	DMC5400 High-Resolution CMOS camera
Performance	BF The DMC4500 and the cooled DFC450 C are capable of acquiring color images at the quality level of a CCD sensor. Also features various binning modes and automatic brightness correction.	HD BF This high-resolution color camera offers HD images in 4k resolution with high frame rate even at low magnification. True-color calibration provides natural color reproduction. The camera has a USB 3.0 interface.
Sensor	5.0 MP CCD Pixel size 3.4 x 3.4 µm 2560 x 1920 pixels 14 bit A/D converter 9 fps (full frame) 18 fps (2 x 2 binning)	20.5 MP CMOS sensor Pixel size 2.4 x 2.4 µm 5472 x 3648 pixels 3 x 12 bit A/D converter 7 fps (full frame) 32 fps (3 x 3 binning)
Application	Dedicated camera for **excellent color documentation** at high resolution, e.g. in combination with tile scanning of a large specimen. Accommodates all brightfield contrast methods. Ideal for later image analysis and measurements.	Ideally suited for the **documentation, evaluation,** and **analysis** of industry or life science research samples. Save all information in just one high quality image. Capture images with high dynamic range for a maximum of detail in light, as well as dark areas.

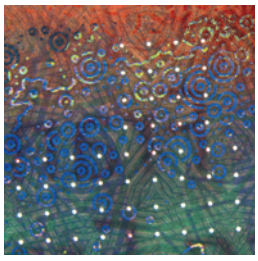
Key success factors:

- Leica color cameras provide state-of-the-art color interpolation algorithms performed in the camera head
- Even fine structural and color details can be distinguished due to appropriate pixel sizes for every desired microscope magnification
- High-Definition (HD) display directly on a monitor allows discussion of findings with a large auditorium

Color camera
HD High-Definition camera
BF All contrast methods (except fluorescence)
FL Dedicated fluorescence camera



Intestine, cross-section

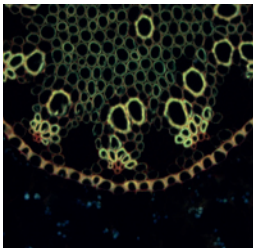


Swiss Banknote

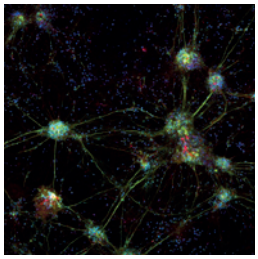
FLUORESCENCE DOCUMENTATION CAMERAS

MYcroscopy: Designed with the highest sensitivity

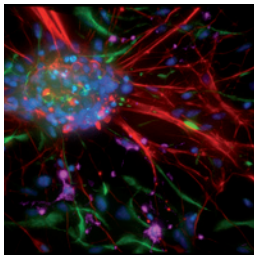
Camera	DMC6200 Pixel Shift Camera	DFC7000 T CCD Microscope Color Camera	DFC3000 G CCD Microscope Camera
Performance	HD BF FL The DMC6200 provides super fast image acquisition and delivers precise color information in every pixel. Even the most subtle color differences are detected through multiple sampling. The camera features a state-of-the-art Sony Exmor CMOS sensor.	BF FL The DFC7000 T is based on the newest generation of Sony EX-view HAD II™ sensor technology which combines high-resolution with high-sensitivity. Users can obtain fluorescence and bright-field images with one camera.	FL Passively cooled fluorescence camera with effectively reduced background noise. Camera can be high-speed triggered.
Sensor	2.3 - 20.7 MP CCD Pixel size 5.86 x 5.86 µm 1920 x 1200 – 5760 x 3600 pixels 3 x 16 bit 30 fps (1920 x 1200)	2.8 MP CCD Pixel size 4.54 x 4.54 µm 1920 x 1440 pixels 8/12 bit with 16 bit A/D converter 40 fps (full frame) 123 fps (5 x 5 binning)	1.3 MP CCD Pixel size 3.75 x 3.75 µm 1296 x 966 pixels 14 bit A/D converter 31 fps (full frame) 54 fps (2 x 2 binning)
Application	Flexible color camera for **ultra-high resolution brightfield** documentation with unsurpassed color fidelity and **good fluorescence documentation** of immunostained specimen.	**Cooled color** fluorescence camera for **excellent brightfield** and **fluorescence** documentation. Specialty: **simultaneous multi-color fluorescence** imaging of fixed samples.	Monochrome camera for basic **fluorescence** applications such as **documentation** of fixed, **immunostained cells** and tissues.



Convallaria



Cultured cortical neuronal cells (mouse).



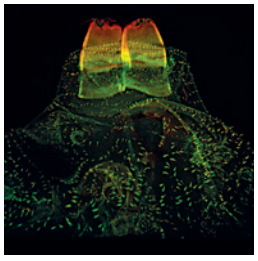
Neuronal cells (mouse).

Camera	DFC7000 GT CCD Microscope Camera	DFC9000 GT/GTC sCMOS Microscope Camera
Performance	FL High-sensitivity camera based on the newest generation of Sony EXview HAD II™ sensors which combine high-resolution with high sensitivity. Features high speed triggering and regulated sensor cooling.	FL Deeply cooled sCMOS camera with a combination of high QEmax (82 %), extreme low noise, high dynamic range, large sensor (19 mm), and high-speed acquisition
Sensor	2.8 MP CCD Pixel size 4.54 x 4.54 µm 1920 x 1440 pixels 8/12 bit with 16 bit A/D converter 40 fps (full frame) 123 fps (5 x 5 binning)	4.2 MP sCMOS Pixel size 6.5 x 6.5 µm 2048 x 2048 pixels 12/ 16 bit 50 fps (GT) /90 fps (GTC) ~165 fps (1048 x 1048)
Application	Versatile **cooled** monochrome **high-sensitivity** camera for fluorescence documentation and standard live cell imaging of **FP-expressing cells** and tissues.	**Deeply cooled** monochrome fluorescence camera for advanced applications like **high-speed live cell** imaging, **FRAP**, and **ratio measurement** with amazing image quality

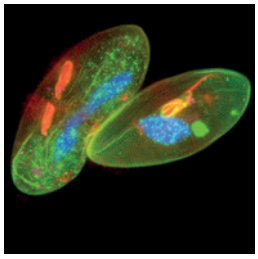
Key success factors:

- High-sensitivity of the sensor allows short exposure times and therefore prevents photo bleaching and actively protects the cells from any photo damage
- Cooling of the camera reduces unwanted noise and generates crystal clear fluorescence signals against dark background
- Hardware-triggering and overlapping mode of read-out allows high-speed, real-time live cell imaging

Color camera
Monochrome camera
HD High-Definition camera
BF All contrast methods (except fluorescence)
FL Dedicated fluorescence camera



D. melanogaster larva. Sample: Courtesy of Prof. Stephan Sigrist, Freie Universität Berlin, Germany.



Paramecium

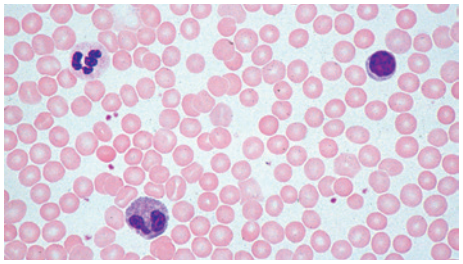
OPTICAL BRILLIANCE

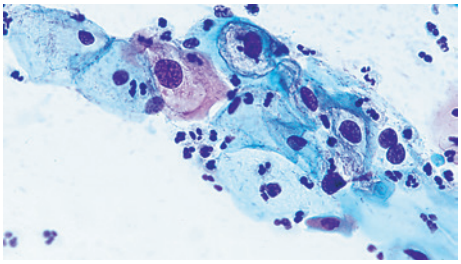
The optical qualities of the DM microscope series are compelling. Outstanding image brilliance and razor-sharp contrast clearly reveal the most delicate specimen structures. The high level of comfort users expect contributes to fatigue-free viewing and greater efficiency.

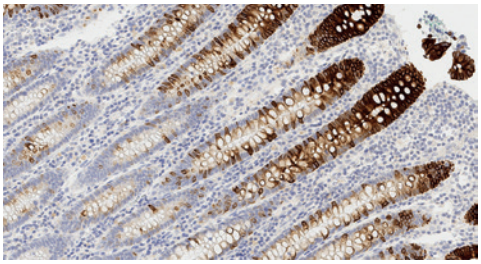
Quick changes between filter block positions. All filter blocks feature Zero Pixel Shift to prevent image shifting when superimposing different fluorescence excitations.

Reduce eyestrain with HI PLAN SL Planachromat objectives. These objectives are designed to ensure the same level of brightness at all magnifications. The preferred color impression is preserved, and continual brightness adjustments are a thing of the past.

- Brightness - matched objectives
- 1.25x overview objective – for screening
- Detailed images with razor-sharp contrast







No need to adjust light intensity

The HI PLAN SL (Synchronized Light) objective series with 4x, 10x, 20x, and 40x magnification is particularly easy on the eyes. These SL objectives are synchronized with each other so that brightness always remains constant for the user, regardless of the selected magnification. This eliminates the need to continuously adjust the brightness and reduces the eyestrain that can occur.

Specially designed HI PLAN CY 10x objective for cytology

It features excellent field flattening and color correction, while offering a long working distance of 12mm for clinical applications.

Set the aperture correctly every time

The aperture scale features color markings that correspond to the color codes of the objectives. Simply match the colors and the aperture is set.

Clinical microscopes and systems

A unique partnership of world leading optics and a deep understanding of laboratory processes combine to make our products efficient and ergonomic instruments available today. All our microscopy systems are designed and manufactured with the goal of increasing diagnostic confidence and driving workflow efficiency through intuitive software processes.

CONNECT
WITH US!

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