

Living up to Life

Leica

MICROSYSTEMS



Leica DMS300

Digital microscope system with integrated high-end optics and high-performance digital camera, complete with LED ringlight and swing-arm system. Optimized for digital inspection and documentation.

The System with a Vision

Well-conceived ergonomics, exceptionally convenient operation and digital perfection are the outstanding features that make the Leica DMS300 another highlight among the digital microscopes from Leica Microsystems. Within the attractive design, the optics and camera unite to form a system with tremendous capabilities. In standalone mode with HD-monitor or with a computer – with its superior digital technology, the Leica DMS300 gives you everything you need for perfect inspection results.

THE CLEVER COMPLETE SOLUTION

The Leica DMS300 enables versatile use at workstations with different conditions.

For example, inspections can be carried out and documented quickly and easily, directly in the production process on the HD-monitor. In addition, the swing-arm stand enables viewing of large products or workpieces. The working height can also be adapted quickly to different heights of your workpiece. Whenever you do not need to use the microscope, simply turn it to the side while you take care of other tasks. The provided efficient LED ring illuminator with removable diffuser offers optimum, color-neutral illumination. The diffuser reduces bothersome reflections from shiny workpieces.

As part of a set with a 10"-monitor and hand/foot switch, the Leica DMS300 is completely preconfigured and ready to operate after unpacking.

The zoom optics with built-in digital camera guarantee natural image reproduction even without an eyepiece and provide ultra-high-speed live images via HDMI-interface on the HD-monitor or on a computer screen via a USB-interface.

Depending on the configured operating mode, the Leica DMS300 can be operated entirely independently at an HD-monitor directly using a remote control or using a computer running powerful Leica imaging software.

The infrared remote control enables comfortable work: switch between different camera modes quickly, run a white balance operation, capture movie clips for fast documentation and hands-on training or save directly to an SD-card. In addition, all camera parameters and advanced settings such as image brightness or contrast can be controlled directly and conveniently.

Easily **programmable operating button** for different functions such as image acquisition, white balance or film start/stop.

Switchable clickstops facilitate inspection and measurement through defined magnification levels in the zoom range.

The **integrated SD-card** saves images directly from the Leica DMS300.

The **hand/foot switch** for fast and easy operation by hand/foot can be programmed for various functions.





**EASY AND CONVENIENT:
LEICA APPLICATION SUITE EZ (LAS EZ)**

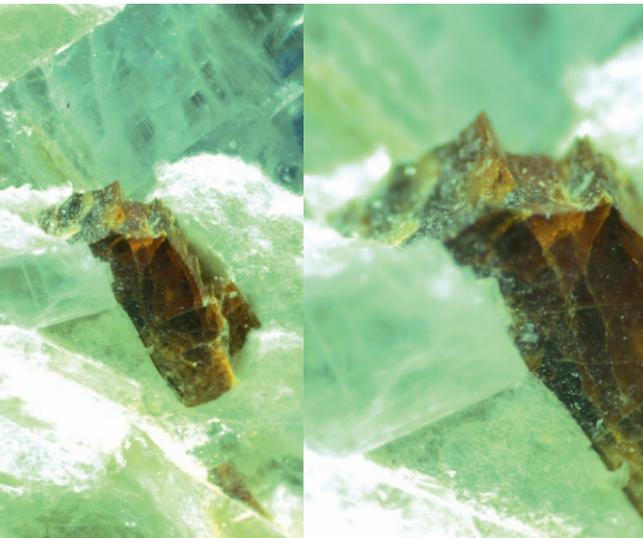
The Leica Application Suite EZ (LAS EZ) software provided is the ideal entry-level software program for the Leica DMS300 digital microscope system from Leica Microsystems. The user-friendly interface makes it easy to acquire and process images. LAS EZ speeds up your quality inspection processes and enables convenient documentation of your work results.



LAS EZ for fast results

The Essence is in the Details

Behind the compact unit of the new Leica DMS300 digital microscope system, there is more than you would think: high-precision optics combined with a high-performance digital camera with proven high-end quality from Leica Microsystems. This system lets you keep your work in perfect view – down to the smallest detail.

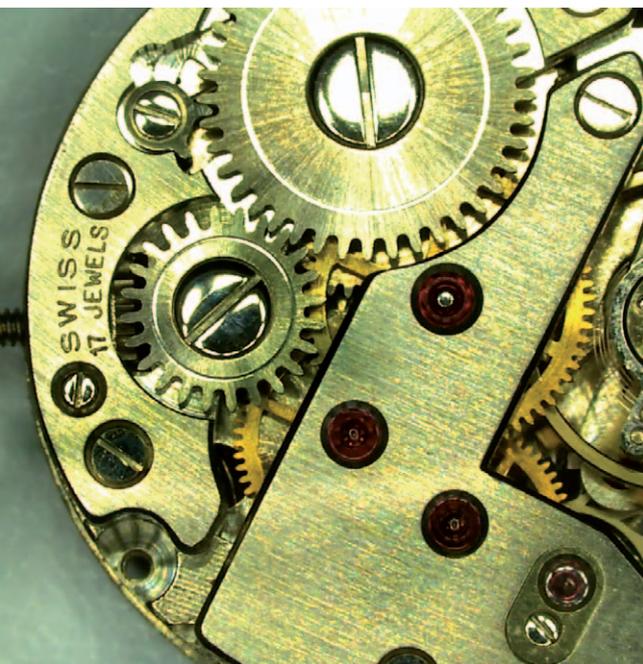


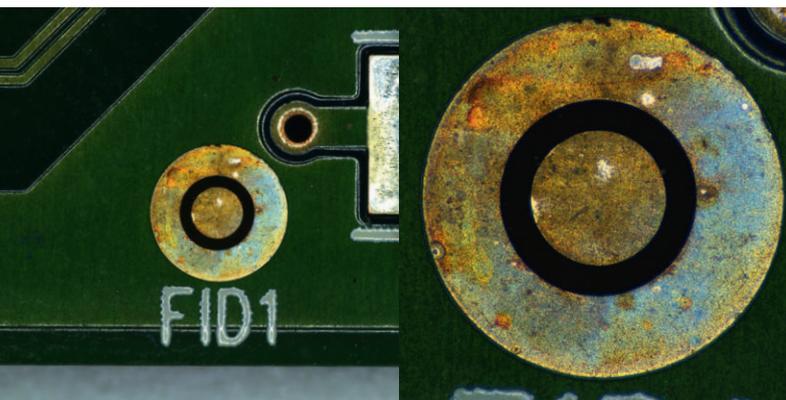
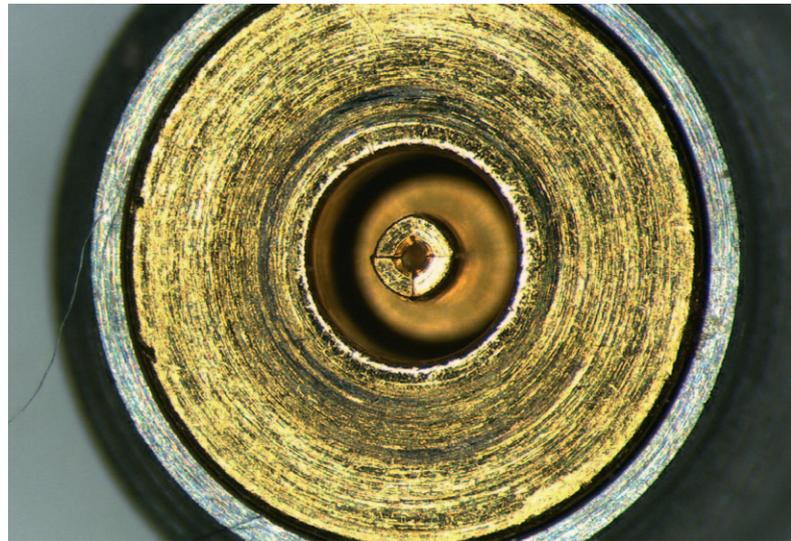
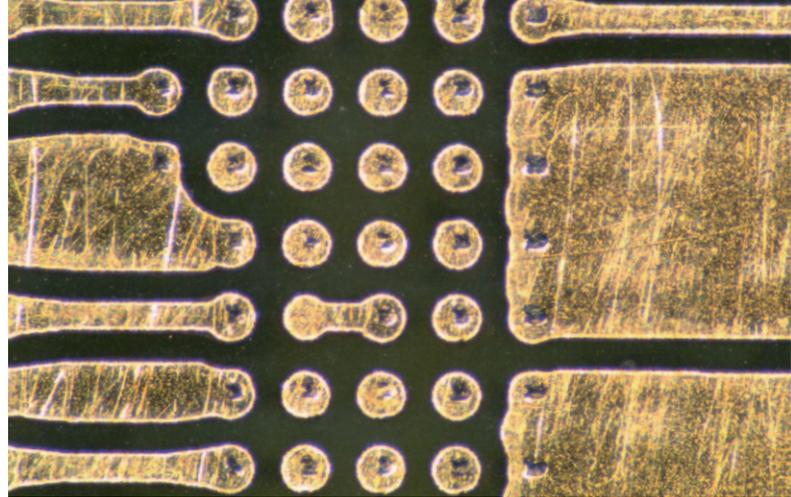
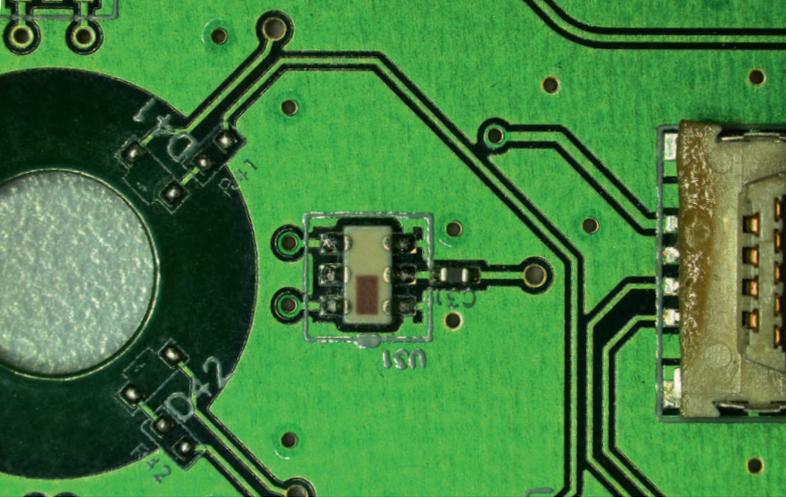
THE OPTICS OF THE LEICA DMS300

- 8:1 zoom range (with switchable clickstops) enables a fast changeover from overview to detail
- Digital magnification range 15× to 120× (including 0.8× objective) with a 22"-monitor
- Parfocal optics – no refocusing when changing the magnification

THE HIGH PERFORMANCE CAMERA OF THE LEICA DMS300

- Digital camera with 2.5 megapixel resolution, also suited for recording the finest details at low magnification
- High live image speed: up to 30 frames per second
- User-optimized menu on the monitor
- Programmable preset values and importable image overlays
- Direct control of all camera parameters via infrared remote control (in HD-mode)
- Direct recording of HD-movie-clips to SD-card



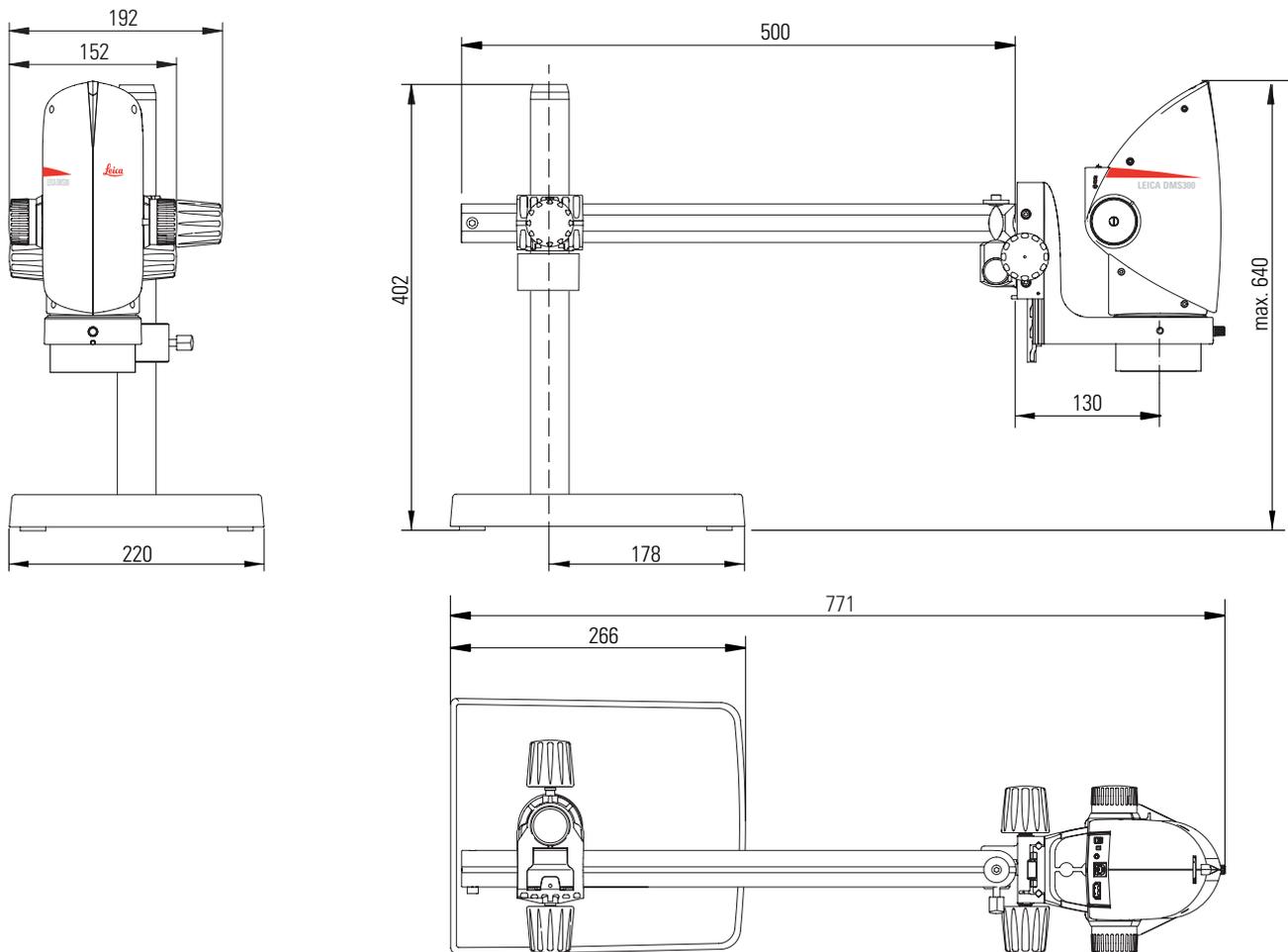


With **parfocal and parcentric optics**, you always keep your products optimally and sharply at the center of your field of view – no refocusing is needed when changing the magnification.

YOUR ADVANTAGES

- Ergonomic work thanks to highly convenient operation
- Optimized for quick and easy quality control, testing, inspection and documentation
- Standalone operation with HD-monitor, possible without computer
- Quick and precise live images
- Direct control of all camera parameters
- Complete set with hand/foot switch and 10"-monitor or without monitor
- Fast and easy start up
- Leica LAS EZ software for image acquisition on a computer
- Manual, easy measurement

Dimensions



Specified in millimeters

INCLUDED IN THE DELIVERY PACKAGE:

- Leica DMS300
- Leica swing-arm stand
- Leica 0.8× objective
- Leica LED ring illuminator
- Remote control (2 pcs.)
- HDMI- and USB-cables
- Universal USB power supply
- SD-card
- Hand/foot switch

Optionally, the Leica DMS300 is also available with 10"-monitor.

Leica DMS300 – specifications

CAMERA SPECIFICATIONS

Resolution (live images)	HD ready Full HD PC	1280 × 720 – 50 Hz / 60 Hz – 30 fps 1920 × 1080 – 50 Hz / 60 Hz / 25 Hz / 30 Hz – 30 fps 1600 × 1200 – 10 fps / 1024 × 768 – 24 fps
Resolution (single exposures)		2.5 megapixels (1824 × 1368) 1.1 megapixels (1216 × 912)
Resolution (movie clips)		HD1080 (1920 × 1080) HD720 (1280 × 720)
Pixel size (resolution)		2.35 µm × 2.35 µm
Sensor grade		Aptina 1/2.3" CMOS
Sensor size		6.1 mm x 4.6 mm
Exposure time		0.5 msec – 500 msec
Gain		1× – 12×
Color depth		3 × 8 bit = 24-bit
Data format	PC HD	JPG MP4
Operating systems		Windows XP, Windows 7, Mac OS X
Software	PC MAC	Leica LAS & LAS EZ software Leica Acquire Software
Recommended computer configuration		PC / Mac, Intel Core 2 Duo, >2.4 GHz, 4 GB RAM, 24-bit graphics card

LEICA DMS300 ACHROMATIC OBJECTIVE (0.8×, working distance 114 mm)

	DMS300@highest zoom position	DMS300@lowest zoom position
Moving image: Resolution (Full HD)	142 lp/mm	24 lp/mm
Max. FoVx	4.06 mm	32.44 mm
Max. FoVy	2.28 mm	18.25 mm
Max. DoF	0.178 mm	3.448 mm
Max. magnification		
@10"-monitor	54.5×	6.8×
@22"-monitor	120×	15×

ELECTRONIC INTERFACES

Computer	USB 2.0, standard USB-plug type B
High-definition connector	HDMI 1.3, standard HDMI-plug type A
Audible feedback	for recording, white balance, etc. (can be turned off)
On/off switch	available
PC/HD switch	available
Reset button	display for the current resolution, change to next resolution, reset, firmware upload
Remote control	infrared remote control RC2 pairable with instrument, with button battery type CR2025
Remote release	hand and foot trigger, with 1.5 m cable
SD-card (Secure Digital)	SD HC compatible, 128 MB – 32 GB
Status LED	3 colors: green – power on, yellow – busy, red – error
Power supply	5 V via USB-cable to computer or to external USB
Power requirement	5 W

MISCELLANEOUS

Operating temperature range	+5 °C – 50 °C
Rel. humidity	10 % – 90 %
CE Declaration of Conformity	available
Tested standards	EN 55011 / EN 61010-1 / EN 61326-1

ORDER NUMBERS

10 450 594	Leica DMS300 with hand/foot switch (incl. USB power supply, HDMI-cable, USB-cable, SD-card, HD RC remote control)
10 450 670	Leica DMS300 with 10"-monitor and hand/foot switch (incl. USB power supply, HDMI-cable, USB-cable, SD-card, HD RC remote control)



For live imaging, the Leica DMS300 has an image detail in 16:9 format on an HD-monitor (displayed with a green frame). The images are always saved in a 4:3 size ratio (shown with a red frame).

The productive cooperative effort “with the user, for the user” has always been the basis for the innovative strength of Leica Microsystems. On this, we have developed our five corporate values: pioneering, high-end quality, team spirit, dedication to science, and continuous improvement. We call making these values reality: Living up to Life.

INDUSTRY DIVISION

The Leica Microsystems Industry Division’s focus is to support customers’ pursuit of the highest quality end result by providing the best and most innovative imaging systems for their needs to see, measure, and analyze microstructures. Its solutions are used in routine and research industrial applications, in materials science and quality control, in forensic science investigations and educational applications.

Leica Microsystems – an international company with a strong network of worldwide customer services:

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