

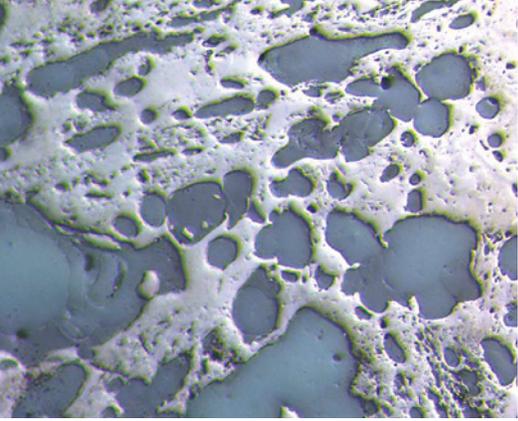
Living up to Life

Leica
MICROSYSTEMS

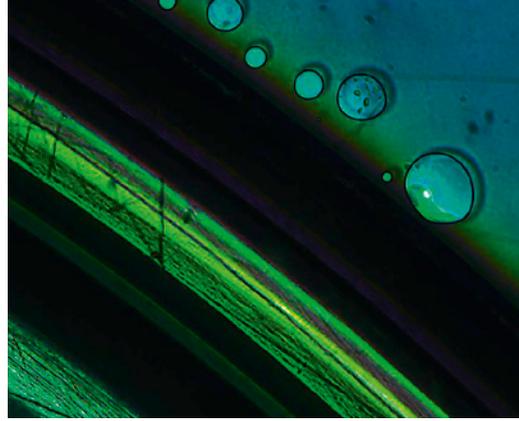
Leica DM750 M

Shine a New Light on Industrial Samples





Polished light metal, reflected light, brightfield-oblique contrast



DVD, reflected light, brightfield, crossed polarizer

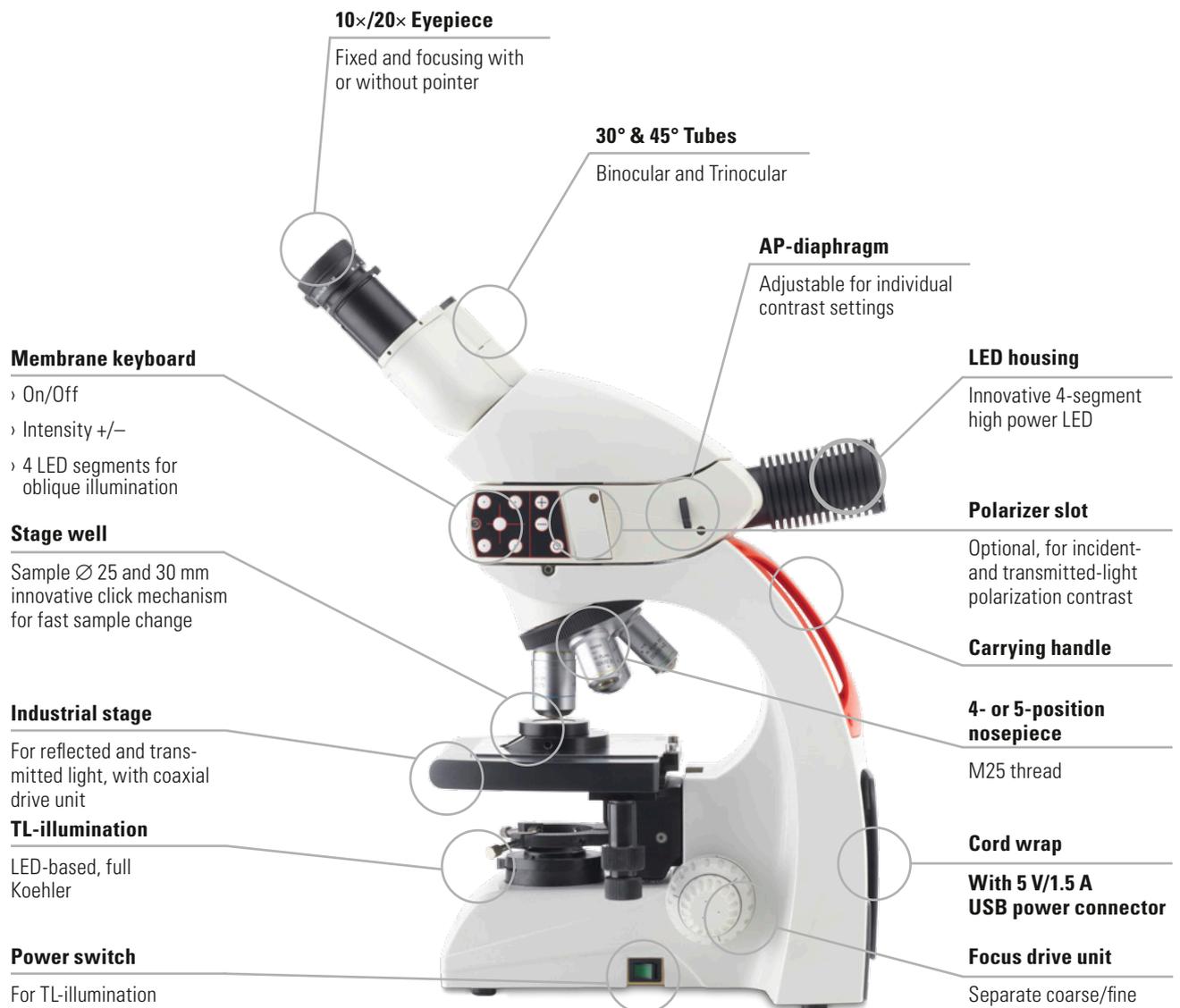


Polished metal sample, reflected light, brightfield



Simply Microscopy for Routine tasks in Materials QC and Teaching

An easy-to-use microscope makes a laboratory function more efficiently. The user can concentrate on the task at hand rather than on complex microscope functions. The Leica DM750 M is an entry-level materials microscope for brightfield, oblique, and polarized light. It is specifically designed to serve the needs of routine quality control and materials analysis in industry as well as the general educational needs in universities, and technical colleges.



Performance Reloaded

The Leica DM750 M combines numerous innovative features to create a unique solution for routine applications in metallography and general materials microscopy.

REFLECTED LIGHT ILLUMINATOR WITH CUTTING-EDGE LED ILLUMINATION

- › Built-in adjustable aperture diaphragm, produces bright, crisp, and maintenance-free lighting for all samples
- › Ergonomically-positioned membrane-keyboard for easy, intuitive operation of all reflected light settings
- › Innovative 4-segment LED provides bright and homogeneous BF and oblique illumination (quarter / half, direction selectable)
- › Intuitive control for LED-light intensity
- › Power on/off switch distinctly separated from other keys to avoid operating errors
- › Reflected light illuminator incorporates two slots that allows the use of a polarizer and analyzer for polarized light applications
- › Power to the LED reflected light illuminator is provided via a USB cable from the 5 V/1.5 A USB power connector on the rear of the Leica DM750 M stand. This saves the cost of an external power supply plus reduces the complexity at the workstation.



PERFECT LIGHT

- › LED illumination is used for reflected and transmitted light. It provides cool, white light with a lifetime of over 20 years, thus saving the time and money spent to exchange halogen bulbs on conventional microscopes
- › Transmitted light Koehler field diaphragm for optimum illumination and contrast
- › Optional condensor available
- › Patented time delay shutoff saves energy by automatically turning off the illumination after two hours of no use (TL only).





UP TO 1,000×

- › High precision 4- or 5-position objective nosepiece with M25 thread
- › Large selection of high performance objectives starting with HI PLAN EPI series
- › Standard magnification range between 50× and 500× as required by most industrial standards
- › Even higher magnifications, e.g. 1,000×, are possible



HANDLING AT ITS BEST

- › Universal stage with coaxial drive for reflected and transmitted light applications allows observation of polished and/or etched samples with heights of up to 30 mm
- › Special sample holders with a 25 mm or 30 mm sample diameters
- › Object guide for precise X/Y positioning of the sample



EASY AND ERGONOMIC OPERATION

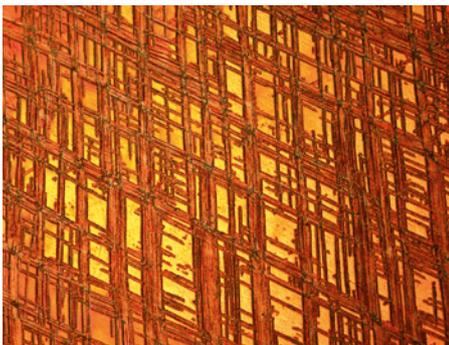
- › 4- or 5-position nosepiece with rubber covered knurled ring for fast and easy change of objective magnification. The highly accurate machining of the nosepieces ensures parcentration of all objectives in use.
- › 4 different tubes to fit the ergonomic needs of different users: 45° angle binocular or trinocular tube or, 30° angle binocular or trinocular tube
- › All tubes have adjustable interpupillary distance and locking mechanisms for the eyepieces, avoiding loss / theft of equipment.
- › The eyepieces with magnification factor 10 and FOV 20 are available as fixed and focusable to compensate different vision requirements for defective eyesight.

Brilliant Views with HD Imaging

The ability to capture, analyze, archive, and share micro-images has always been an important task in the materials laboratory. Leica Microsystems offers an extensive range of advanced digital imaging solutions to exactly match camera and software performance to the needs of your specific application.

LEICA MICROSYSTEMS IMAGING

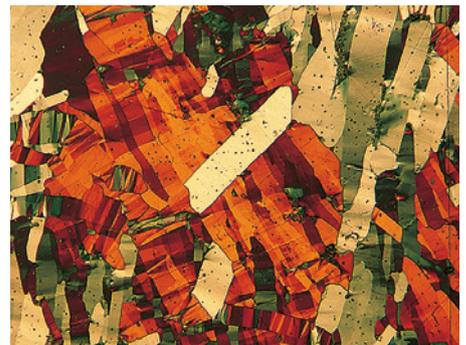
- › A large variety of Leica microscope cameras including Full HD live image. Leica DFC Cameras provide high resolution pictures and fast live images.
- › Leica Application Suite (LAS) software is the modular platform for easy camera control, image capture, annotation, measurement, and documentation.
- › Customize your own imaging solution using a wide selection of optional LAS software modules.
- › Store and recall: The Microscope Assistant module for instantly perfect results for all samples
- › Expert modules for easy-to-use Grainsizing and Phase analysis according to international norms and standards.
- › The modular design of the system allows easy upgrades and service.
- › Trinocular viewing tubes and c-mount adapters provide the versatility to use stand-alone cameras, which opens the door to unlimited imaging possibilities.



Copper-zinc deformation line



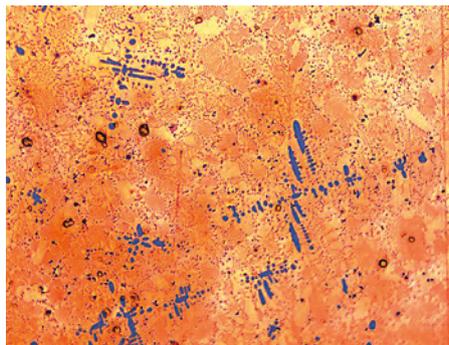
Grain sizing reticle overlay



Polished section of rock



Weld structure, brightfield



Brass sample, brightfield



Aluminum-silicon, brightfield

Full HD
1080



Specifications

STAND

Shape of the stand protects controls
 Stand construction – die-cast aluminum
 Adjustable Koehler field diaphragm (TL)
 Centerable and focusable condenser mount
 External fuses
 Knurled nosepieces
 5 V/1.5 A USB power supply

REFLECTED LIGHT AXIS

4-segment LED illumination for:
 Incident light brightfield
 Oblique contrast
 Polarization contrast
 Built-in adjustable aperture diaphragm

MEMBRANE KEYBOARD CONTROL

3 LED segment control for selection and rotation of illumination direction
 LED-light intensity
 Power on/off switch

POLARIZER/ANALYZER SLOT FOR POLARIZED LIGHT

TRANSMITTED LIGHT

Built-in LED illumination – 25,000 hours service lifetime
 Full Koehler field diaphragm (with condenser)
 Optional Abbe condenser (NA 0.9)
 Continuous intensity adjustment
 2 hours auto off (can be disabled or enabled)

EYEPIECES

High eyepoint
 10×/20 (20 mm field of view)
 Crosshair eyepiece with 45° marks, scale, and orientation feature
 Available fixed or focusing
 Focusing eyepieces with reticule holder for 21 mm reticule
 Foldable eyeguards
 30 mm mounting diameter
 Other eyepiece magnification factors also available

STAGE

Stages available for left- and right-hand operation
 Integrated coaxial drive for X/Y movement
 Stage surface 185 mm (150 mm front) × 140 mm (W × D)
 Stages prepared to take special sample holders (stage wells)
 Rounded stage edges
 Non-extending rack
 Vernier for X/Y coordinates
 Wear-resistant stage surface

SPECIAL SAMPLE HOLDERS FOR EMBEDDED METALLOGRAPHIC SALES (STAGE WELLS)

Stage well for one inch samples
 Stage well 30 mm for maximum sample height = 30 mm

OBJECTIVES

Infinity platform
 HI PLAN or N PLAN series for FOV 20
 Objective labeling laser engraved
 M25 nosepiece thread

FOCUS

Low position focus controls
 Self-adjusting focus mechanism
 300 microns per fine focus rotation
 Calibrated in 3 micron increments
 Weighted focus knobs

IMAGING

Trinocular tubes available (50% / 50% light split)
 C-mount adapters with standard Leica Microsystems mount
 Leica cameras

EZSTORE™

Vertical handle
 Undercut in front of stand
 Cord wrap
 Vertical cord attachment to stand

AGTREAT™

Anti-microbial surfaces

CERTIFICATIONS

cULus, CE, RoHS

Recommended Outfits

Leica DM750 M with 4-position nosepiece for reflected & oblique light including industrial stage & stage wells

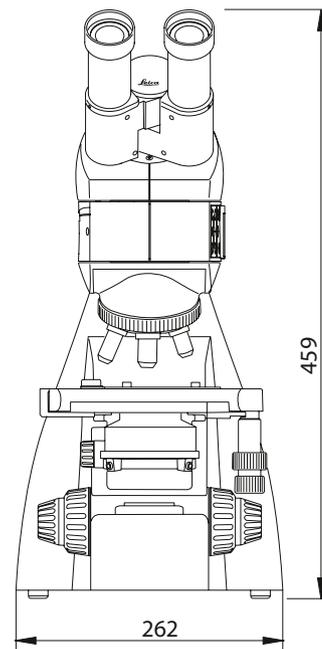
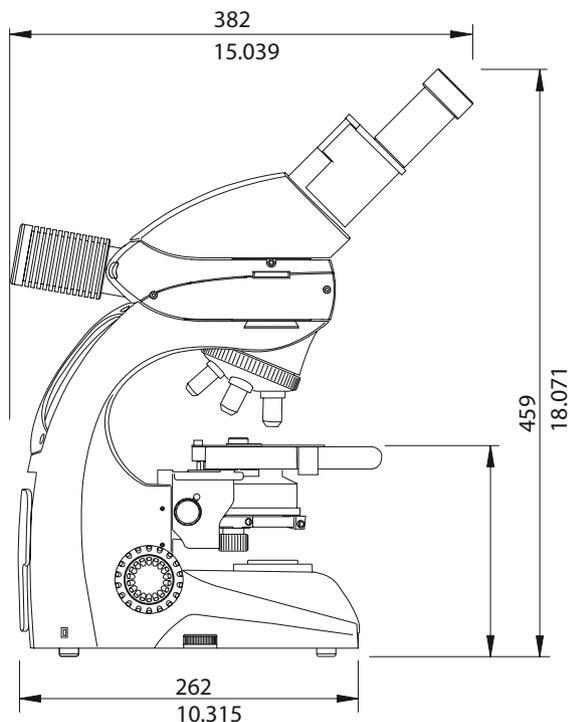
STAND		Quantity
13 613 115	Leica DM750 M with 4-position nosepiece	1
TUBES		
13 613 521	30° binocular tube	1
EYEPIECES		
13 613 532	10×/20 focusing eyepiece with eyeguard	1
13 613 530	10×/20 eyepiece with eyeguard	1
ILLUMINATION		
13 613 169	Incident light axis with LED illumination	1
STAGE WELL PLATES		
13 613 167	Stage well for small diameter samples	1
13 613 168	Stage well for large diameter samples	1
OBJECTIVES		
11 566 071	Objective HI PLAN EPI 5×/0.12	1
11 566 069	Objective HI PLAN EPI 10×/0.25	1
11 566 070	Objective HI PLAN EPI 20×/0.40	1
11 566 072	Objective N PLAN EPI 50×/0.75	1
POWER CORD NOT INCLUDED: Must be ordered separately		1

Leica DM750 M with 5-position nosepiece for RL, TL, oblique & polarized light including industrial stage & stage wells, Leica DMC2900

STAND		Quantity
13 613 117	Leica DM750 M with 5-position nosepiece & industrial stage (right hand)	1
TUBES / MOUNT / CAMERA		
13 613 523	30° Trinocular tube	1
13 613 706	C-mount 0.55×	1
12 730 466	Leica DMC2900 camera	1
EYEPIECES		
13 613 532	10×/20 focusing eyepiece with eyeguard	1
13 613 530	10×/20 eyepiece with eyeguard	1
ILLUMINATION		
13 613 170	Reflected light illuminator kit LED (RL-Axis, slot, polarizer & analyzer)	1
STAGE WELL PLATES		
13 613 167	Stage well for small diameter samples	1
13 613 168	Stage well for large diameter samples	1
13 613 550	Abbe condensor	1
OBJECTIVES		
11 566 071	Objective HI PLAN EPI 5×/0.12	1
11 566 069	Objective HI PLAN EPI 10×/0.25	1
11 566 070	Objective HI PLAN EPI 20×/0.40	1
11 566 072	Objective N PLAN EPI 50×/0.75	1
11 566 073	Objective N PLAN EPI 100×/0.75	1
POWER CORD NOT INCLUDED: Must be ordered separately		1

Dimensions

Dimensions in mm/inch



System Diagram



**Leica Microsystems
Cameras**

C-mount Camera Adapters
13 613 706 – 0.55x – 1/2" detectors
13 613 707 – 0.70x – 2/3" detectors
13 613 708 – 1.0x – 1" detectors



10x/20 Fixed Eyepieces
13 613 530 without pointer
13 613 531 with pointer



10x/20 Focusing
13 613 532



45° Trinocular
13 613 522



30° Trinocular
13 613 523



45° Binocular
13 613 520



30° Binocular
13 613 521



45° EZTube™
(integrated eyepieces)
13 613 220 without pointer
13 613 221 with pointer



30° EZTube™
13 613 222
without pointer



13 613 169
Illuminator

11 555 079
180° Analyzer

11 555 005
Polarizer R/P
13 613 166
Slot for Polarizer



DM750 M
13 613 115 Stand with 4-position nosepiece and Industrial stage (right hand)
13 613 116 Stand with 4-position nosepiece and Industrial stage (left hand)
13 613 117 Stand with 5-position nosepiece and Industrial stage (right hand)
13 613 118 Stand with 5-position nosepiece and Industrial stage (left hand)



Flip Top Condenser
11 501 183



Abbe
Condenser
13 613 550

Condenser
Compensators



11 555 074 Lambda
13 586 008 1/4 Lambda

HI PLAN Objectives
11 566 071 HI PLAN EPI 5x/0.12
11 566 069 HI PLAN EPI 10x/0.25
11 566 070 HI PLAN EPI 20x/0.40

N PLAN Objectives
11 566 079 N PLAN EPI 40x/0.75
11 566 072 N PLAN EPI 50x/0.75
11 566 073 N PLAN EPI 100x/0.85



Stage Well
13 613 167 Stage well for Ø 25 mm samples
13 613 168 Stage well for Ø 30 mm samples

Additional Polarizer Sliders for Reflected Light

11 565 001 Polarizer with lambda plate
11 555 084 Polarizer 360° rotatable

Analyzer Sliders

11 555 045 Fixed analyzer slider
11 555 079 180° rotatable analyzer slider
11 555 080 360° rotatable analyzer slider

Stage Well

13 613 167 Stage well for one inch samples
13 613 168 Stage well for Ø 30 mm samples

Replacements

13 613 563 Eyeguard pair
13302138946910 Fuse
13 613 100-100 Leica DM750 M user documents
13 586 062 Add-on lens for condensers (included with stand)
13 613 669 Dust cover

Others

11 513 106 Stage micrometer
11 505 091 Diffuser slider for using 2.5x objective with Abbe condensers
11 505 507 Auxiliary lens for using 2.5x objective with 11 501 183 flip top condenser

International Power Cords

13 613 900	U.S.	
13 613 901	Europe Continental	
13 613 902	U.K.	
13 613 903	Switzerland	
13 613 904	Denmark	
13 613 905	Italy	
13 613 906	Australia	
13 613 907	China	
13 613 908	Japan	
13 613 909	Israel	
13 613 910	South Africa	
13 613 911	India	
13 613 912	Argentina	

Clean and Green

We actively implement ways to make our environment cleaner and safer for this generation and the next:

- › All packaging is completely recyclable.
- › No lead content in any of the glass components.
- › We are constantly optimizing our logistics chain to keep the CO₂ footprint as low as possible.
- › AgTreat™ helps prevent the spread of disease via the microscope surfaces and leads to a healthier laboratory environment.
- › All products have been tested by independent safety laboratories and carry the cULus and CE mark to indicate their design for enhanced safety.
- › All products are RoHs compliant, which means all electrical components meet any restrictions on the use of hazardous substances.

See more at www.leica-microsystems.com/education:

- › Interactive tour for earth and material science courses
- › E-Series of stereomicroscopes for low magnification inspection, dissecting, and image capture
- › Leica DM500 and Leica DM750 for life science education
- › Leica DM750 P polarizing microscope for materials science
- › A selection of higher level microscopes for research

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.**

Leica Microsystems operates globally in three 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.

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.

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

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Denmark · Ballerup	+45	4454 0101	4454 0111
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Spain · Barcelona	+34	93 494 95 30	93 494 95 32
Sweden · Kista	+46	8 625 45 45	8 625 45 10
Switzerland · Heerbrugg	+41	71 726 34 34	71 726 34 44
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