



# Leica DM750 P / DM750 M

Shine a new light on your samples!

Perfect for Education, Materials Inspection and basic Metallography  
in Quality assurance labs

Living up to Life

**Leica**  
MICROSYSTEMS

# Science Teaching Revitalized

The more time an instructor has to teach, the more students can learn. The **Leica DM750 P polarizing microscope** was specifically developed to revitalize earth science teaching and to achieve the goal of more hands-on time for Earth and Materials Science courses. With many student-friendly features and high-quality construction, the Leica DM750 P is the right tool to invigorate Petrography, Crystallography, and Materials Science learning and teach the next generation of scientists effectively and efficiently.

The **Leica DM750 M** is an entry-level **materials microscope for brightfield, oblique and polarized light**. It was specifically designed to serve the needs of standard quality control and materials analysis in the QC-laboratory as well as the general educational needs in universities of applied sciences and technical colleges.

## **Superb Optics**

- Based on the same optical platform as Leica Microsystems' research microscope line, users enjoy outstanding optical performance and full access to virtually all accessories from the Leica Microsystems microscope product line.
- Strain-free objectives and condensers make the sample the only part effecting the polarized light.

## **EZStore™**

- Integrated vertical handle provides easy carrying and easy lifting when storing on high shelves; undercut on front of stand works in combination with the handle for safer, two-handed carrying.
- Integrated cord wrap eliminates damage to microscope components from improper cord wrapping; vertical cord insertion prevents the cord from pulling partially out of the stand while in storage or in use.
- Onboard storage of accessories to prevent loss.
- The unique shape of the microscope stand protects controls from damage when microscopes are stored side-by-side.

## **AgTreat™**

- The spread of disease from surfaces is of great concern, especially in educational environments. Leica Microsystems has integrated an additive so that all microscope touch points are treated to inhibit the growth of bacteria. This helps to prevent the spread of disease via the microscope surfaces and leads to a healthier laboratory environment.



# The Future is now

The DM750 P is designed specifically for the versatile needs of Earth and Material Science Courses.



## Simplicity

- Analyzer module to accommodate analyzer sliders for basic polarisation microscopy.
- Conoscopy analyzer/Bertrand lens module with upfront clearly labeled flip in/flip out controls to prevent dust damage and confusion of operation. Bertrand lens is easily centerable with the provided tool (stored in module).
- Conoscopy advanced analyzer/Bertrand lens module also provides a focusable Bertrand lens to fine tune the focus of the Conoscopic Image for different magnifications.
- Onboard storage locations for two nosepiece compensators and the objective centering tools to prevent loss.



## Ready to work

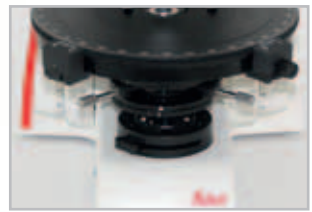
- Large 178 mm diameter stage for easy specimen placement and viewing of calibrations.
- Brake for locking the stage in position.
- Object guide for precise X/Y positioning of the specimen.
- Laser engraved stage eliminates the chance for the stage calibrations to rub off over time.





### Optional LED Reflected Light

- Reflected light illuminator with capability for brightfield, oblique and polarized light.
- Patented stage well for tall samples allow the viewing of polished materials in mounts thicker than 17 mm.



### Perfect light

- LED illumination provides cool, white light with a lifetime of over 20 years average use. No longer need to change lamps during lab time and save the expense of replacement lamps.
- Koehler field diaphragm for optimum illumination and contrast.
- Patented time delay shutoff saves energy by automatically turning off the illumination after 2 hours of no use.



### Versatility

- Strain free standard condenser for magnifications 4x – 100x with slot for ¼ wave compensator for circular polarization technique.
- Optional Flip Top condenser for low magnifications.
- Aperture diaphragm with marks for the correct position of typical objective magnifications for intuitive learning and operation.



### Aligned Viewing

- 4 Position individually centerable nosepiece for exact durable centration of each objective to the stage rotation axis.
- 30° angle for comfortable viewing.
- Integrated mechanism to maintain eyepiece crosshair orientation during IPD adjustment.

# Performance reloaded

The DM750 M specifically developed for the versatile Materials education, routine applications and basic metallography in quality assurance labs.



## Up to 1000 ×

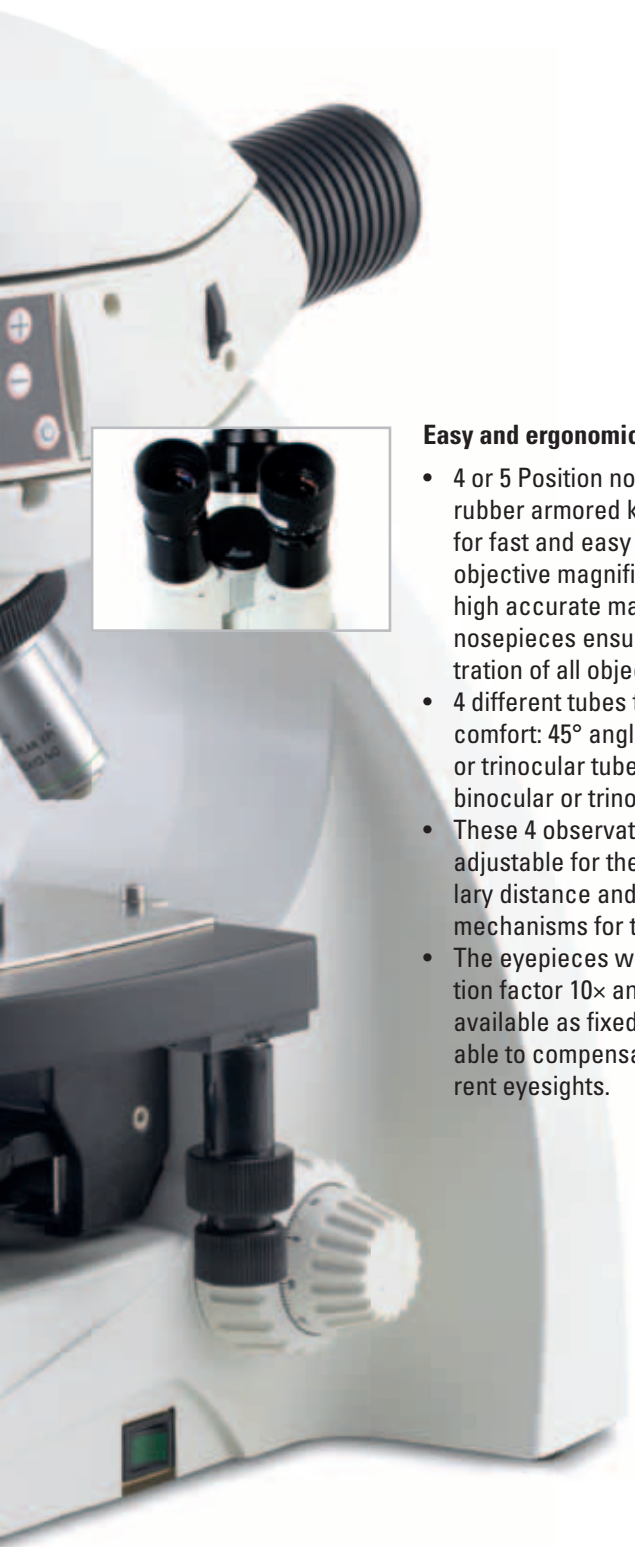
- Featuring a 4- or 5-fold objective Nosepiece with M25 treat.
- Typically equipped with Hi PLAN EPI series objectives.
- Provides magnifications between 50× and 500× as required by most industrial standards.
- Even higher magnifications e.g. 1000× are possible
- Can optionally be equipped with objectives from the huge selection of high performance objectives .



## Handling at it's best

- Universal „industrial“ cross stage for reflected and transmitted light applications allows observation of polished and/ or etched samples with sample heights of up to 30mm.
- Special (patent applied) sample holders with 25 or 30 mm sample diameters can be used.
- Object guide for precise X/Y positioning of the specimen.





### Reflected light illuminator with cutting-edge LED-illumination

- Built-in adjustable aperture diaphragm, produces bright, crisp and maintenance-free lighting for all of your samples.
- Ergonomically positioned membrane-keyboard allows easy, intuitive operation of all 4 LED segments for oblique illumination.
- Quick control for LED-light intensity.
- Power on/off switch distinctly separated from other keys to avoid operating errors.
- Reflected light illuminator incorporates two slots allowing the use of a Polarizer & Analyzer for polarized light applications.



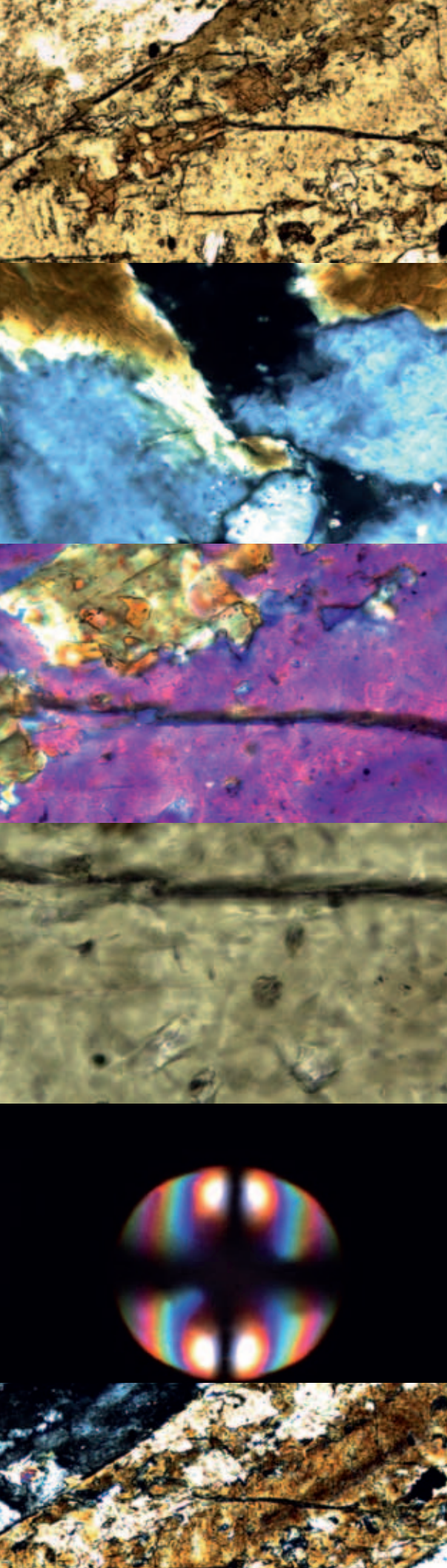
### Easy and ergonomic viewing

- 4 or 5 Position nosepiece with rubber armored knurled ring for fast and easy change of objective magnification. The high accurate machining of the nosepieces ensure parcentration of all objectives in use.
- 4 different tubes to fit your comfort: 45° angle binocular or trinocular tube or 30° angle binocular or trinocular tube.
- These 4 observation tubes are adjustable for the interpupillary distance and have locking mechanisms for the eyepieces.
- The eyepieces with magnification factor 10× and FOV 20 are available as fixed and focusable to compensate for different eyesights.



### Perfect light

- LED illumination provides cool, white light with a lifetime of over 20 years average use. No need to change lamps during lab time and save the expense of replacement lamps.
- Koehler field diaphragm for optimum illumination and contrast.
- Optional condensor available
- Patented time delay shutoff saves energy by automatically turning off the illumination after 2 hours of no use.



Full HD  
1080

The ability to share, capture, and archive images is becoming an important part of the microscopy laboratory. **Now** you can share your images with the **new microscopy cameras** from Leica Microsystems for advanced imaging solutions.

### Leica Imaging

- A variety of Leica microscopy cameras including **Full HD viewing**. Different cameras provide high resolution pictures and fast live images.
- Includes Leica Application Suite (LAS) software for easy camera control, image capture, annotation, measurement and documentation.
- Customize your own Imaging Solution using a wide selection of optional Leica Microsystems LAS software modules.
- Store and recall: A “never-lost” module for instantly perfect results for all samples.
- 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.





# Brilliant views with HD Imaging



# Leica DM750 P Specifications

## Separate 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  
30mm mounting diameter

## Viewing Tubes for separate eyepieces

30° Pol binocular & trinocular tube with slot for alignment, 90° and 45° orientation feature on right eyetube for crosshair eyepiece  
Maximum field of view 20 mm  
Leica tube dovetail standard  
Eyepiece locking screw on left eyetube  
Interpupillary distance range 52 mm – 75 mm

## Stand

Stand shape protects controls  
Stand construction – die-cast aluminium  
External fuses  
Knurled nosepieces  
4 position centerable nosepieces  
ISO Compensator position above nosepieces

## EZStore™

Vertical handle  
Undercut in front of stand  
Cord wrap  
Vertical cord attachment to stand  
Storage positions in A/B Modules for 2 compensators and objective centering tools  
Magnetic attachment for objective centering tool storage  
Detent attachment for compensator storage

## Objectives

Infinity Platform  
HI Plan Pol for FOV 20  
Objective labeling laser engraved  
M25 nosepiece thread

## EZGuide™

Point counting and non point counting mechanical stages (stage travel 30 mm × 40 mm)

## Stage

Large 178 mm circular diameter stage surface  
Hard anodized stage surface  
Brake for securing rotation location  
Laser engraved stage calibration in 1 degree increments  
Verniers on two sides to 0.1 degree

## Condenser

Centerable and focusable condenser mount  
Slot in condenser for contrast sliders (Darkfield, Compensator)  
Magnification labels on condenser  
Standard Leica condenser mount for condensers (Abbe, Turret, Flip top, etc.)

## Focus

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

## EZLite™

Available with adjustable Koehler field diaphragm as standard  
LED Illumination – 25'000 hours life  
Continuous intensity adjustment  
Illumination enough for viewing at lowest intensity  
2 hour Auto Off (can be disabled or enabled)

## Imaging

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

## Intermediate Modules

15mm Flat top module  
Module for LSF Reflected Light Illuminator

## Analyzer/Bertrand Lens Modules

Analyzer module with pin for viewing tube alignment  
Basic A/B module with pin for viewing tube alignment  
Advanced A/B Module with focusing Bertrand Lens and pin for viewing tube alignment

## AgTreat™

Anti Microbial Treatment

## Reflected light axis

4-Segment LED illumination for:  
Incident light contrast  
Oblique contrast  
Pol-contrast  
Built-in adjustable aperture diaphragm

## Certifications

cULus, CE, RoHS

## Shipping

Dimensions: 40 cm × 37 cm × 39 cm  
Weight: 9 kg

# Leica DM750 M Specifications

## Stand

Stand shape protects controls  
Stand construction – die-cast aluminium  
Adjustable Köhler field diaphragm (TL)  
Centreable and focusable condenser mount  
External fuses  
Knurled nosepieces

## Reflected light axis

4-Segment LED illumination for:  
Incident light contrast  
Oblique contrast  
Pol-contrast  
Built-in adjustable aperture diaphragm

## Membrane-keyboard controlling

4 LED segments  
LED-light intensity  
Power on/off switch

## Polarizer/Analyzer slot for polarized light

## Transmitted light

Built-in LED Illumination – 25'000 hours life  
Full Köhler field diaphragm  
Abbe Condensor  
Continuous intensity adjustment  
Illumination enough for viewing at lowest intensity  
2 hour Auto Off (can be disabled or enabled)

## Viewing Tubes

30° Binoc and Trinoc tubes  
45° Binoc and Trinoc tubes  
30° and 45° EZ tubes with integrated (undetachable) eyepieces  
Maximum field of view 20 mm  
Leica tube dovetail standard  
Interpupillary distance range 52 mm – 75 mm

## Separate 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

## Stage

Stages available for left and right operation  
Integrated coaxial drive for x/y movement  
Stage surface 185 mm (150mm front) wide × 140 mm deep  
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 samples (stage wells)

Stage well  $\varnothing$  25 mm for max. sample height = 30 mm  
Stage well  $\varnothing$  30 mm for max. 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 mount  
Leica DFC-cameras or Leica ICC50 Integrated camera

## EZStore™

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

## AgTreat™

Anti Microbial Treatment

## Certifications

cULus, CE, RoHS

## Shipping

Dimensions: 40 cm × 37 cm × 39 cm  
Weight: 12 kg

# DM750 M

## Preconfigured Outfits Leica DM750 P

| OUTFIT ORDERING NUMBER                                     |   | 13 613 602     | 13 613 603     |
|--|---|----------------|----------------|
| <b>STAND</b>   |   | <b>DM750 P</b> | <b>DM750 P</b> |
| 13 613 611   | DM750 P Stand Koehler, 4 position centerable nosepiece                              | X              | X              |
| <b>TUBES</b>   |   |                |                |
| 13 613 621   | 30° Binocular Pol Tube  | X              | X              |
| <b>EYEPIECES</b>   |   |                |                |
| 13 613 532   | 10×/20 focusing eyepiece with eyeguard  | X              | X              |
| 13 613 630   | 10×/20 focusing eyepiece with eyeguard, Crosshair reticule, and key for orientation | X              | X              |
| <b>POL MODULES</b>   |   |                |                |
| 13 613 660   | Analyzer/Bertrand Lens Module   | X              | X              |
| <b>COMPENSATORS</b>  |   |                |                |
| 13 613 664   | Lambda Compensator 530 nm   | X              | X              |
| <b>CONDENSERS</b>  |   |                |                |
| 13 613 650   | Pol Abbe Condenser 0.85   | X              | X              |
| <b>POL OBJECTIVES</b>                                      |   |                |                |
| 11 556 060   | HI Plan Pol 4×/0.10 NA, 18.0 mm W.D.  | X              | X              |
| 11 556 061   | HI Plan Pol 10×/0.25 NA, 12.0 mm W.D.   | X              | X              |
| 11 556 065   | HI Plan Pol 40×/0.65 NA, 0.36 mm W.D.   | X              |                |
| 11 556 066   | HI Plan Pol 63×/0.75 NA, 0.31 mm W.D.   |                | X              |
| <b>POWER CORD</b> NOT INCLUDED: Must be ordered separately |   |                |                |

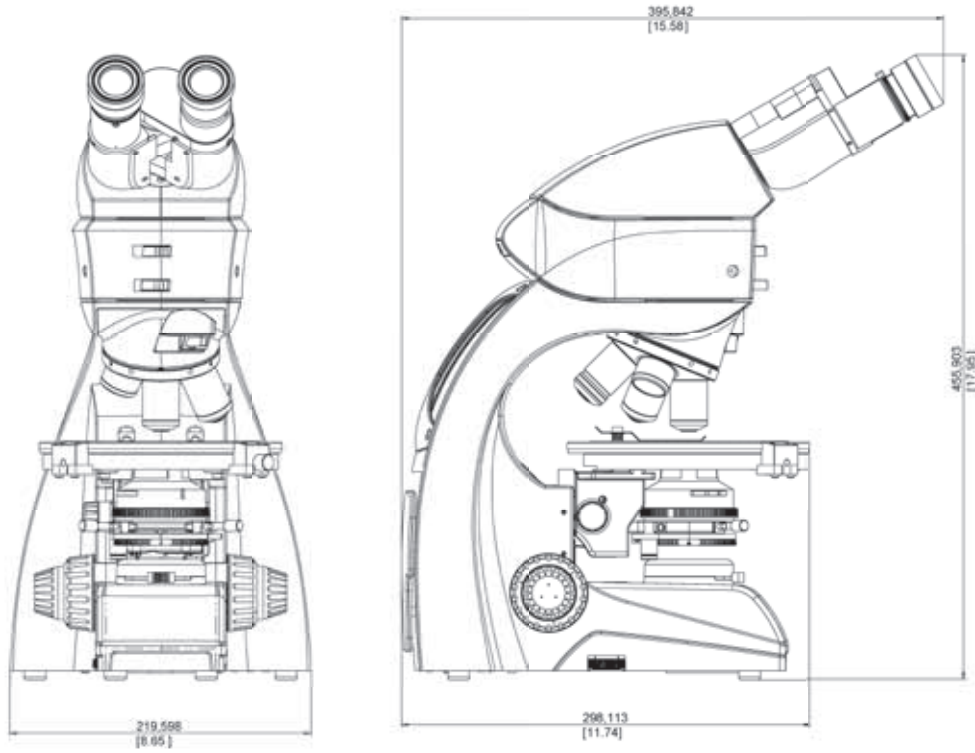
## Recommended Outfits Leica DM750 M

| DM750M with 4-place nosepiece for reflected & oblique light incl. industrial stage & stage wells |   |          |
|--|---|----------|
| STAND  |   | Quantity |
| 13 613 100   | DM750M with 4-place nosepiece & Industrial stage (right hand) | 1        |
| <b>TUBES</b>   |   |          |
| 13 613 521   | 30° Binocular Tube  | 1        |
| <b>EYEPIECES</b>   |   |          |
| 13 613 532   | 10×/20 focusing eyepiece with eyeguard                        | 1        |
| 13 613 530   | 10×/20 eyepiece with eyeguard                                 | 1        |
| <b>ILLUMINATION</b>  |   |          |
| 13 613 165   | Incident Light Axis with LED illumination                     | 1        |
| <b>STAGE WELL PLATES</b>   |   |          |
| 13 613 167   | Stage well for small diameter samples                         | 1        |
| 13 613 168   | Stage well for large diameter samples                         | 1        |
| <b>OBJECTIVES</b>  |   |          |
| 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        |
| <b>POWER CORD</b> NOT INCLUDED: Must be ordered separately                                       |   | 2        |

| DM750M with 5-place nosepiece for RL, TL, Oblique & Polarized light incl. industrial stage & stage wells, DFC 295 |   |          |
|---|---|----------|
| STAND   |   | Quantity |
| 13 613 110  | DM750M with 5-place nosepiece & Industrial stage (right hand)             | 1        |
| <b>TUBES / MOUNT / CAMERA</b>   |   |          |
| 13 613 523  | 30° Trinocular Tube   | 1        |
| 13 613 707  | C-mount 0.7×  | 1        |
| 12 730 209  | Leica DFC 295 Microscope Camera Kit                                       | 1        |
| <b>EYEPIECES</b>  |   |          |
| 13 613 532  | 10×/20 focusing eyepiece with eyeguard                                    | 1        |
| 13 613 530  | 10×/20 eyepiece with eyeguard   | 1        |
| <b>ILLUMINATION</b>   |   |          |
| 13 613 170  | Reflected light Illuminator Kit LED (RL-Axis, Slot, Polarizer & Analyser) | 1        |
| <b>STAGE WELL PLATES / CONDENSOR</b>  |   |          |
| 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        |
| <b>OBJECTIVES</b>   |   |          |
| 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        |
| <b>POWER CORD</b> NOT INCLUDED: Must be ordered separately  |   | 2        |

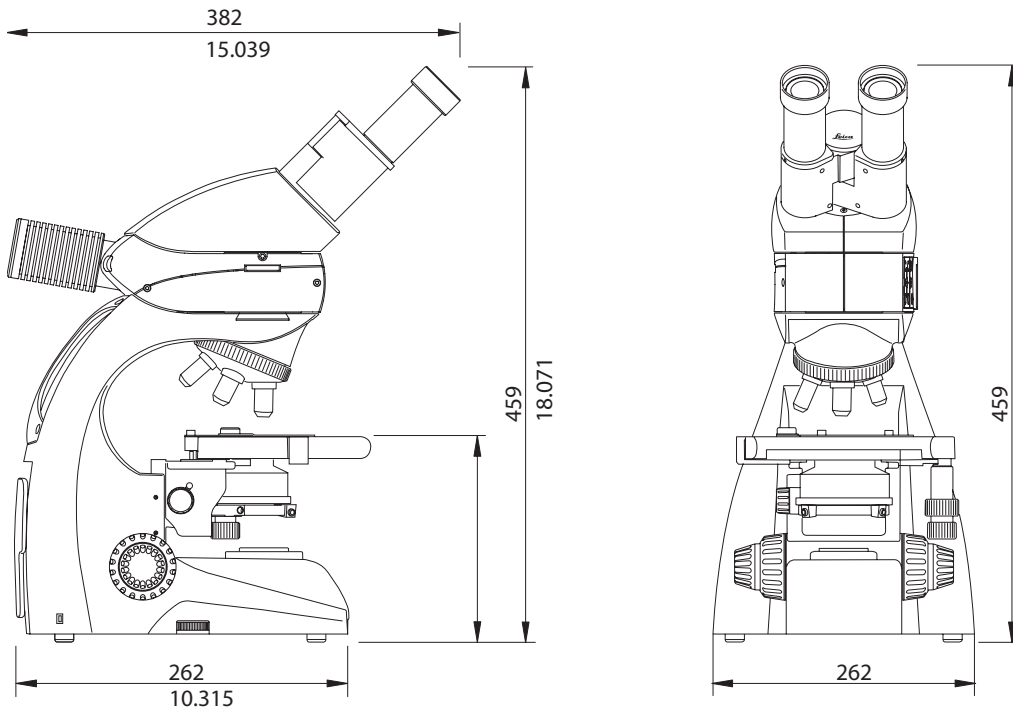
# Dimensions Leica DM750 P

Dimensions in mm/inch

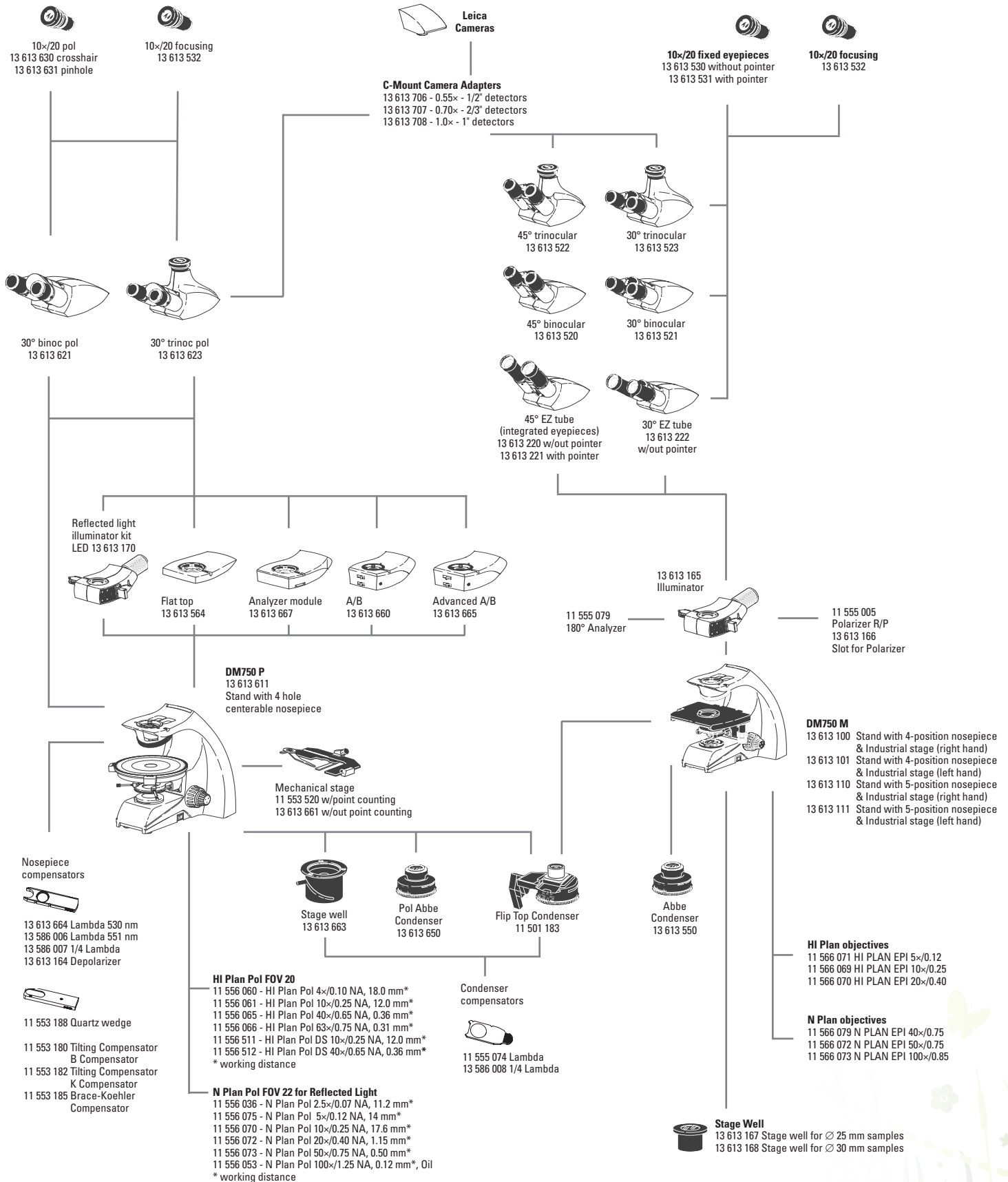


# Dimensions Leica DM750 M

Dimensions in mm/inch



# System diagram Leica DM750 P / DM750 M



# Clean and Green

## Reflected Light

13 613 170 Pol Reflected Light Illuminator Kit - LED consists of:  
13613165 - Illuminator  
13613166 - Polarizer adapter  
11555005 - Polarizer R/P with 0°, 45°, and 90° click stops  
11555079 - 180° Rotatable Analyzer Slider  
Power cord must be ordered separately

## 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 Ø 25 mm samples  
13 613 168 Stage well for Ø 30 mm samples

## Replacements

13 613 563 Eyeguard Pair  
13 RFAG30001 Fuse  
13 613 662 Objective Centering Tools  
13 613 671 Thumbscrew pair DM750 P condenser mount  
13 583 041 Object clamps for DM750 P  
13 613 611-100 DM750 P User Documents  
13 613 100-100 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 2.5× objective with Abbe Condensers  
11 505 507 Auxilliary lens for using 2.5× objective with 11 501 183 Flip top Condenser  
13 613 164 Depolarizer - fits into Compensator slot

## 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 

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.
- Constantly optimizing our logistics chain to keep the CO<sub>2</sub> footprint as low as possible.
- AgTreat™ helps to 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 safety.
- All products are RoHs compliant, which means all electrical components meet any restrictions on the use of hazardous substance

## See more at [www.leica-microsystems.com/education](http://www.leica-microsystems.com/education)

- Interactive tour for Earth and Material Science courses
- E-Series of Stereo Microscopes for Low magnification inspection, dissecting, and image capture
- Leica DM500 and DM750 for Life Science Education
- Selection of higher level microscopes for Research
- A selection of posters and instructional booklets which are free of charge



# “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 microstructures 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.**

### Active worldwide

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and representatives in more than 100 countries

In accordance with the ISO 9001 certificate, Leica Microsystems (Switzerland) Ltd, Industry Division, has at its disposal a management system that meets the requirements of the international standard for quality management. In addition, production meets the requirements of the international standard ISO 14001 for environmental management.