



# Leica DM100 & Leica DM300

Affordable Innovation for the First-time Scientist

# Affordable Innovation for the Next Generation of Scientists

Students learn best when their equipment is easy to use and constructed to be robust enough for trouble free operation each day.

Leica Microsystems, with 165 years of microscope design and manufacturing experience, combines the latest technology in optics, mechanics, and illumination in the new Leica DM100 and DM300 student microscopes. These microscopes provide students with the capabilities they need to study the finest details in all the life sciences.

#### **Construction that lasts**

> Focus drive design has been proven in the clinical laboratory

#### **Brilliant illumination**

› Leica EZLite™ LED illumination produces crisp, clear images

#### View the finest details

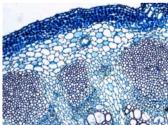
> Outstanding optical quality reveals the finest specimen details



Convallaris - Lily of the Valley



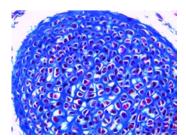
Taste Buds



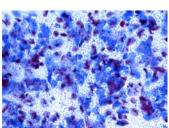
Sunflower



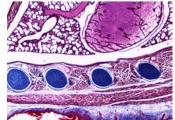
Giant Chromosomes



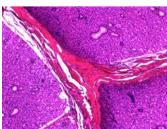
Mouse Embryo



Squamos Epithelium



Mouse Embryo



Parotid Gland









### Benefits: Leica DM100 & DM300

#### **Robust construction:**

- Maintenance-free, sealed, brass shaft, focus mechanism; the same design that is used in Leica Microsystems' clinical microscopes provides accurate focus control over the life of the microscope
- Spring-loaded, high-magnification objectives prevent broken specimen slides
- Designed to International Safety Standards

### **Optimized Illumination and Optics:**

- LED illumination saves the cost of replacement lamps and provides a cool white light for over 20 years of average use at 80 % lower energy consumption
- › Leica EZLite™ illumination system provides an evenly illuminated field of view for accurate specimen viewing
- The illumination system provides stable, true daylight quality with a wide brightness ratio of 200 to 1

 Superb optical performance as a result of the illumination, objective, viewing tube, and eyepiece working seamlessly together

### **Student Friendly**

- > Coaxial focus mechanism for intuitive control
- Compact size with small footprint for easy storage and carrying
- Continuous light intensity control for comfortable viewing with specimens of various thickness and color
- › Leica EZTube™ binocular and monocular tubes with integrated eyepieces prevent loss and also provides continuous 360° tube rotation for shared viewing and easy storage

### **Flexibility**

- > Pre-configured outfits for easy ordering
- Choice of monocular or binocular tube depending on budget









#### Leica DM100

- Affordable entry-level microscope
- > Fixed stage with stage clips for accurate manual specimen manipulation
- Pre-centered, pre-focused condenser lens built into the stage for student-friendly operation
- Clearly labeled disc diaphragm for matching aperture with objective for maximum resolution
- > Commonly configured with monocular tube for economy

#### Leica DM300

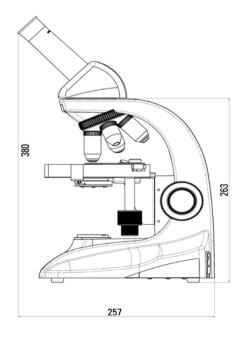
- > Second level microscope for full lab sessions
- Built-in mechanical stage with low position X/Y controls for accurate specimen movement at high magnifications
- Pre-centered, pre-focused professional condenser system for maximizing illumination
- Clearly labeled adjustable iris diaphragm for fine tuning the image resolution
- Commonly configured with binocular tube for comfortable viewing during longer lab sessions

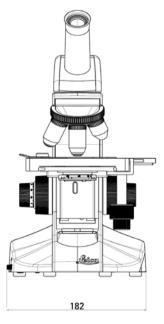
## **Outfit Matrix**

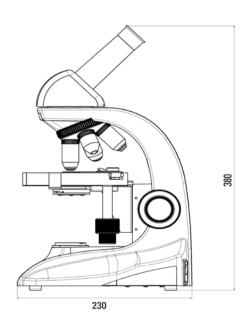
ATTENTION: POWER CORD MUST BE ORDERED SEPARATELY		13 613 308 DM100 LED, Monoc,	13 613 382 DM300 LED, Monoc,	13 613 383 DM300 LED, Monoc,	13 613 384 DM300 LED, Binoc,	13 613 385 DM300 LED, Binoc,
		Fixed Stage, Disc Diaphragm, 4×, 10×, 40×, Dust Cover, User Documents	Mechanical Stage, Abbe Condenser, 4×, 10×, 40×, Dust Cover, User Documents	Mechanical Stage, Abbe Condenser, 4×, 10×, 40×, 100×, Oil, Dust Cover, User Documents	Mechanical Stage, Abbe Condenser, 4×, 10×, 40×, 100×, Oil, Dust Cover, User Documents	Mechanical Stage, Abbe Condenser, Plan 4×, 10×, 40×, 100×, 0il, Dust Cover, User Documents
Stands						
13 613 310	DM100 Stand, Fixed Stage, Disc Diaphragm, Dust Cover, User Documents	X				
13 613 313	DM300 Stand, Mechanical Stage, Abbe Condenser, Dust Cover, User Documents		X	X	X	Х
Tubes						
13 613 320	Monocular Leica EZTube™ with eyeguard and pointer	X	X	X		
13 613 322	Binocular Leica EZTube™ with eyeguards, with pointer in right eyepiece				X	Х
Achromat	Objectives					
13 613 341	Achromat 4×/0.10	X	X	X	X	
13 613 342	Achromat 10×/0.25	X	X	X	X	
13 613 343	Achromat 40×/0.65	X	X	X	X	
13 613 344	Achromat 100×/1.25 oil			X	X	
Plan Objectives						
13 613 346	Plan Achromat 4×/0.10					X
13 613 347	Plan Achromat 10×/0.25					Х
13 613 348	Plan Achromat 40×/0.65					Х
13 613 349	Plan Achromat 100×/1.25 oil					Х
Accessori	es					
13 614 800	Immersion oil, 10 ml			X	X	Х

# **Dimensions**

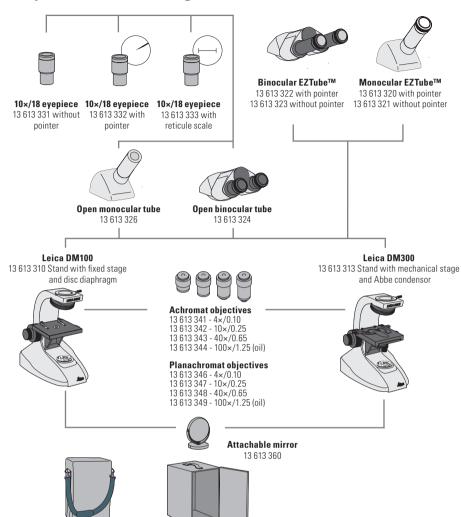
Dimensions in mm







# System Diagram



Hard storage case

#### BASIC COMPONENTS

13 613 331 13 613 332	10×/18 eyepiece without pointer 10×/18 eyepiece with pointer
13 613 333 13 613 320	10×/18 eyepiece with reticule scale  Monocular EZTube™ with pointer
13 613 321 13 613 322	Monocular EZTube™ without pointer Binocular EZTube™ with pointer
13 613 323 13 613 324	Binocular EZTube™ without pointer Open binocular tube
13 613 326	Open monocular tube
13 613 310 13 613 313	Leica DM100 Stand with fixed stage and disc diaphragm Leica DM300 Stand with mechanical
13 013 313	xy-stage and Abbe condenser
13 613 341 13 613 342	Objective Achromat 4×/0.10 NA Objective Achromat 10×/0.25 NA
13 613 343 13 613 344	Objective Achromat 40×/0.65 NA Objective Achromat 100×/1.25 (oil)
13 613 346 13 613 347	Objective Planachromat 4×/0.10 Objective Planachromat 10×/0.25
13 613 348 13 613 349	Objective Planachromat 40×/0.65 Objective Planachromat 100×/1.25 (oil)

#### OPTIONS

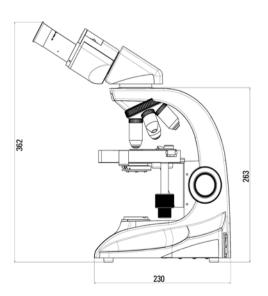
10 447 477 13 613 361 13 614 800 13 613 363	Soft storage case Hard storage case Immersion oil 10 ml Simple pol kit
13 613 360	Attachable mirror

#### REPLACEMENTS

13 613 300-100	User Document
13 596 010	Dust cover
13 613 362	Pair of eyeguards
13RFAG30003	Replacement Fuse

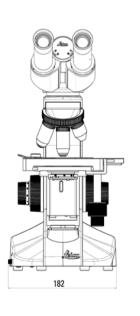
#### INTERNATIONAL POWER CORDS

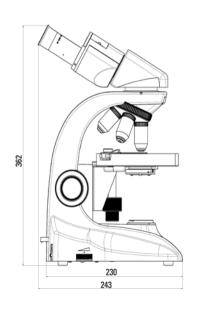
13 613 900	U.S.	<b>(</b>
13 613 901	Europe Continental	6
13 613 902	U.K.	. :
13 613 903	Switzerland	0
13 613 904	Denmark	
13 613 905	Italy	@ @
13 613 906	Australia	(1)
13 613 907	China	(1)
13 613 908	Japan	
13 613 909	Israel	0
13 613 910	South Africa	0 0
13 613 911	India	0 0
13 613 912	Argentina	



Soft storage case

10 447 477







# Specifications Leica DM100 & DM300

#### SEPARATE EYEPIECES

- > High eyepoint
- > 10×/18 eyepieces fixed
- Available with or without pointer and with a measuring reticle
- Foldable eyeguards
- > 23.2 mm mounting diameter

#### EZTUBE™ MONOCULAR TUBE

- > 45 degree viewing angle
- > 10×/18 eyepiece integrated into eyetube
- Attached to stand with 2 set screws
- Rotatable mounting
- › Available with and without pointer

#### **STAND**

- Stand shape protects controls
- > Stand construction die-cast aluminium
- External fuses
- > Knurled nosepiece control
- 4 position nosepiece
- Drop in holder for 32 mm mounted or not mounted filters

#### EZTUBE™ BINOCULAR TUBE

- Preset diopters for corrected vision
- > 30° viewing angle
- 10×/18 high eyepoint eyepieces integrated into eyetubes
- > Attached to stand with 2 set screws
- > Rotatable mounting
- Available with and without pointer
- Interpupillary distance range52 mm 75 mm

#### OPEN BINOCULAR AND MONOCULAR TUBES

- › Accepts separate 10×/18 eyepieces
- > Attached to stand with 2 set screws
- Rotatable mounting
- Left eyetube for binocular tube with diopter focus
- > 30° viewing angle for binocular tube
- Interpupillary distance range for binocular tube 52 mm – 75 mm
- Preset field aperture

**EZLITE™ ILLUMINATION** 

- LED illumination 6 000 K temp, 25 000 h life at full intensity
- > Continuous intensity adjustment
- Illumination enough for viewing at lowest intensity
- Simple polarizing kit available

#### CONDENSER

- Prefocused and precentered condenser
- Leica DM100 NA = 0.65 Disc diaphragm with magnification indicators
- Leica DM300 NA = 0.9/1.25 oil -Adjustable diaphragm with magnification labels

#### STAGE

- Leica DM100 Fixed Size:  $13.0 \text{ cm}(X) \times 12.4 \text{ cm}(Y)$
- Leica DM300 Mechanical Right handed
   Size: 14.3 cm (X) × 13.2 cm (Y)
- > Travel: 76 mm (X) × 50 mm (Y)
- Front loading specimen holder for two standard slides

#### **FOCUS**

- Coaxial focus controls
- > Self-adjusting focus mechanism
- 300 microns per fine focus rotation
- Calibrated in 3 micron increments

### CERTIFICATIONS

> cULus, CE, RoHS

### SHIPPING

- > Dimensions: 45 cm × 31.5 cm × 42 cm
- Weight: 6.5 kg