

From Eye to Insight



LEICA LMD6/7

Technical Information – September 2020



FEATURES AND SPECIFICATIONS

Laser	Leica LMD7	Leica LMD6
Type	Diode pumped, solid state	Diode pumped, solid state
Wavelength	349 nm	355 nm
Average pulse energy	120 µJ	70 µJ
Repetition rate	10 – 5000 Hz	80 Hz
Adjustable repetition rate	Yes	No
Laser aperture control	Yes, continuously adjustable	
Free intensity control	1-100%	
UV offset freely adjustable and saved for each objective	Yes	
Laser beam movement	Via optics	

Microscope		
Transmitted light axis	Contrast methods	BF, optional PH, DF, POL, DIC (fully automated)
	Illumination	LED (PMax = 15 W) Lamphousing
	Automation	Automated illumination manager Automated contrast manager
	Condenser	Condenser head S28, 0.55 NA (Motorized- and scanning stage) Condenser head S40, 0.40 NA (Stage LMT350) Motorized 7x condenser disk Motorized polarizer
Fluorescence axis	Filter cube turret	Motorized 5x or 8x
	Automation	Fluorescence intensity manager (FIM) for brightness adjustment Circular and rectangular field diaphragms for eyepiece or camera viewing Internal filter wheel and motorized Excitation Manager
	Illumination	Leica EL6000 (120 W metal halide) or LED3
	Cubes	Special cubes (size k) for simultaneous fluorescence and cutting LMD-BGR LMD-GFP band pass LMD-GFP long pass LMD-Cy3 LMD-DAPI
		LMD-Alexa594 LMD-CFP LMD-GFP/Cy3 LMD-YFP LMD-Cy5
Operation	Focus	Motorized: – 5 electronic ratios – Includes parfocal function Memory function for two z-positions
	Objective turret	Motorized 7x M25 thread including dry and immersion modes
	Controls	6 programmable function buttons Leica SmartMove for motorized- and scanning stage Controls for z (focus) movement and x, y (stage) movement 4 programmable function buttons
		Optional Leica STP8000 for motorized- and scanning stage Controls for z (coarse and fine focus) and x, y (stage) movement 11 programmable function buttons Touchscreen with information and control panels
	Multiwheel for Stage LMT350 4 programmable function buttons 4 predefined function buttons	
Stand	Display	With integrated touchscreen Leica SmartTouch
	Interfaces	2 x USB 2.0, 2 x I ² C
	Dimensions	With scanning stage: 649.6 mm height, 512.0 mm width, 596.5 mm depth
	Weight	Depending on configuration, max. 48 kg

Dissection and Collection Unit Based on			
Stage type	Scanning Stage	Motorized Stage	Scanning Stage LMT350
Specimen Collection	Contact- and contamination-free		
Dissection modes	Draw & Cut Move & Cut (direct online cutting) Draw & Scan (dot dissection scan) LMD screw (cut subsequently in Z-direction) Shadow Cuts		
Serial section cutting	Yes	Not recommended	Yes
AVC+ basic	Yes	Yes	Yes
AVC+ professional	Yes	Not recommended	Yes
Universal holder	Yes	No	No
Stage repeatability	+/- 1 µm	+/- 10 µm	<= +/- 0.5 µm
Stage max. travel speed	20 mm/s	20 mm/s	200 mm/s
Stage drive	Ball bearing screw	Rack / pinion	Linear motor drives
Holders	3x standard slides (25 mm x 76 mm) Optional: 1x big slide (50 mm x 76 mm) Petri dish (50 mm) 18-well Ibidi slide stack	1x standard slide (25 mm x 76 mm) Optional: 1x big slide (50 mm x 76 mm) Petri dish (50 mm) 18-well Ibidi slide stack	4x standard slides (25 mm x 76 mm) Optional (combinations possible): 1x big slide (50 mm x 76 mm) 2x Petri dishes (50 mm) 2x 18-well Ibidi slide stacks
Collectors	4x 0.2 ml standard PCR tubes 4x 0.5 ml standard PCR tubes Petri dish (50 mm) Optional: 2x 8-well strips building up a 96-well plate Height adjustable universal collector (for multi-well slides, 8-strips, 8-strip tube caps, ...) 48-well collector (6x8-strip tube caps)	4x 0.2 ml standard PCR tubes 4x 0.5 ml standard PCR tubes Optional: 1x 8-well strips building up a 96-well plate	4x 0.2 ml standard PCR tubes 4x 0.5 ml standard PCR tubes 2x Petri dishes (50 mm) Optional: 96-PCR-well plate (non-, semi- or fully-skirted) 96-LCC-well plate 2x 18-well Ibidi slides 1 x 8-strip, 1 x 12-strip 1.5 ml tube (with or without filling) 14x24 mm Tubes "V.2"
Power supply	CTR6/CTR6 LED		Dual SP box

System software (Operating System Microsoft® Windows® 7/10)		
Package includes	Dissection	Automated collection devices and positioning of PCR tubes Fully automated inspection mode Multi-cutting over entire slide Save and load drawn shapes
	User guidance	Workflow based graphical user interface Free scaling of drawn shapes Save user profiles Overview images in BF and Fluorescence
	Control	Full laser control Control software of microscope stand Laser and illumination settings are linked to objectives
	Interfaces	Export shape list data for Microsoft Excel or OpenOffice
Optional software packages	Auto Detection Mode (ADM basic) for automated cell recognition within field of view only Auto Detection Mode (ADM pro) for fully or semi automated cell recognition over freely defined area Integrated database to transfer relevant data (laser, microscope and camera; database as optional)	

Camera	Leica LMD CC7000	Leica DFC7000 T	Leica DFC3000 G	Leica DMC2900
Type	Digital color	High sensitivity digital color	CCD monochrome	Digital color
Cooled	No	active Peltier cooling	passive cooling	No

