



LMC-4000 Series

FOR CLINICAL AND RESEARCH






BRIGHTFIELD

PHASE CONTRAST

CROSS POLARIZATION

DARKFIELD TO 40X

-  Corrected for eyeglasses
-  Carrying Handle
-  LED Illumination
-  Rackless Stage

KEY FEATURES

- Y-Shaped body for maximum stability
- Carrying handle
- Stable main body
- Brightfield, Darkfield, Polarization, Metallurgical, Phase Contrast, & Fluorescence Contrast Methods
- High contrast, broad beam optical design
- Modular design allows for flexibility in system configuration - 100% customizable for every need

OPTICAL SYSTEM

- Infinity corrected optical system
- Plan Achromat objectives standard, Plan Fluor (optional)
- Wide range of magnifications: 2X, 4x, 10x, 20x, 40x, 60x & 100x
- Anti-reflective coatings on optics
- Sharp images with bright natural color
- Parcentric and parfocal objectives

TRINOCULAR OPTICS

- 10x Eyepieces with 22mm widefield eyepieces
- 50 to 75mm interpupillary distance
- Light splitting ratio 0:100/50:50 (0:100/100:0 on FL models)
- Rubber eyecups
- Diopter adjustment
- Tilting Ergonomic head and standard fixed eyepiece configurations available

STAND

- Large, sturdy base designed for the lab environment
- Rack and pinion focusing mechanism for smooth focus control
- Rackless, X/Y mechanical stage with adjustable tension
- Built-in carrying handle for easy transportation of microscope
- Coarse and fine focus adjustment
- Reversed quintuple nosepiece
- Full Koehler illumination with field and iris diaphragm





MULTI-OBSERVATION CONFIGURATIONS

- LED Pointer
- 12V/100W Illumination
- Supports up to 5 heads

	CAT. NO.	HEAD	OBJECTIVES	OPTICS	FOV	F-CONTROLS	KOEHLER	CONDENSER	ILLUM	STAGE	OBJ TURRET
BRIGHTFIELD	LMC4BF1	BINOC	4X, 10X, 40X, 100X Oil	INFINITY, PL	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	5W LED	RACKLESS X/Y MECH STAGE	5 POS
	LMC4BF7	ERGO BINOC	2X, 4X, 10X, 40X, 100X Oil	INFINITY, PL	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	5W LED	RACKLESS X/Y MECH STAGE	5 POS
	LMC4PA1	TILTING ERGO TRINOC	2X, 4X, 10X, 40X, 100X Oil	INFINITY, PL FLUOR	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	5W LED	RACKLESS X/Y MECH STAGE	45POS
	LMC4PA2	TILTING ERGO TRINOC	2X, 4X, 10X, 40X, 100X Oil	INFINITY, PL	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	5W LED	RACKLESS X/Y MECH STAGE	5 POS
	LMC4HM3	TRINOC	4X, 10X, 40X, 50X Oil, 100X Oil	INFINITY, PL	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	5W LED	RACKLESS X/Y MECH STAGE	5 POS
GOUT	LMC4GT4	TRINOC	4X, 10X, 40X, 50X Oil, 100X Oil	INFINITY, PL	22MM	COARSE & FINE	FULL	1.1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A. - GOUT KIT	5W LED	RACKLESS X/Y MECH STAGE	5 POS
Darkfield	LMC4DF3	TRINOC	2X, 4X, 10X, 20X, 40X	INFINITY, PL	22MM	COARSE & FINE	FULL	1.25 N.A. ABBE, DARKFIELD Oil UP TO 40X	5W LED	RACKLESS X/Y MECH STAGE	5 POS
	LMC4DF4	TRINOC	4X, 10X, 20X, 40X, 100X Oil	INFINITY, PL	22MM	COARSE & FINE	FULL	1.25 N.A. ABBE, DARKFIELD Oil UP TO 100X	5W LED	RACKLESS X/Y MECH STAGE	5 POS
PHASE	LMC4PH18	TRINOC	4X BF, 10XPH, 20XPH, 40XPH, 100XPH Oil	INFINITY, PL PH	22MM	COARSE & FINE	FULL	1.25 N.A. ABBE, 5-POSITION PHASE CONTRAST TURRET	5W LED	RACKLESS X/Y MECH STAGE	5 POS
PHASE/POL	LMC4-AB3	TRINOC	4X BF, 10XPH, 20XPH, 40XPH	INFINITY, PL PH	22MM	COARSE & FINE	FULL	1.25 N.A. ABBE, 5-POSITION PHASE CONTRAST TURRET	5W LED	RACKLESS X/Y MECH STAGE	5 POS
2 HEAD	LMC4MD2	TRINOC (MAIN) BINOC (OBSERVER)	2X, 4X, 10X, 40X, 100X Oil	INFINITY, PL	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	12V/100W HAL	RACKLESS X/Y MECH STAGE	5 POS
5 HEAD	LMC4MD3	TRINOC (MAIN) BINOC (OBSERVER)	2X, 4X, 10X, 40X, 100X Oil	INFINITY, PL	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	12V/100W HAL	RACKLESS X/Y MECH STAGE	5 POS



LMC-4000 Series

FLUORESCENCE



FLUORESCENCE



-  Corrected for eyeglasses
-  Carrying Handle
-  LED Illumination
-  Rackless Stage
-  Plan Fluor Objectives

KEY FEATURES

- Y-Shaped body for maximum stability
- Carrying handle
- Stable main body
- Brightfield, Darkfield, Polarization, Metallurgical, Phase Contrast, & Fluorescence Contrast Methods
- High contrast, broad beam optical design
- Modular design allows for flexibility in system configuration
- 100% customizable for every need

OPTICAL SYSTEM

- Infinity corrected optical system
- Plan Achromat objectives standard, Plan Fluor (optional)
- Wide range of magnifications: 2X, 4x, 10x, 20x, 40x, 60x & 100x
- Anti-reflective coatings on optics
- Sharp images with bright natural color
- Parcentric and parfocal objectives



LED FLUORESCENCE

- 25,000 hour life span
- No alignment needed
- LED wave length specific to filter set
- Adjustable light intensity
- High signal to noise ratio
- Stable light excitation energy
- No warm-up or cool down time
- Produces no harmful UV light
- Powered by optional battery pack

-  4 Channel Fluorescence
-  Hard Coated Filters
-  Brightness Control
-  Wave-Length Specific LED















MERCURY FLUORESCENCE

- Full spectrum illumination
- 100 watt mercury bulb
- Digital power supply
- Centerable lamp housing
- 6 position fluorescence turret
- Brightfield and fluorescence observation
- Fluorescence light block

-  Full Spectrum Fluorescence
-  Hard Coated Filters
-  Mercury Bulb



	CAT. NO.	HEAD	OBJECTIVES	OPTICS	FOV	F-CONTROLS	KOEHLER	CONDENSER	ILLUM	STAGE	OBJ TURRET	GFP FILTER	RFP FILTER	DAPI FILTER
LED FL	LMC4FL4	TRINOC	4X, 10X, 20X, 40X, 100X oil	INFINITY, PL FLUOR	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	5W LED	RACKLESS X/Y MECH STAGE	5 POS	 470 +/- 20  525 +/- 20	 560 +/- 20  645 +/- 37	 365 +/- 25  460 +/- 25
MERCURY FL	LMC4FL2	TRINOC	4X, 10X, 20X, 40X, 100X oil	INFINITY, PL FLUOR	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	5W LED	RACKLESS X/Y MECH STAGE	5 POS	 470 +/- 20  525 +/- 20	 560 +/- 20  645 +/- 37	 365 +/- 25  460 +/- 25









LMC-4000 Series POLARIZATION



POLARIZATION



-  Corrected for eyeglasses
-  Carrying Handle
-  LED Transmitted Illumination
-  Stage Locking
-  Stress Free Objectives
-  50W Halogen

KEY FEATURES

- Y-Shaped body for maximum stability
- Carrying handle
- Can be purchased pre-configured or customized for your specific requirements
- High contrast, broad beam optical design
- Modular Transmitted and reflected light polarization for identification of crystallized structures in biological or material samples
- Can be purchased pre-configured or customized for your specific requirements
- Anti-corrosive and friction coated, graphite stage
- Intermediate device for conoscopic observation with internal Bertrand lens, Analyzer, Compensator, and Wave Plates. Easily determine the degree of polarization for crystal identification.

OPTICAL SYSTEM

- Infinity corrected optical system
- Plan POL and LMPlan POL objectives available
- Wide range of magnifications: 4x, 5x, 10x, 20x, 40x, 60x & 100x
- Central stop dispersion staining objectives available for asbestos analysis
- Sharp images with bright natural color
- Parcentric and parfocal objectives



STAND

- Large, sturdy base designed for the lab environment
- Rack and pinion focusing mechanism for smooth focus control
- Rotating Stage with Stage Lock
- Coarse and fine focus adjustment
- Centerable objective nosepiece
- Full Koehler illumination with field and iris diaphragm

- Eyepiece Rotation Lock
- Centerable Objective Turret
- 50W Halogen
- Rotating Stage
- Locking Stage



Bayonet locking mechanism on eyepiece ensures that the reticle remains orthogonal with the polarizer and analyzer.



50 Watt reflected light illuminator allows for viewing transmitted or reflected light. A pre-centered bulb ensure easy replacement of the bulb.

Intermediate device for conoscopic observation with internal Bertrand lens, Analyzer, Compensator, and Wave Plates. Easily determine the degree of polarization for crystal identification.









CAT. NO.	HEAD	OBJECTIVES	OPTICS	FOV	F-CONTROLS	KOEHLER	CONDENSER	ILLUM	STAGE	OBJ TURRET
LMC4PL5	TRINOC	4X, 10X, 20X, 60X	INFINITY, STRAIN FREE PL	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	TRANSMITTED 50W HAL	ROUND, ROTATING	4 POS CENTERABLE
LMC4PL6	TRINOC	5X, 10X, 20X, 50X	INFINITY, STRAIN FREE LMPL	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	TRANSMITTED AND REFLECTED 50W HAL	ROUND, ROTATING	4 POS, CENTERABLE
LMC4-AB2	TRINOC	4X, 10X (CS), 20X, 40X (CS)	INFINITY STRAIN FREE, CENTRAL STOP (10X & 40X)	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	TRANSMITTED 50W HAL	ROUND, ROTATING	4 POS CENTERABLE



LMC-4000 Series METALLURGICAL



-  Corrected for eyeglasses
-  Carrying Handle
-  LED Illumination
-  Stage Locking
-  LMPLAN Objectives
-  Adjustable Stage

KEY FEATURES

- Y-Shaped body for maximum stability
- Carrying handle
- Ultra-Bright LED Illumination, reflected and transmitted light for Material Science applications
- Reflected and transmitted light for Material Science applications
- Can be purchased separately or in a pre-configured system

OPTICAL SYSTEM

- Infinity corrected optical system
- LMPlan objectives
- Wide range of magnifications: 5x, 10x, 20x, 50x & 100x
- Sharp images with bright natural color
- Parcentric and parfocal objectives

OBJECTIVES

Series	Magnification	N.A.	W.D.	F.N.	Cover glass thickness	Immersion
LMPlan	5x	0.15	10.80	22	-	/
	10x	0.30	10.00	22	-	/
	20x	0.45	4.00	22	-	/
	50x	0.55	7.90	22	-	/
	100x	0.80	2.10	22	-	/



STAND

- Large, sturdy base designed for the lab environment
- Rack and pinion focusing mechanism for smooth focus control
- Adjustable stage height. 28mm sample height in transmitted and 78mm high samples in reflected light allows for maximum flexibility on the times of materials that can be viewed on this system
- Coarse and fine focus adjustment
- Full Koehler illumination with field and iris diaphragm



Centerable Objective Turret



50W Halogen



Rotating Stage



Locking Stage



5 Watt reflected light illuminator with field and iris diaphragm, polarization and color filter options.

Both transmitted and reflected light options with independent light intensity control.



CAT. NO.	HEAD	OBJECTIVES	OPTICS	FOV	F-CONTROLS	KOEHLER	CONDENSER	ILLUM	STAGE	OBJ TURRET
LMC4PL5	TRINOC	4X, 10X, 20X, 60X	INFINITY, STRAIN FREE PL	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	TRANSMITTED 50W HAL	ROUND, ROTATING	4 POS CENTERABLE
LMC4PL6	TRINOC	5X, 10X, 20X, 50X	INFINITY, STRAIN FREE LMPL	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	TRANSMITTED AND REFLECTED 50W HAL	ROUND, ROTATING	4 POS, CENTERABLE
LMC4-AB2	TRINOC	4X, 10X (CS), 20X, 40X (CS)	INFINITY STRAIN FREE, CENTRAL STOP (10X & 40X)	22MM	COARSE & FINE	FULL	1.2 N.A. ABBE, WITH IRIS AND FLIP OUT LENS WITH 0.9 N.A.	TRANSMITTED 50W HAL	ROUND, ROTATING	4 POS CENTERABLE