E. LEITZ, INC.
468 PARK AVENUE SOUTH
NEW YORK, NEW YORK 10016

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Specifications and Prices

LEITZ LABORATORY AND RESEARCH MICROSCOPES
LABOLUX-D AND LABOLUX-UB D

LEITZ LABORATORY AND RESEARCH MICROSCOPE LABOLUX-D CONSISTING OF:

051 248	Modern stand, LABOLUX-D, made of non-corroding alloy with coaxial dual knob coarse and fine adjustment (1 interval = 0.002mm), identical controls on either side of the stand for the vertical displacement of the stage along precision ball races and built-in field diaphragm for Koehler Illumination. Dovetail carrier -.-.5, for the interchange of condensers, with rack and pinion for the adjustment in the height of condenser. Built-in low voltage lamp 6 volts, 15 watts with one each daylight conversion filter CB 16.5 and ground glass; including one spare bulb -.-.-.31. Slot to accept filter slider with one blank slider and flexible plastic dust cover (81,108)	$ 495.00
512 066	Interchangeable, inclined binocular tube S (tube factor 1.25x) (NACON)	206.00
512 025	Mechanical stage #48, with scales and verniers, low set operating knobs on one axis, traversing area 76 x 50mm (3" x 2") (IKRES)	153.00
512 137	Swing out condenser #601L, with lower element, aperture diaphragm, centering mount and interchangeable aspherical top element As 0.90; on dovetail carrier (OHFAW)	59.00
512 067	Quadruple revolving objective nosepiece on interchange carrier 7.4.- (NADUR)	50.00
	LEITZ Microscope LABOLUX-D 7.4.5.31 S 48/601L as described above	$ 963.00

OPTICAL EQUIPMENT A2n BINO

519 036	Achromatic dry objective, 3.5x/0.10, focal length 31.6mm, free working distance 23mm (OANEE)	$ 31.00
519 004	Achromatic dry objective, 10x/0.25, focal length 16.3mm, free working distance 5.7mm (ACORA)	32.00
519 003	Achromatic dry objective, 40x/0.65, focal length 4.46mm, free working distance 0.67mm, with spring loaded mount (ACMAT)	50.00
519 060	Achromatic oil immersion objective, Oil 100x/1.30, focal length 1.9mm, free working distance 0.13mm, with spring loaded mount (OILIM-FE)	88.00
519 129	Periplanatic eyepieces, paired 10x°, field of view 18mm (PELEK)	52.00
	LEITZ Laboratory and Research Microscope LABOLUX-D 7.4.5.31 S 48/601L + A2n Bino complete as described above	$1,216.00
500 047	Regulating transformer 6 volts, 2.5 amps, 110 volts A.C. (RESEV)	51.00
		$1,267.00

OPTIONAL

051 305	Leatherette carrying case, horizontal (NEESY)	$ 41.00
512 270	Fitted accessory case	16.00

LEITZ LABORATORY AND RESEARCH MICROSCOPE LABOLUX-D CONSISTING OF:

051 248	Modern stand, LABOLUX-D, made of non-corroding alloy with coaxial dual knob coarse and fine adjustment (1 interval = 0.002mm), identical controls on either side of the stand for the vertical displacement of the stage along precision ball races and built-in field diaphragm for Koehler Illumination. Dovetail carrier -.-.5, for the interchange of condensers, with rack and pinion for the adjustment in the height of condenser. Built-in low voltage lamp 6 volts, 15 watts with one each daylight conversion filter CB 16.5 and ground glass; including one spare bulb -.-.-.31. Slot to accept filter slider with one blank slider and flexible plastic dust cover (81,108)	$ 495.00
512 072	Interchangeable, inclined binocular observation and straigth monocular photographic tube FS (tube factor 1.25x) (NASEB)	266.00
512 025	Mechanical stage #48, with scales and verniers, low set operating knobs on one axis, traversing area 76 x 50mm (3" x 2") (IKRES)	153.00
512 138	Swing out condenser #602L, with lower element, aperture diaphragm, centering mount and interchangeable achromatic top element Achr. 0.90; on dovetail carrier (OHFEX)	119.00
512 067	Quadruple revolving objective nosepiece on interchange carrier 7.4.- (NADUR)	50.00
	LEITZ Microscope LABOLUX-D 7.4.5.31 FS 48/602L as described above	$1,083.00

OPTICAL EQUIPMENT

519 009	Apochromatic dry objective, Apo 12.5x/0.30, focal length 13.0mm, free working distance 2.5mm (APOSA)	$ 104.00
519 007	Apochromatic dry objective, Apo 25x/0.65, focal length 7.4mm, free working distance 0.85mm, with spring loaded mount (APOCT)	177.00
519 038	Apochromatic dry objective, Apo 40x/0.95, focal length 4.4mm, free working distance 0.12mm, with spring loaded mount (OBPAM)	261.00
519 008	Apochromatic oil immersion objective, Apo Oil 90x/1.32, focal length 2.0mm, free working distance 0.12mm, with spring loaded mount (APOIM)	333.00
519 142	Periplanatic widefield eyepieces, paired GF 10x, field of view 18mm (PESIS)	70.00
	LEITZ Laboratory and Research Microscope LABOLUX-D 7.4.5.31 FS 48/602L complete with optical equipment as described above	$2,028.00
500 047	Regulating transformer 6 volts, 2.5 amps, 110 volts, A.C. (RESEV)	51.00
		$2,079.00

OPTIONAL

051 305	Leatherette carrying case, horizontal (NEESY)	$ 41.00
512 270	Fitted accessory case	16.00

LABORATORY AND RESEARCH MICROSCOPE LABOLUX-UB D EQUIPPED FOR: REFLECTED LIGHT DARKFIELD

512 157	Modern stand, LABOLUX-UB D, made of non-corroding alloy with coaxial, dual knob coarse and fine adjustment (1 interval = 0.002mm); identical controls on either side of the stand for the vertical displacement of the stage along precision ball races. Dovetail guide for interchangeable object stages; permitting a 60mm vertical adjustment of the object stage independent of the focusing motion. Slot to accept filter slider with one blank slider and Mipolam pad.	$ 410.00
512 036	Flexible plastic protective dust cover	2.00
513 222	ULTROPAK Illuminator with built-in ring mirror, heat absorption filter, two sector diaphragms (90^{o} - 180^{o} and 180^{o} - 360^{o}), slot to accept polarizer and bayonet objective changing device. Built-in low voltage lamp 6 volts, 15 watts with daylight conversion filter CB 16.5, ground glass and green filters 7.121.-.36	215.00
512 066	Interchangeable, inclined binocular observation tube S (tube factor 1.25x)	206.00
512 011	Gliding stage #249, range of displacement 70 x 70mm; on interchange carrier	178.00
	LEITZ Microscope LABOLUX-UB D 7.121.-.36 S 249/- as described above	$1,011.00

OPTICAL EQUIPMENT

513 003	Achromatic dry objective, UO 3.8x/0.12 with ring condenser, free working distance 33mm	$ 57.00
513 004	Achromatic dry objective, UO 6.5x/0.18 with ring condenser, free working distance 16.2mm	82.00
513 005	Achromatic dry objective, UO 11x/0.25 with ring condenser, free working distance 5.8mm	99.00
513 006	Achromatic dry objective, UO 22x/0.45 with ring condenser, free working distance 2.2mm	113.00
513 119	Achromatic dry objective, UO 32x/0.55 with ring condenser, free working distance 1.0mm	120.00
513 007	Achromatic dry objective, UO 50x/0.65 with ring condenser, free working distance 0.7mm	133.00
519 030	Huyghens eyepieces, paired 6x, field of view 17mm	22.00
519 129	Periplanatic eyepieces, paired $10x^{o}$, field of view 18mm	52.00
	LEITZ Laboratory and Research Microscope LABOLUX-UB D 7.121.-.36 S 249/- complete with optical equipment as described above	$1,689.00
500 047	Regulating transformer 6 volts, 2.5 amps for connection to 110/120 volts, 60 cycles A.C.	51.00
		$1,740.00

OPTIONAL EQUIPMENT, POL ACCESSORIES FOR ULTROPAK

513 173	Filter polarizer in mount	$ 55.00
513 074	Filter analyser (fitting filter slider)	40.00

SUPPLEMENTARY EQUIPMENT FOR TRANSMITTED LIGHT

512 071	Collector lens	$ 42.00
512 133	Low voltage lamp 6 volts, 2.5 amps with daylight conversion filter CB 16.5, ground glass and green filter; including one spare bulb -.-.-.31	51.00
513 176	Illumination centering disc	1.00
512 139	Adjustable field diaphragm and dust protective glass (fitting in place of dust protective glass in base of microscope)	19.00
512 118	Dovetail carrier -.-.8, for the interchange of condensers, with rack and pinion for the adjustment in the height of condenser	52.00
512 067	Quadruple revolving objective nosepiece on interchange carrier 7.4.-	50.00

NOTE:

The LABOLUX-UB D, when equipped with a substage rack and pinion with carrier, accepts the same condensers as the standard LABOLUX-D microscope. The objectives for transmitted light can be selected from the table on pages 19 and 20.

LEITZ LABORATORY AND RESEARCH PHASE (ZERNIKE) MICROSCOPE LABOLUX-D CONSISTING OF:

051 248	Modern stand, LABOLUX-D, made of non-corroding alloy with coaxial dual knob coarse and fine adjustment (1 interval = 0.002mm), identical controls on either side of the stand for the vertical displacement of the stage along precision ball races and built-in field diaphragm for Koehler Illumination. Dovetail carrier -.-.5, for the interchange of condensers, with rack and pinion for the adjustment in the height of condenser. Built-in low voltage lamp 6 volts, 15 watts with one each daylight conversion filter CB 16.5 and ground glass; including one spare bulb -.-.-.31. Slot to accept filter slider with one blank slider and flexible plastic dust cover (81,108)	$ 495.00
512 066	Interchangeable, inclined binocular tube S (tube factor 1.25x) (NACON)	206.00
512 025	Mechanical stage #48, with scales and verniers, low set operating knobs on one axis, traversing area 76 x 50mm (3" x 2") (IKRES)	153.00
513 156	Phase contrast condenser, PHACO #402aL, with lower element, aperture diaphragm, centering mount, swing out upper element Achr. 0.90 and revolving disc with lens for bright-field (H), three phase annular diaphragms, central stop for darkfield and one blank setting; on dovetail carrier (RAFIX)	163.00
512 067	Quadruple revolving objective nosepiece on interchange carrier 7.4.- (NADUR)	50.00
	LEITZ Microscope LABOLUX-D 7.4.5.31 S 48/402aL as described above	$1,067.00

OPTICAL EQUIPMENT C10 BINO

519 165	Achromatic dry phase objective, PHACO 10x/0.25, free working distance 7.7mm (RABES)	$ 74.00
519 166	Achromatic dry phase objective, PHACO 40x/0.65, free working distance 0.71mm, with spring loaded mount (RABIT)	102.00
519 167	Achromatic oil immersion phase objective, PHACO Oil 100x/1.30, free working distance 0.17mm, with spring loaded mount (RABOW)	145.00
513 123	Magnifier for focusing the phase ring (PHADS)	34.00
519 142	Periplanatic widefield eyepieces, paired GF 10x, field of view 18mm (PESIS)	70.00
	LEITZ Laboratory and Research Phase Microscope LABOLUX-D 7.4.5.31 S 48/402aL complete with optical equipment C10 as described above	$1,492.00
500 047	Regulating transformer 6 volts, 2.5 amps, 110 volts A.C. (RESEV)	51.00
		$1,543.00

OPTIONAL

051 305	Leatherette carrying case, horizontal (NEESY)	$ 41.00
513 179	Phase accessory case	22.00

	LEITZ LABORATORY AND RESEARCH PHASE (HEINE) MICROSCOPE LABOLUX-D CONSISTING OF:	
051 248	Modern stand, LABOLUX-D, made of non-corroding alloy with coaxial dual knob coarse and fine adjustment (1 interval = 0.002mm), identical controls on either side of the stand for the vertical displacement of the stage along precision ball races and built-in field diaphragm for Koehler Illumination. Dovetail carrier -.-.5, for the interchange of condensers, with rack and pinion for the adjustment in the height of condenser. Built-in low voltage lamp 6 volts, 15 watts with one each daylight conversion filter CB 16.5 and ground glass; including one spare bulb -.-.-.31. Slot to accept filter slider with one blank slider and flexible plastic dust cover (81,108)	$ 495.00
512 072	Interchangeable, inclined binocular observation and straight monocular photographic tube FS (tube factor 1.25x) (NASEB)	266.00
512 025	Mechanical stage #48, with scales and verniers, low set operating knobs on one axis, traversing area 76 x 50mm (3" x 2") (IKRES)	153.00
513 125	Phase contrast condenser, Pv #64, with control knob for the vertical adjustment of the mirror component through three intermediate settings (brightfield, phase contrast and darkfield) N.A. 0.25 to 0.70 and screw-on immersion cap N.A. 1.40; on dovetail carrier (PHAKY)	173.00
512 067	Quadruple revolving objective nosepiece on interchange carrier 7.4.- (NADUR)	50.00
	LEITZ Microscope LABOLUX-D 7.4.5.31 FS 48/64 as described above	$1,137.00

	OPTICAL EQUIPMENT	
519 149	Achromatic dry phase objective, Pv 10x/0.25 normal contrast, free working distance 5.8mm (PHALZ)	$ 71.00
519 153	Immersion attachment for Pv 10x objective (PHAWK)	13.00
519 150	Achromatic dry phase objective, Pv 25x/0.50 normal contrast, free working distance 0.9mm, with spring loaded mount (PHANC)	114.00
519 151	Apochromatic dry phase objective, Pv Apo 40x/0.70 normal contrast, free working distance 0.38mm, with spring loaded mount (PHASG)	261.00
519 152	Apochromatic oil immersion phase objective, Pv Apo Oil 90x/1.15 normal contrast, free working distance 0.12mm, with spring loaded mount (PHATH)	329.00
513 123	Magnifier for focusing the phase ring (PHADS)	34.00
519 142	Periplanatic widefield eyepieces, paired GF 10x, field of view 18mm (PESIS)	70.00
	LEITZ Laboratory and Research Phase Microscope LABOLUX-D 7.4.5.31 FS 48/64 complete with optical equipment as described above	$2,029.00
500 047	Regulating transformer 6 volts, 2.5 amps, 110 volts A.C. (RESEV)	51.00
		$2,080.00

	OPTIONAL	
051 305	Leatherette carrying case, horizontal (NEESY)	$ 41.00

LEITZ LABORATORY AND RESEARCH FLUORESCENCE MICROSCOPE LABOLUX-D CONSISTING OF:

051 248	Modern stand, LABOLUX-D, made of non-corroding alloy with coaxial dual knob coarse and fine adjustment (1 interval = 0.002mm), identical controls on either side of the stand for the vertical displacement of the stage along precision ball races and built-in field diaphragm for Koehler Illumination. Dovetail carrier -.-.5, for the interchange of condensers, with rack and pinion for the adjustment in the height of condenser. Built-in low voltage lamp 6 volts, 15 watts with one each daylight conversion filter CB 16.5 and ground glass; including one spare bulb -.-.-.31. Slot to accept filter slider with one blank slider and flexible plastic dust cover (81,108)	$ 495.00
512 066	Interchangeable, inclined binocular observation tube S (tube factor 1.25x) (NACON)	206.00
512 025	Mechanical stage #48, with scales and verniers, low set operating knobs on one axis, traversing area 76 x 50mm (3" x 2") (IKRES)	153.00
512 137	Swing out condenser #601L, with lower element, aperture diaphragm, centering mount and interchangeable aspherical top element As 0.90; on dovetail carrier (OHFAW)	59.00
513 109	Immersion darkfield condenser in centering mount D 1.20, #82; on dovetail carrier (ORCIX)	87.00
512 067	Quadruple revolving objective nosepiece on interchange carrier 7.4.- (NADUR)	50.00
	LEITZ Microscope LABOLUX-D 7.4.5.31 S 48/601L - 82 as described above	$1,050.00

OPTICAL EQUIPMENT

519 004	Achromatic dry objective, 10x/0.25, focal length 16.3mm, free working distance 5.7mm (ACORA)	$ 32.00
519 006	Achromatic dry objective, 25x/0.50, focal length 7.1mm, free working distance 0.92mm, with spring loaded mount (ACVIR)	59.00
519 027	Fluorite oil immersion objective, Fl Oil 54x/0.95, focal length 3.4mm, free working distance 0.22mm, with spring loaded mount (FLUIM)	145.00
519 045	Achromatic oil immersion objective, Oil 100x/1.30-1.10 with built-in iris diaphragm, focal length 1.9mm, free working distance 0.13mm, with spring loaded mount (OBSOT)	147.00
519 129	Periplanatic eyepieces, paired 10x°, field of view 18mm (PELEK)	52.00

FLUORESCENCE EQUIPMENT

514 102	Universal Lamp Housing Model #250 with filter changing device, reflector and two lens collector. Base "B" with carrier plate #17 for the proper elevation of the microscope and the mirror housing. Lamp socket, high pressure mercury burner HBO 200 Type L II and heat sink to prevent the excessive build-up of heat in the burner and thereby prolonging its life. Pair of protective goggles for use when adjusting the burner. Mirror housing #15 with swing out deflecting mirror, for the reception of the low voltage lamp; permitting rapid change from mercury burner for fluorescence to the low voltage lamp for observation in brightfield; including protective dust cover for the complete microscope and lamp housing (NEMEH)	$ 560.00
514 027	Heat filter 2mm, KG 1, unmounted (LODES)	7.00
514 033	Heat filter 4mm, BG 38, mounted (LOERN)	10.00
514 029	UV filter 2mm, UG 1, mounted (LODOV)	10.00
514 032	Blue filter 3mm, BG 12, mounted (LOEHF)	10.00
050 220	Ignitor, choke and special transformer for HBO 200, 110/120 volts A.C. (81,851)	214.00

BARRIER FILTERS

514 007	Filter slider with one each barrier filter K 430 and K 460 (IGGAV)	$ 24.00
514 118	Filter slider with one each barrier filter K 510 and K 530 (IGKOC)	24.00
	LEITZ Laboratory and Research Fluorescence Microscope LABOLUX-D 7.4.5.31 S 48/601L - 82 complete with optical equipment as described above	$2,344.00
500 047	Regulating transformer 6 volts, 2.5 amps for connection to 110/120 volts, 60 cycles A.C. (RESEV)	51.00
		$2,395.00

	LEITZ LABORATORY AND RESEARCH PHASE FLUORESCENCE MICROSCOPE LABOLUX-D CONSISTING OF:	
051 248	Modern stand, LABOLUX-D, made of non-corroding alloy with coaxial dual knob coarse and fine adjustment (1 interval = 0.002mm), identical controls on either side of the stand for the vertical displacement of the stage along precision ball races and built-in field diaphragm for Koehler Illumination. Dovetail carrier -.-.5, for the interchange of condensers, with rack and pinion for the adjustment in the height of condenser. Built-in low voltage lamp 6 volts, 15 watts with one each daylight conversion filter CB 16.5 and ground glass; including one spare bulb -.-.-.31. Slot to accept filter slider with one blank slider and flexible plastic dust cover (81,108)	495.00
512 066	Interchangeable, inclined binocular observation tube S (tube factor 1.25x) (NACON)	206.00
512 025	Mechanical stage #48, with scales and verniers, low set operating knobs on one axis, traversing area 76 x 50mm (3" x 2") (IKRES)	153.00
513 157	Phase contrast-fluorescence condenser, PHACO #402aaL, with lower element, aperture diaphragm, centering mount, swing-out upper element Achr. 0.90 and revolving disc with six settings; H-brightfield, 1 normal phase contrast with PHACO 10x/0.25 objective, 2 phase contrast and UV fluorescence with PHACO 40x/0.65 objective, 3 phase contrast and blue fluorescence with PHACO 40x/0.65 objective, 4 phase contrast and UV fluorescence with PHACO Oil 100x/1.30 objective and 5 phase contrast and blue fluorescence with PHACO Oil 100x/1.30 objective (RAFOY)	254.00
512 037	Quadruple revolving objective nosepiece on interchange carrier 7.4.- (NADUR)	50.00
	LEITZ Microscope LABOLUX-D 7.4.5.31 S 48/402aaL as described above	$1,158.00

	OPTICAL EQUIPMENT	
519 165	Achromatic dry phase objective, PHACO 10x/0.25, free working distance 7.7mm (RABES)	$ 74.00
519 166	Achromatic dry phase objective, PHACO 40x/0.65, free working distance 0.71mm, with spring loaded mount (RABIT)	102.00
519 167	Achromatic oil immersion phase objective, PHACO Oil 100x/1.30, free working distance 0.17mm, with spring loaded mount (RABOW)	145.00
513 123	Magnifier for focusing the phase ring (PHADS)	34.00
519 142	Periplanatic widefield eyepieces, paired GF 10x, field of view 18mm (PESIS)	70.00

	FLUORESCENCE EQUIPMENT	
514 151	Universal Lamp Housing Model #250 with filter changing device. reflector and two lens collector. Base "B" with carrier plate #17 for the proper elevation of the microscope and the mirror housing. Lamp socket, high pressure mercury burner HBO 200 type L II and heat sink to prevent the excessive build-up of heat in the burner and thereby prolonging its life. Pair of protective goggles for use when adjusting the burner. Mirror housing #15s with beam splitter and swing-out deflecting mirror for the reception of the low voltage lamp; permitting rapid change from mercury burner for fluorescence to the low voltage lamp for observation in brightfield. Protective dust cover for the complete microscope and lamp housing (NETIP)	$ 601.00
513 142	Filter OG 2 (RACET)	12.00
514 027	Heat filter 2mm, KG 1, unmounted (LODES)	7.00
514 033	Heat filter 4mm, BG 38, mounted (LOERN)	10.00
514 029	UV filter 2mm, UG 1, mounted (LODOV)	10.00
514 032	Blue filter 3mm, BG 12, mounted (LOEHF)	10.00
050 220	Ignitor, choke and special transformer for HBO 200, 110/120 volts A.C. (81,851)	214.00

	BARRIER FILTERS	
514 007	Filter slider with one each barrier filter K 430 and K 460 (IGGAV)	$ 24.00
514 118	Filter slider with one each barrier filter K 510 and K 530 (IGKOC)	24.00
	LEITZ Laboratory and Research Phase Fluorescence Microscope LABOLUX-D 7.4.5.31 S 48/402aaL complete with optical equipment as described above	$2,495.00
500 047	Regulating transformer 6 volts, 2.5 amps for connection to 110/120 volts, 60 cycles A.C. (RESEV)	51.00
		$2,546.00

OPTIONAL EQUIPMENT

512 065	Interchangeable, inclined monocular observation tube P (NACIM)	$ 40.00
512 072	Interchangeable, inclined binocular observation and straight monocular photographic tube FS (NASEB)	266.00
513 111	Dry darkfield condenser with centering mount #84, D 0.80; on dovetail carrier (OREBK)	120.00
514 146	Stray light shielding device	24.00

ADDITIONAL, HIGH INTENSITY LIGHT SOURCE FOR LABOLUX-D MICROSCOPE

XENON LAMP XBO 150

514 099	Universal Lamp Housing Model #250 with filter changing device, reflector and two lens collector. Base "B" with carrier plate #17 for the proper elevation of the microscope and the mirror housing. Lamp socket, high intensity xenon burner XBO 150W and pair of protective goggles for use when adjusting the burner. Mirror housing #15 with swing out deflecting mirror for the reception of the low voltage lamp; permitting rapid change from xenon burner to the low voltage lamp. Protective dust cover for the complete microscope and lamp housing (NEIHP)	$ 653.00
514 040	Heat absorbing filter B1/K2, unmounted (LOIHG)	19.00
514 031	Grey filter 0.2%, mounted (LOEBY)	10.00
514 036	Grey filter 5%, mounted (LOFIV)	10.00
514 041	Green filter 1.5mm, VG 9, mounted (LOILK)	10.00
514 028	Dispersion disc R, mounted (LODIT)	9.00
514 042	Dispersion disc N, mounted (LOIRP)	7.00
514 034	Case for filters (LOFAS)	10.00
050 230	Power supply for XBO 150W Xenon lamp, regulated to supply constant current, maintaining light output within + or - 1%; for connection to 100/130 volts A.C. (82,776)	440.00
		$1,168.00

562 019	Paired neutral density eyepiece filters, NG 3 (MEFIX)	$ 14.00

OPTIONAL ACCESSORIES FOR MICROPROJECTION

512 064	Interchangeable, straight monocular photographic tube O (NACEL)	$ 23.00
513 137	Attachable reflecting prism, with adjusting screw (PRIAU-C)	34.00

VIEWING AND DEMONSTRATION SCREEN

513 138	Viewing and demonstration screen 155mm ϕ with ground glass, fresnel lens, image erecting prism and built-in periplanatic widefield eyepiece GF 10xM (PRUFS)	$ 353.00
513 139	Viewing and demonstration screen as described above, however with reticle for grain size measurements (PRULY)	374.00
051 386	Viewing and demonstration screen with ground glass 150mm ϕ (requires GF 10x eyepiece) (81,986)	180.00
519 137	Periplanatic widefield eyepiece GF 10x (PERIR)	35.00

UNIVERSAL LAMP HOUSING MODEL #250 IN CONJUNCTION WITH LABOLUX MICROSCOPE AND ARISTOPHOT

514 083	Universal Lamp Housing Model #250 with filter changing device, reflector and two lens collector. Lamp socket, high intensity Xenon burner XBO 150W and pair of protective goggles for use when adjusting the burner. Lamp holder with clamping brackets fitting the twin columns of the ARISTOPHOT stand for the proper alignment of the mirror housing to the microscope. Mirror housing #15 with swing out deflecting mirror for the reception of the low voltage lamp; permitting rapid change from xenon burner to the low voltage lamp (MAUPT)	$ 685.00
514 040	Heat absorbing filter B1/K2, unmounted (LOIHG)	19.00
514 031	Grey filter 0.2%, mounted (LOEBY)	10.00
514 036	Grey filter 5%, mounted (LOFIV)	10.00
514 041	Green filter 1.5mm, VG 9, mounted (LOILK)	10.00
514 028	Dispersion disc R, mounted (LODIT)	9.00
514 042	Dispersion disc N, mounted (LOIRP)	7.00
514 034	Case for filters (LOFAS)	10.00
050 230	Power supply for XBO 150W Xenon lamp, regulated to supply constant current, maintaining light output within + or - 1%; for connection to 100/130 volts A.C. (82,776)	440.00
		$1,200.00

562 019	Paired neutral density eyepiece filters NG 3 (MEFIX)	$ 14.00

MERCURY LAMP HBO 200

514 086	Universal Lamp Housing Model #250 with filter changing device, reflector and two lens collector. Lamp socket, high pressure mercury burner HBO 200 Type L II, pair of protective goggles for use when adjusting the burner and heat sink to prevent the excessive build-up of heat in the burner and thereby prolonging its life. Lamp holder with clamping brackets fitting the twin columns of the ARISTOPHOT stand for the proper alignment of the mirror housing to the microscope. Mirror housing #15 with swing out deflecting mirror for the reception to the low voltage lamp; permitting rapid change from mercury burner for fluorescence to the low voltage lamp for observation in brightfield (MAVOC)	$ 592.00
514 027	Heat filter 2mm, KG 1, unmounted (LODES)	7.00
514 033	Heat filter 4mm, BG 38, mounted (LOERN)	10.00
514 029	UV filter 2mm, UG 1, mounted (LODOV)	10.00
514 032	Blue filter 3mm, BG 12, mounted (LOEHF)	10.00
050 220	Ignitor, choke and special transformer for HBO 200, 110/120 volts A.C. (81,851)	214.00
		$ 843.00

INTERCHANGEABLE COMPONENTS FOR LAMP HOUSING #250 FOR LABOLUX-D MICROSCOPES

514 025	Universal lamp housing model #250 with filter changing device, reflector, two lens collector and control knobs for adjusting the bulb and collector (LOARM)	$ 304.00
514 050	Elevating base "B" for LABOLUX-D Microscope (LONEC)	53.00
514 051	Carrier plate #17 with bayonet mount (LONOF)	19.00
514 026	Mirror housing #15 with swing out deflecting mirror (LOBEP)	55.00
514 016	Mirror housing #15s with beam splitter and swing out deflecting mirror (required for phase fluorescence) (IGPAD)	96.00
514 062	Lamp holder with clamping brackets fitting the twin columns of the ARISTOPHOT stand and mirror housing #15 with swing out deflecting mirror (LOTOK)	164.00
514 020	Lamp holder with clamping brackets fitting the twin columns of the ARISTOPHOT stand and mirror housing #15s with beam splitter and swing out deflecting mirror (required for phase fluorescence) (IGPUJ)	205.00
512 040	Protective dust cover (ISMEL)	5.00

FILTERS, SPARE BULBS AND REPLACEMENT PARTS FOR LABOLUX-D LIGHT SOURCES

A) LOW VOLTAGE LAMP 6 VOLTS, 15 WATTS -.-.-.31

512 075	Daylight conversion filter CB 16.5 (NOBAW)	$ 7.00
512 076	Ground glass filter (NOBEX)	6.00
512 077	Green filter (NOBOZ)	6.00
513 176	Illumination centering disc	1.00
500 012	Bulb 6 volts, 15 watts (LINOP)	3.00
512 061	Lamp socket with connecting cable (LINUR)	25.00
500 046	Four step transformer 6 volts, 2.5 amps for connection to 110/120 volts, 60 cycles A.C. (REROW)	25.00
500 047	Regulating transformer 6 volts, 2.5 amps for connection to 110/120 volts, 60 cycles A.C. (RESEV)	51.00
500 048	Regulating transformer with ammeter 6 volts, 2.5 amps for connection to 110/120 volts, 60 cycles A.C. (RETAV)	74.00
552 041	Plane and concave mirror in mount (PEJUL)	17.00

B) MERCURY BURNER, HBO 200

500 016	Mercury burner HBO 200, type L II (89,194)	$ 47.00
514 073	Heat sink (LUAHG)	11.00
514 039	Pair of protective goggles (LOHUZ)	3.00
514 065	Lamp socket for HBO 200 (LOULM)	63.00
050 220	Ignitor, choke and special transformer for HBO 200, 110/120 volts A.C. (81,851)	214.00
514 027	Heat filter 2mm, KG 1, unmounted (LODES)	$ 7.00
514 033	Heat filter 4mm, BG 38, mounted (LOERN)	10.00
514 029	UV filter 2mm, UG 1, mounted (LODOV)	10.00
514 032	Blue filter 3mm, BG 12, mounted (LOEHF)	10.00
514 057	UV filter 1mm, UG 1, mounted (LOSOJ)	$ 10.00
514 058	UV filter 1mm, UG 5, mounted (LOSUK)	13.00
051 484	UV filter 2mm, UG 2, unmounted (89,384)	8.00
051 488	UV filter 2mm, UG 5, unmounted (89,388)	8.00
514 035	UV filter 3mm, UG 5, mounted (LOFET)	18.00
514 059	Blue filter 1.5mm, BG 12, mounted (LOTAG)	10.00
051 480	Blue filter 2mm, BG 12, unmounted (89,380)	8.00
514 030	Blue filter 5mm, BG 12, mounted (LODUW)	10.00
514 015	Blue filter 3mm, BG 3, mounted (IGKAY)	11.00
051 486	Filter 2mm, GG 9, unmounted (89,386)	$ 8.00
051 492	Filter 2mm, #5840, unmounted (89,392)	8.00
051 490	Filter 2mm, #5970, unmounted (89,390)	8.00
514 080	UV cover glass VG 5, 18 x 18mm (LUPEL)	2.00
514 034	Case for filters (LOFAS)	10.00

C) XENON BURNER, XBO 150W

500 008	Xenon burner XBO 150W (LAZEB)	$ 148.00
514 039	Pair of protective goggles (LOHUZ)	3.00
514 038	Lamp socket for XBO 150W (LOHEW)	66.00
050 230	Power supply for XBO 150W xenon lamp, regulated to supply constant current, maintaining light output within + or - 1%; for connection to 100/130 volts A.C. (82,776)	440.00
514 040	Heat filter B1/K2, unmounted (LOIHG)	19.00
514 031	Grey filter 0.2%, mounted (LOEBY)	10.00
514 036	Grey filter 5%, mounted (LOFIV)	10.00
514 041	Green filter 1.5mm, VG 9, mounted (LOILK)	10.00
514 028	Dispersion disc R, mounted (LODIT)	9.00
514 042	Dipsersion disc N, mounted (LOIRP)	7.00
514 034	Case for filters (LOFAS)	10.00

BARRIER FILTERS

A) For LABOLUX without provision for filter slider

514 048	Filter K 430, mounted (LOMOD)	$ 12.00
514 012	Filter K 460, mounted (IGJEY)	12.00
514 013	Filter K 470, mounted (IGJIZ)	12.00
514 014	Filter K 490, mounted (IGJOB)	12.00
514 117	Filter K 510, mounted (IGKEZ)	12.00
514 046	Filter K 530, mounted (LOMEB)	12.00

B) For LABOLUX-D with provision for filter slider

514 007	Slider with one each barrier filter K 430 and K 460 (IGGAV)	$ 24.00
514 008	Slider with one each barrier filter K 470 and K 490 (IGGEW)	24.00
514 118	Slider with one each barrier filter K 510 and K 530 (IGKOC)	24.00

C) For eyepieces (in screw-in mount)

514 005	Filter, blue absorbing (EEUQM)	$ 8.00
514 003	Filter, UV absorbing (DQEER)	7.00

IMMERSION OIL

513 035	Bottle, 10 grams (DOLEO)	$ 1.00
513 059	Bottle, 50 grams (IMMAV)	2.00
513 060	Bottle, 100 grams (IMMEW)	3.00
513 061	Bottle, 250 grams (IMMIX)	6.60
513 062	Bottle, 500 grams (IMMOY)	12.00
513 063	Bottle, 1000 grams (IMMUZ)	20.00

IMMERSION OIL, FREE OF FLUORESCENCE

513 036	Bottle, 10 grams (EEUCH)	$ 1.40
513 064	Bottle, 50 grams (IMNAW)	2.60
513 065	Bottle, 100 grams (IMNEX)	3.80
513 066	Bottle, 250 grams (IMNOZ)	7.60
513 067	Bottle, 500 grams (IMNUB)	13.00
513 068	Bottle, 1000 grams (IMOBS)	24.00

513 108	Combination bottle for immersion oil and XYLOL (OLBAD)	$ 2.00

TUBES

512 064	Straight monocular photographic tube O (NACEL)	$ 23.00
512 065	Inclined monocular observation tube P (NACIM)	40.00
512 066	Inclined binocular observation tube S (tube factor 1.25x) (NACON)	206.00
512 072	Combination, inclined binocular observation and straight monocular photographic tube FS (tube factor 1.25x) (NASEB)	266.00
512 115	Combination, inclined binocular observation and straight monocular photographic tube FSA with automatic focusing compensation for the adjustment of the interpupillary distance. Prism on slider can be switched in and out to direct the light at a ratio of 80% to the camera and 20% to the binocular tube. A second prism position directs 100% of the light into the binocular tube, for observation (ORFOB)	422.00

STAGES

A) FOR LABOLUX-D

512 123	Mechanical stage #26, with scales and verniers, traversing area 76 x 50mm (3" x 2") (PZKEE)	$ 94.00
512 025	Mechanical stage #48, with scales and verniers, low set operating knobs on one axis, traversing area 76 x 50mm (3" x 2") (IKRES)	153.00
512 128	Rotating and centering object stage #23, 130mm ϕ (IK-SOW)	53.00

B) FOR LABOLUX-UB D

512 010	Plain square object stage #218, 140 x 140mm; on interchange carrier (for reflected light only) (IDINC)	$ 53.00
512 129	Rotating and centering object stage #223, 130mm ϕ; on interchange carrier (IDIRF)	89.00
512 011	Gliding stage #249, traversing area 70 x 70mm for reflected light and 35 x 40mm for transmitted light; on interchange carrier (IDITH)	178.00
512 118	Dovetail carrier -.-.8, for the interchange of condensers, with rack and pinion for the adjustment in the height of condenser (OZARB)	52.00

BRIGHTFIELD CONDENSERS

512 137	Swing out condenser #601L, with lower element, aperture diaphragm, centering mount and interchangeable aspherical top element As 0.90; on dovetail carrier (OHFAW)	$ 59.00
512 138	Swing out condenser #602L, with lower element, aperture diaphragm, centering mount and interchangeable achromatic top element Achr. 0.90; on dovetail carrier (OHFEX)	119.00
512 165	Swing out condenser #603L, with lower element, aperture diaphragm, centering mount and interchangeable aplanatic top element Apl Oil 1.25; on dovetail carrier (OHFOZ)	152.00
512 081	Condenser base with aperture diaphragm and centering mount #600 (OHBIV)	$ 42.00
512 082	Aspherical top element As 0.90, #001; in interchange mount (OHBOW)	9.00
512 083	Achromatic top element Achr. 0.90, #002; in interchange mount (OHBUX)	69.00
512 084	Aplanatic top element Apl Oil 1.25, #003; in interchange mount (OHCAT)	102.00
513 183	Achromatic top element Achr. 0.70/L4, #005; in interchange mount	72.00
512 140	Lower condenser element in mount (OKLEL)	8.00
512 126	Two diaphragm brightfield condenser #78, with swing-out top lens N.A. 0.95, with field of view and aperture diaphragm; centering mount on dovetail carrier (OPWEL)	$ 172.00
512 109	Condenser top element N.A. 1.40 (ORAPU)	25.00
512 116	Condenser top element N.A. 0.65 (ORZEL)	25.00
512 024	Three lens condenser #72R, N.A. 1.40, with iris diaphragm, filter holder and centering mount; on dovetail carrier (IKOPY)	$ 92.00
512 108	Large field condenser #90; on dovetail carrier (OPWUP)	27.00

DARKFIELD CONDENSERS

513 109	Immersion darkfield condenser D 1.20, in centering mount #82; on dovetail carrier (ORCIX)	$ 87.00
513 111	Dry darkfield condenser D 0.80, in centering mount #84; on dovetail carrier (OREBK)	120.00
513 211	Funnel stop for achromatic dry objective 63x/0.85	$ 1.00
513 069	Funnel stop for achromatic oil immersion objective Oil 100x/1.30 and fluorite oil immersion objective Fl Oil 95x/1.32	1.00
513 212	Funnel stop for fluorite oil immersion objective Fl Oil 54x/0.95	1.00
513 213	Funnel stop for apochromatic dry objective Apo 40x/0.95	1.00
513 214	Funnel stop for apochromatic dry objective Apo 63x/0.95	1.00
513 215	Funnel stop for apochromatic oil immersion objective Apo Oil 90x/1.32	1.00

PHASE CONTRAST CONDENSER, HEINE SYSTEM

513 125	Phase contrast condenser, Pv #64, with control knob for the vertical adjustment of the mirror component through three intermediate settings (brightfield, phase contrast and darkfield) N.A. 0.25 to 0.70 and screw on immersion cap N.A. 1.40; on dovetail carrier (PHAKY)	$ 173.00
513 123	Focusing magnifier for centering the phase ring (PHADS)	34.00
513 124	Holder with CB 16.5 and green filters (PHAFT)	9.00

PHASE CONTRAST CONDENSER, ZERNIKE SYSTEM

513 156	Phase contrast condenser, PHACO #402aL, with lower element, aperture diaphragm, centering mount, swing out upper element Achr 0.90 and revolving disc with lens for brightfield (H), three phase annular diaphragms, central stop for darkfield and one blank setting; on dovetail carrier (RAFIX)	$ 163.00
513 187	Phase contrast condenser, PHACO #405eL, with lower element, aperture diaphragm, centering mount, swing out upper element Achr 0.70/L4 and revolving disc with lens for brightfield (H), three phase annular diaphragms, central stop for darkfield and one blank setting; on dovetail carrier	202.00
513 123	Focusing magnifier for centering the phase ring (PHADS)	34.00

PHASE FLUORESCENCE CONDENSER, ZERNIKE SYSTEM

513 157	Phase contrast-fluorescence condenser, PHACO #402aaL, with lower element, aperture diaphragm, centering mount, swing-out upper element Achr. 0.90 and revolving disc with six settings; H-brightfield, 1 normal phase contrast with PHACO 10x/0.25 objective, 2 phase contrast and UV fluorescence with PHACO 40x/0.65 objective, 3 phase contrast and blue fluorescence with PHACO 40x/0.65 objective, 4 phase contrast and UV fluorescence with PHACO Oil 100x/1.30 objective and 5 phase contrast and blue fluorescence with PHACO Oil 100x/1.30 objective (RAFOY)	$ 254.00
513 142	Filter OG 2 (RACET)	12.00
513 123	Focusing magnifier for centering the phase ring (PHADS)	34.00

NOTE:

Former model LABOLUX Microscopes with built-in light sources can be equipped for Koehler Illumination with the following:

512 139	Adjustable field diaphragm and dust protective glass (fitting in place of present dust protective glass in base of microscope)	$ 19.00

Series 400L or 600L condensers according to choice.

If a series 400 or 600 condenser is already available, the following is required to focus the field diaphragm into the image plane:

512 140	Lower condenser element in mount (OKLEL)	$ 8.00

OBJECTIVE CARRIERS

512 067	Quadruple revolving objective nosepiece on interchange carrier 7.4.- (NADUR)	$ 50.00
512 132	Quadruple revolving objective nosepiece with infinity corrected tube lens; on interchange carrier (required when using "H" objectives for transmitted light) (NAOVY)	101.00
513 222	ULTROPAK Illuminator with built-in ring mirror, heat absorption filter, two sector diaphragms (90^{o} - 180^{o} and 180^{o} - 360^{o}), slot to accept polarizer and bayonet objective changing device. Built-in low voltage lamp 6 volts, 15 watts with daylight conversion filter CB 16.5, ground glass and green filters 7.121.-.36	$ 215.00
513 173	Filter polarizer in mount (KEBOM)	55.00
513 074	Filter analyser; fitting the filter slider (KANON)	40.00
513 223	ULTROPAK-POL Illuminator 7.126.-.36 complete as described above	$ 310.00

SIMPLE POLARIZING EQUIPMENT FOR SERIES 400 AND 600 CONDENSERS

513 173	Filter polarizer in mount (KEBOM)	$ 55.00
513 088	Holder for polarizer with slot to accept compensators (KEBIL)	27.00
513 074	Filter analyser, fitting the filter slider (KANON)	40.00
513 091	Complete pol equipment for series 400 and 600 condensers (KEDIN)	$ 122.00
513 089	Gypsum plate (KEBUN)	$ 37.00
513 090	Mica plate (KACAK)	34.00
512 013	Simple rotating stage with one object holder; fitting specimen slide of the #48 stage (IDJOT)	27.00
512 014	Simple rotating stage with two object holders; fitting specimen slide of the #48 stage (IDJUV)	27.00

PROJECTION AND DRAWING ACCESSORIES

513 137	Adjustable projection prism (PRIAU)	$ 34.00
513 143	Drawing mirror (RYEEK)	$ 27.00
513 150	Light screening device (ZDHEE)	5.00

JEWEL BEARING ATTACHMENT FOR LABOLUX-UB D

512 186	Jewel bearing attachment with graduated and centering circular slide, lateral swing-out movement and low voltage lamp 8 volts, 0.6 amps (LAGEH)	$ 296.00
512 187	Adapter for jewel bearing attachment (LYUGS)	40.00
500 002	Regulating transformer with ammeter 8 volts, 0.6 amps for connection to 110/120 volts, 60 cycles A.C. (BEEVY)	59.00
		$ 395.00

MISCELLANEOUS

051 305	Leatherette carrying case, horizontal (NEESY)	$ 41.00
512 068	Mahogany carrying case, upright (NAEHL)	67.00
512 036	Protective dust cover (ISDEC)	2.00
512 110	Protective dust cover, rigid plastic (ORAST)	73.00
512 119	Mipolam pad (POKEK)	3.00
512 027	Plastic nosepiece dust plug (ILLUV)	0.40

FULLY AUTOMATIC, EXPOSURE PRE-DETERMINING, 35MM CAMERA ORTHOMAT

543 060	ORTHOMAT, automatic photomicrographic camera, including photomultiplier tube; electromagnetic, vibration-free shutter; automatic motor driven film advance, interchangeable film chamber for 35mm cassettes. Detail exposure measurement of 1% of field of view; or integral measurement of entire field. Electronic power control unit, for automatic exposures from 1/100th of a second to 1/2 hour or more, with film speed setting for color or black and white, capable of solving the most complicated photographic task (ORMAF)	$2,620.00
512 115	Combination, inclined binocular observation and straight monocular photographic tube "FSA" with automatic focusing compensation for the adjustment of the interpupillary distance. Prisms on slider can be switched in and out to direct the light at a ratio of 80% to the camera and 20% to the binocular tube. A second prism position directs 100% of the light into the binocular tube, for observation (ORFOB)	422.00

RECOMMENDED EYEPIECES

519 227	Periplanatic eyepieces, paired 10xMF, with adjustable eyelens and reticle with concentric focusing rings and area markings circumscribing the photographic image area, field of view 14mm	$ 107.00
519 226	Periplanatic eyepiece, single 10xMF, with adjustable eyelens and reticle with concentric focusing rings and area markings circumscribing the photographic image area, field of view 14mm	63.00
519 229	Periplanatic widefield eyepieces, paired GF 12.5xMF, with adjustable eyelens and reticle with concentric focusing rings and area markings circumscribing the photographic image area; field of view 18mm	131.00
519 228	Periplanatic widefield eyepiece, single GF 12.5xMF, with adjustable eyelens and reticle with concentric focusing rings and area markings circumscribing the photographic image area; field of view 18mm	75.00
519 231	Periplanatic high eyepoint eyepieces, paired 10xMF, with adjustable eyelens and reticle with concentric focusing rings and area markings circumscribing the photographic image area; field of view 15mm	131.00
519 230	Periplanatic high eyepoint eyepiece, single 10xMF, with adjustable eyelens and reticle with concentric focusing rings and area markings circumscribing the photographic image area; field of view 15mm	83.00

OPTIONAL ACCESSORIES

543 069	Low power focusing telescope (ORPUM)	$ 83.00
543 073	Interchangeable film chamber (ORWEP)	72.00
543 043	Base plate 600 x 450mm with four vibration absorbers (KAXEV)	63.00
543 103	Neutral density filter 6.3% with holder (ORLOH)	9.00
543 104	Neutral density filter 25% with holder (ORLIG)	9.00
543 039	Protective dust cover for ORTHOMAT control unit (ISPUS)	2.00

NOTE:

When using the ORTHOMAT on standard "FS" tubes without compensation for the interpupillary adjustment the following accessories are required:

543 066	Focusing attachment with ground glass screen (ORNOK)	$ 12.00
543 059	Focusing magnifier (NAGBA)	29.00

35MM PHOTOMICROGRAPHIC EQUIPMENT WITH THE LEICA CAMERA

543 040	Microphotographic attachment for series M, LEICA camera bodies with bayonet mount. Camera mount set in anti-vibration device. Built-in focusing telescope with concentric focusing ring and area markings circumscribing the photographic image area of a GF 10x eyepiece, however not included eyepiece. Beam splitting device allowing 25% of the light to enter the focusing telescope and 75% to the camera. Lateral tube with built-in lens, viewing angle of 30°, accepting the measuring eye of the MICROSIX exposure meter, permitting detail measurements and deflecting prism with swing-in lever. Tube clamp with eyepiece adapter for standard diameter (23.2mm) eyepieces (KAVAR)	$ 241.00
519 137	Periplanatic widefield eyepiece, single GF 10x, field of view 18mm (PERIR)	35.00
543 058	MICROSIX-L exposure meter with a viewing angle of 30° of measuring eye (MITIX)	167.00
10,101	LEICA Camera body MD with focal plane shutter, speeds of one to 1/1000th second and time, automatic flash synchronization, bayonet mount and provision to attach a special film marking device base plate	186.00
543 037	Cable release, 50cm length for bayonet mount LEICA Camera (IFOZT)	2.60
		$ 631.60

OPTIONAL

14,131	Special film marking device base plate (including 10 marking tapes)	$ 19.00
14,132	Package of 100 marking tapes	8.50

MICRO-CAMERA ATTACHMENT "MICRO-IBSO", FOR 35MM ONLY

543 057	Micro Camera attachment with lateral observation and focusing telescope, swing-in swing-out prism 75%/25%, time and instantaneous shutter, two cable releases, periplanatic eyepiece 10x and interchangeable 1/3x conical tube with bayonet mount to accept series M LEICA Camera bodies (MIKAS-M)	$ 175.00
10,101	LEICA Camera body MD with focal plane shutter, speeds of one to 1/1000th second and time, automatic flash synchronization, bayonet mount and provision to attach a special film marking device base plate	186.00
14,067	Cable release with fixing screw for LEICA shutter	1.65
543 003	Double cable release coupler (operating the deflecting prism and shutter) (CALOS)	16.00
		$ 378.65

054 310	Micro Camera attachment as described under #543 057, however equipped with a total reflecting prism (MIKAS-MT)	$ 175.00

OPTIONAL

14,131	Special film marking device base plate (including 10 marking tapes)	$ 19.00
14,132	Package of 100 marking tapes	8.50

ALTERNATE LEICA CAMERA BODY

10,300	LEICA Camera body M2x with focal plane shutter, speeds of one to 1/1000th second; automatic flash synchronization, built-in range finder, viewfinder and bayonet flange for attaching a LEICA lens or micro attachment	$ 214.00

MICROPHOTOGRAPHY WITH THE POLAROID LAND CAMERA

054 022	Micro Camera attachment with lateral observation and focusing telescope, swing-in swing-out prism, anti-vibration mounted shutter with speeds of one to 1/125th second and time, two cable releases, Periplanatic eyepiece 10x and POLAROID Camera Back model CB100 for 3 1/4 x 4 1/4" black and white color film pack (84,022)	$ 300.00

35MM PHOTOMICROGRAPHIC EQUIPMENT WITH FILM TRANSPORT HOUSING

543 078	Focusing arrangement with lateral telescope, self winding shutter for time and instantaneous exposures, two cable releases, Periplanatic widefield eyepiece GF 10x and intermediate adapter 0.32:1 (MIBED)	$ 169.00
543 003	Double cable release coupler (operating deflecting prism and shutter) (CALOS)	16.00
543 077	Film transport housing with light screening sleeve, film advance lever, film counter and rewind knob (FILOT)	72.00
		$ 257.00
054 314	Focusing arrangement as #543 078, however, with total reflecting prism (MIBEB-T)	$ 169.00

OPTIONAL ACCESSORIES FOR PHOTOMICROGRAPHY

543 058	MICROSIX-L Exposure meter with viewing angle 30° of measuring eye (MITIX)	$ 167.00
543 043	Base plate 600 x 450mm with four vibration absorbers (KAXEV)	$ 63.00
543 084	Micro flash "MECABLITZ III" with carrier plate, mirror housing #15S, and five neutral density filters for LABOLUX-D Microscope (MICAD)	$ 402.00
543 096	Neutral density filter 70%, mounted (as replacement) (NODUD)	$ 9.00
543 092	Neutral density filter 50%, mounted (as replacement) (NODAY)	9.00
543 093	Neutral density filter 25%, mounted (as replacement) (NODEZ)	9.00
543 094	Neutral density filter 6.3%, mounted (as replacement) (NODIB)	9.00
543 095	Neutral density filter 0.4%, mounted (as replacement) (NODOC)	9.00

SUPPLEMENTARY EQUIPMENT FOR LOW POWER PHOTOGRAPHY WITH THE LABOLUX-D

543 099	Low power photo tube with bayonet mount	$ 24.00
543 101	Low power condenser II; on dovetail carrier	26.00
543 117	Micro mirror reflex housing with swing out mirror, focusing magnifier 5x, cable release, interchangeable clear and ground glass focusing screens	236.00
10,911	LEICA camera body MD with focal plane shutter, speeds of one to 1/1000th second and time automatic flash synchronization, bayonet lens mount and special film marking base plate	194.50
14,067	Cable release with locking screw for LEICA shutter	1.65
		$ 482.15

RECOMMENDED OPTICAL EQUIPMENT

549 010	Macro objective, SUMMAR 24mm f/4.5, with iris diaphragm (SUMAN)	$ 82.00
543 102	Adapter ring with screw thread for 24mm macro objective	4.00
549 011	Macro objective, SUMMAR 35mm f/4.5, with iris diaphragm (SUMEX)	82.00
549 012	Macro objective, SUMMAR 42mm f/4.5, with iris diaphragm (SUMIT)	82.00
549 007	Macro objective, MILAR 50mm f/4.5, with iris diaphragm (PUZII)	64.00
519 005	Achromatic dry objective, 3.2x/0.12, focal length 39.8mm, free working distance 35mm (ACUBE)	28.00
519 004	Achromatic dry objective, 10x/0.25, focal length 16.3mm, free working distance 5.7mm (ACORA)	32.00

UNIVERSAL PHOTO-MICROGRAPHIC APPARATUS "ARISTOPHOT" FOR FILMS & PLATES UP TO 4 x 5", INCLUDING POLAROID

542 048	Stand "ARISTOPHOT" consisting of large base plate with Mipolam pad, vertical camera carrier on twin columns with adjustable prismatic bar (63cm, 25" long) and protective dust cover (MADAH)	$ 208.00
542 051	Camera bellows 4 x 5", extensible up to 60cm, with two double film holders Graflex #1248, ground glass screen and focusing magnifier; bayonet locking device for light tight connection to the bellows support and shutter (MAJUS)	362.00
542 075	Lower bellows support on rack and pinion carrier, vibration-free mounting, time and instantaneous shutter with strobe contact, cable release and tape measure; upper and lower light excluding collars (ORHAL)	120.00
542 052	Mirror reflex housing, rotatable, with frame to accept 4 x 5" film holders or Polaroid 500 film holder and swing out mirror for focusing the image on the ground glass screen (MAKEP)	247.00
542 054	Photomicrographic apparatus ARISTOPHOT complete for 4 x 5" (MALER)	$ 937.00
519 137	Periplanatic eyepiece, single GF 10x	35.00

OPTIONAL

543 052	Polaroid land film holder #500 for 4 x 5" single sheet film (MARAV)	$ 40.00

UNIVERSAL PHOTO-MICROGRAPHIC APPARATUS "ARISTOPHOT" FOR 35MM FILM SIZE WITH THE LEICA

542 048	Stand "ARISTOPHOT" consisting of large base plate with Mipolam pad, vertical camera carrier on twin columns with adjustable prismatic bar (63cm, 25" long) and protective dust cover (MADAH)	$ 208.00
543 097	Micro mirror reflex housing with swing-out mirror, focusing magnifier 5x, interchangeable clear and ground glass focusing screens, cable release, intermediate adapter and mounting bracket (IFPEB)	286.00
543 075	Intermediate adapter 1/3x (mounted between reflex housing and telescope) (ZOIIL)	26.00
543 074	Focusing telescope with central time and instantaneous shutter, strobe contact, synchronized swing-out deflecting prism and two cable releases; upper and lower light excluding collars (ZOCII)	170.00
542 109	Photomicrographic Apparatus "ARISTOPHOT" complete for 35mm, however, without LEICA Camera body	$ 690.00
10,101	LEICA Camera body MD with focal plane shutter, speeds of one to 1/1000th second and time, automatic flash synchronization, bayonet mount and provision to attach a special film marking device base plate	186.00
14,067	Cable release with locking screw for LEICA shutter	1.65
		$ 877.65
519 137	Periplanatic eyepiece, single GF 10x	35.00
14,131	Special film marking device base plate (including 10 marking tapes)	$ 19.00
14,132	Package of 100 marking tapes	8.50

OPTIONAL

543 076	Intermediate adapter 1/2x (ZPEII)	$ 27.00
542 024	LEICA bellows, 50cm (20") (EEXSN)	34.00
542 026	Short LEICA bellows, 12cm (5") (ETXBE)	19.00
542 075	Lower bellows support on rack and pinion carrier, vibration-free mounting, time and instantaneous shutter with strobe contact, cable release and tape measure; upper and lower light excluding collars (ORHAL)	120.00
542 046	Intermediate adapter ring (MACOK)	3.00
542 045	Upper and lower light excluding collars (MABIH)	8.00

Objectives and eyepieces for transmitted-light investigations in bright- and darkfield

Designation of objectives	magnification/aperture	Cover glass correction[1]	Type of eyepiece[3]	Code No.	$	Focal length mm	Free working distance mm	Total magnifications with Huygens PERIPLAN or widefield eyepieces at a tube factor of 1.25x (whole values)[5]					
								6 x	8 x	10 x	12 x	16 x	25 x
Achromatic dry systems	2.5/0.07	D O	P	519 044	$ 53.00	56.8	14	20	25	32	38	50	80
	3.2/0.12	D O	H	519 005	28.00	39.8	35	24	32	40	48	63	100
	3.5/0.10	D O	H	519 036	31.00	31.6	23	26	35	44	53	70	110
	6/0.18	D O	H	519 001	31.00	23.1	17	45	60	75	90	120	190
	10/0.25	D O	H	519 004	32.00	16.3	5.7	75	100	125	150	200	320
	25/0.50	D	P	519 006	59.00	7.1	0.92	190	250	320	375	500	800
	40/0.65	D	P	519 003	50.00	4.5	0.67	300	400	500	600	800	1250
	63/0.85	D !	P	519 002	65.00	2.9	0.29	475	630	800	950	1250	2000
	Iris 63/0.85	D	P	519 047	101.00								
Achromatic immersion objectives (W=water immersion objectives)	Öl + W 22/0.65	D O	P	519 059	$104.00	8.1	0.32	165	220	275	330	440	700
	W 90/1.20	D	P	519 171	154.00	2.1	0.09	675	900	1125	1350	1800	2800
	Iris Öl 100/1.30	D[4]	P	519 060	88.00	1.9	0.13	750	1000	1250	1500	2000	3200
	Iris öl 100/1.30-1.10	D	P	519 045	147.00								
Fluorite dry systems	Fl 40/0.85	D I	P	519 025	$131.00	4.3	0.38	300	400	500	600	800	1250
Fluorite oil immersion objectives	Fl Öl 54/0.95	D O	P	519 027	$145.00	3.4	0.22	400	540	675	800	1100	1700
	Fl Öl 95/1.32	D[4]	P	519 026	184.00	2.0	0.15	710	950	1200	1425	1900	3000
	Iris öl 95/1.32 1.10	D	P	519 046	268.00								
Apochromatic dry systems	Apo 12.5/0.30	D O	P	519 009	$104.00	13.0	2.5	95	125	160	190	250	400
	Apo 25/0.65	D	P	519 007	177.00	7.3	0.85	190	250	320	375	500	800
	Apo 40/0.95	D [2]	P	519 038	261.00	4.4	0.12	300	400	500	600	800	1250
	Apo 63/0.95	D [2]	P	519 039	261.00	3.0	0.12	475	630	800	950	1250	2000
Apochromatic oil immersion objectives	Apo Öl 90/1.32	D	P	519 008	$333.00	2.0	0.12	675	900	1125	1350	1800	2800
	Apo Öl 90/1.40	D	P	519 010	411.00	2.0	0.06						
Plano-objectives	Pl Fl 4/0.14	D O	P	519 176	$136.00	41.5	15	30	40	50	60	80	125
	Pl Fl 10/0.30	D O	P	519 175	180.00	17.9	7.5	75	100	125	150	200	320
	Pl 25/0.50	D	P	519 163	182.00	7.6	0.90	190	250	320	375	500	800
	Pl 40/0.65	D	P	519 161	208.00	4.6	0.58	300	400	500	600	800	1250
	Pl Apo Öl 100/1.32	D[4]	P	519 160	450.00	2.4	0.27	750	1000	1250	1500	2000	3200

Huygens eyepieces

Magnification	Field of view mm	Code No. Single	$	Pair	$
6 x	19	519 034	11.00		
6 x	17	—		519 030	22.00
10 x	14	519 033	11.00	519 029	22.00
6 x M Micrometer 10 mm=100 intervals	17.5	519 052	disc.	—	
		519 905	19.00		
pointer eyepiece H 6.3x	18	519 054	27.00	—	

PERIPLAN wide-field eyepieces

Magnification	Field of view mm	Code No. Single	$	Pair	$
GF 10 x	18	519 137	$35.00	519 142	$70.00
GF 10 x M	18	519 126	50.00	519 127	85.00
GF 12.5 x	18	519 051	49.00	519 053	98.00
GF 12.5 x M	18	519 055	56.00	519 056	105.00
GF 16 x	15	519 138	46.00	519 143	92.00
GF 25 x	10	519 140	50.00	519 144	100.00
GF 25 x M	10	519 141	58.00	519 130	108.00
Micrometer 10 mm = 100 intervals		519 905	19.00		

PERIPLAN eyepieces

Magnification	Field of view mm	Code No. Single	$	Pair	$
6.3 x	18	519 185	33.00	519 186	66.00
6.3 x M	18	519 188	41.00	519 187	74.00
8 x	16	519 139	21.00	519 028	42.00
10 x °	18	519 128	26.00	519 129	52.00
25 x	8	519 198	disc.	519 218	disc.
high-point eyepieces					
8 x	18	519 147	44.00	519 148	88.00
10 x	15	519 135	48.00	519 136	96.00
10 x M	15	519 134	62.00	519 125	110.00

° with large field of view

Phase contrast objectives for the Heine Condenser

Designation of objective Magnification / Aperture		Free working distance in mm	Cover-glass correc-tion [1]	Type of eye-piece [3]	Code No.	$
Dry system	Pv 10/0.25	5.8	D O	P	519 149	$ 71.00
	Immersion attach-ment for Pv 10/0.25	0.3			519 153	13.00
Dry system	Pv 25/0.50	0.92	D	H (P)	519 150	114.00
Dry system of especially long working distance	Pv Apo L 40/0.70 [2]	0.82	D I	P	519 151	261.00
Dry system of especially long working distance	Pv Apo L 63/0.70 [2]		D I	P	519 155	293.00
Water dipping objective	Pv WE 22/0.60	0.05	O	P	519 156	disc.
Water dipping objective	Pv WE 80/1.00	0.06	O	P	519 215	disc.
Oil immersion objective	Pv Fl Öl 70/1.15	0.20	D O	P	519 154	268.00
Oil immersion objective	Pv Apo Öl 90/1.15	0.12	D O	P	519 152	329.00
Oil immersion objective	Pv Apo Öl 90/1.32	0.12	D O	P	519 158	386.00

Phase contrast objectives for the Zernike Condenser

Designation of objective Magnification / Aperture		Free working distance mm	Cover-glass correc-tion [1]	Type of eye-piece [3]	Code No.	$
Dry system	Phaco 10/0.25	7.7	D O	P	519 165	$ 74.00
Dry system	Phaco 40/0.65	0.71	D	P	519 166	102.00
Oil immersion objective	Phaco Öl 100/1.30	0.17	D	P	519 167	145.00

[1]) D: with coverglass D = 0.17 (coverglass thickness should be observed to within ± 0.05 mm)
O: without coverglass, DO: can be used with or without coverglass
DI: coverglass thickness 0.17mm should be observed accurately to within ± 0.01mm, or should be accurately set with the correction mount where it varies from this values.

[2]) These objectives have a correction mount. Its adjustment has hardly any effect on image sharpness.
Ideal method of focusing when the thickness of the coverglass is unknown.

[3]) H = use Huygens eyepiece, P = use PERIPLAN or widefield eyepieces.

[4]) These oil immersion objectives may also be used for uncovered subjects (smear preparations without coverglass); the negligible reduction of image quality can be ignored.

[5]) Values in small type are outside the rangeof useful magnification.

All objectives from 3.5/0.10 are parfocal on the nosepiece.

ULTROPAK objectives

Designation of objectives Magnification / Aperture		Free working distance in mm	Code No.	$	Magnification with eyepiece 6 x	8 x	10 x	Outfit on request with	$
Dry systems	UO 3.8/0.12	33	513 003	$ 57.00	29	38	48	Immersion attachment 3.8 513 014	$ 28.00
	UO 6.5/0.18	16	513 004	82.00	50	65	82	6.5 513 015	25.00
	UO 11/0.25	5.7	513 005	99.00	83	110	140	11 513 016	22.00
	UO 22/0.45	2.1	513 006	113.00	165	220	275		
	UO 32/0.55	1.0	513 119	120.00	240	320	400		
	UO 50/0.65	0.66	513 007	133.00	375	500	630		
Immersion objectives	UO W 55/0.85	0.59	513 008	175.00	410	550	690	Dipping cone EZ 23—100, 513 017, including 50 cover glasses and 1 tube coverglass cement	$ 23.00
	UO W 75/0.90	0.48	513 009	215.00	560	750	950		
	UO Fl Öl 60/0.85	0.57	513 010	208.00	450	600	750		
	UO Fl Öl 75/1.00	0.51	513 011	237.00	560	750	950		

Fl = fluorite system, W = water immersion, Öl = oil immersion

Mirror condenser 22—100, suitable for all UO-objectives 22—100 for obliquely incident sharply outlined illumination. Especially suitable for observation in depth, in which parts above the area under observation must not be illuminated. 513 013 $100.00

TERMS: NET 30 DAYS

Prices and Specifications are subject to change without notice.

This Price List Supersedes All Previous Issues for this Catalog February 1st, 1967