

Optech microscopes

Industrial & Geo Science Applications



Optech microscopes

Reflected light MT 1 MT 1BD



Reflected and transmitted light laboratory microscope.

- Metal frame stand.
- Trinocular head, 30° inclined.
- Wide field eyepieces WF 10x (22).
- EPI BF/Pol reflected light module, for bright field and polarized light with lamp housing 1 and halogen lamp 6V / 30 W in model MT 1.
- EPI BF DF/Pol reflected light module, for bright field and polarized light with lamp housing 2 and halogen lamp 12V / 50 W in model MT 1 BD.
- 5-places revolver nosepiece, with parfocal infinity objectives, having Plan-achromatic correction for Episcopy.
- Translating stage 210 x 140 mm with scan area 75 (X) - 50 (Y).
- Abbe condenser AN 1,25, with aperture diaphragm.
- Transmitted light system, with halogen lamp 6V / 30 W; electronic adjustment of the light intensity.

Standard equipment:

- Glass rectangular insert
- Dust cover.
- User & instruction manual.

Optional accessories:

- Additional optics.
- TV C-mount adapters.
- Photomicrography adapters.
- Digital cameras.

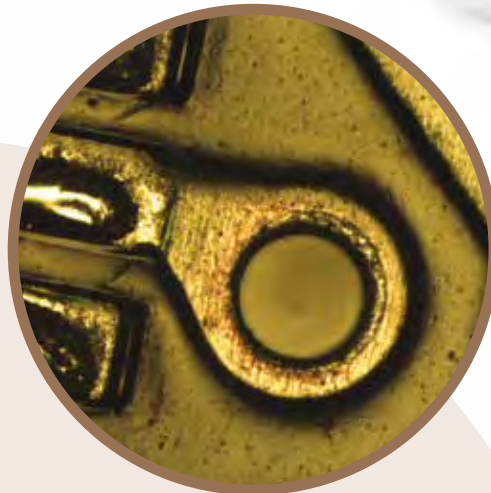


Image captured in bright field



Image captured in dark field

CODE	MODEL	BRIGHT FIELD OBJECTIVES
K71662	MT 1	PLL 5x / 0,12 - PLL 10x / 0,25 - PLL 20x / 0,40 - PLL 50x / 0,70

CODE	MODEL	BRIGHT & DARK FIELD OBJECTIVES
K71663	MT 1BD	PLL 5x / 0,12 BD - PLL 10x / 0,25 BD - PLL 20x / 0,40 BD - PLL 50x / 0,70 BD

Optech microscopes

Reflected light MEC 100 series



Reflected light modular microscope.

- Bench, compact and stable stand.
- Trinocular head, 30° inclined.
- Wide field eyepieces WF 10x (22).
- EPI BF/Pol reflected light module, for bright field and polarized light with lamp housing 1 and halogen lamp 6V / 30 W in model MEC 101.
- EPI BF DF/Pol reflected light module, for bright field and polarized light with lamp housing 2 and halogen lamp 12V / 50 W in model MEC 102 BD.
- EPI BF DIC/Pol reflected light module, for bright field, interference contrast and polarized light with lamp housing 2 and halogen lamp 12V / 50 W in model MEC 103 DIC.
- 5-places revolver nosepiece, with parfocal infinity objectives, having Plan-achromatic correction for Episcopy.
- Translating stage 160 x 140 mm with scan area 35 (X) - 30 (Y), installed on a metal rectangular base 300 x 250 mm.

Standard equipment:

- Dust cover.
- User & instruction manual.

Optional accessories:

- Epifluorescence device.
- Additional optics.
- TV C-mount adapters.
- Photomicrography adapters.
- Digital cameras.



CODE	MODEL	BRIGHT FIELD OBJECTIVES
K71664	MEC 101	PLL 5x / 0,12 - PLL10x / 0,25 - PLL20x / 0,40 - PLL50x / 0,70

CODE	MODEL	BRIGHT & DARK FIELD OBJECTIVES
K71665	MEC 102 BD	PLL 5x / 0,12 BD - PLL 10x / 0,25 BD - PLL 20x / 0,40 BD - PLL 50x / 0,70 BD

CODE	MODEL	BRIGHT FIELD & INTERFERENCE CONTRAST OBJECTIVES
K71666	MEC 103 DIC	PLL 5x / 0,12 DIC - PLL 10x / 0,25 DIC - PLL 20x / 0,40 DIC - PLL 50x / 0,70

Optech microscopes

Reflected light IM series



Reflected light inverted microscope, for research and routine laboratories.

- **IM5:** bright field, polarized light.
- **IM5 BD:** bright field, dark field, polarized light.
- **IM5 DIC:** bright field, interference contrast, polarized light.

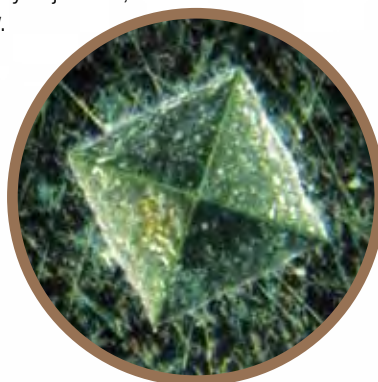
- Metal frame high-stability stand.
- Binocular head, 45° inclined.
- Side photo port, for comfortable and stable photo/TV connection.
- Wide field eyepieces WF 10x (22).
- Lamp housing 1 and halogen lamp 6V / 30 W in model IM5.
- Lamp housing 2 and halogen lamp 12V / 50 W in models IM5 BD, IM5 DIC.
- 5-places revolver nosepiece, with parfocal infinity objectives, having Plan-achromatic correction for Episcopy.
- Translating stage 242 x 200 mm with scan area 30 (X) - 30 (Y).

Standard equipment:

- Dust cover.
- User & instruction manual.

Optional accessories:

- Additional optics.
- TV C-mount adapters.
- Photomicrography adapters.
- Digital cameras.



CODE	MODEL	BRIGHT FIELD OBJECTIVES
K71479	IM5	PLL 5x / 0,12 - PLL 10x / 0,25 - PLL 20x / 0,40 - PLL 50x / 0,70

CODE	MODEL	BRIGHT & DARK FIELD OBJECTIVES
K71481	IM5 BD	PLL 5x / 0,12 BD - PLL 10x / 0,25 BD - PLL 20x / 0,40 BD - PLL 50x / 0,70 BD

CODE	MODEL	BRIGHT FIELD & INTERFERENCE CONTRAST OBJECTIVES
K71667	IM5 DIC	PLL 5x / 0,12 DIC - PLL 10x / 0,25 DIC - PLL 20x / 0,40 DIC - PLL 40x / 0,70

Optech modular videomicroscopes

OT 6.4 Z series



Modular video microscope for quick inspections and quality control.

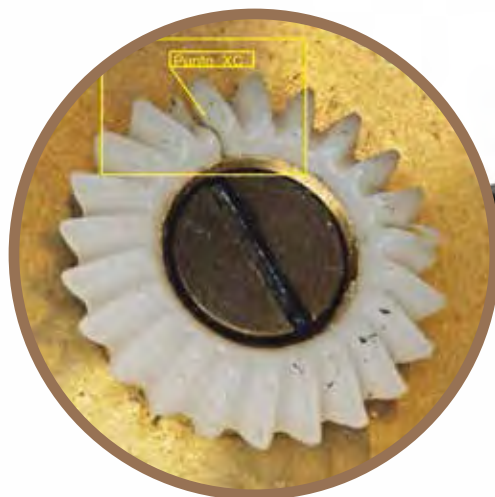
- Optical system OT 6,4 Z with zoom factor 6,4:1.
- Magnifications: 0,7x...4,5x.
- Working distance: 108 mm.
- C-mount TV adapters with different magnifications: 0,35x - 0,5x - 0,75x - 1,0x.
- Additional optic devices: 0,3x - 0,5x - 0,75x - 1,5x - 2,0x.
- Working distances: 314 mm...38 mm.
- Wide base stand with geared column.
- Optical system support and macrometric focusing.
- LED sectorial anular lighting system, with adjustable intensity.
- Wide range of videocameras and software, according to the application.

Standard equipment:

- Dust cover.
- User & instruction manual.

Optional accessories:

- Motorized system on Z axis.
- Motorized system on X - Y axes.



Compact optical system VF 6.4 Z, with focus variation.

- To be used in fixed stations.
- Possible working distances: 140 mm...440 mm.
- Magnifications are appropriate according to the chosen working distance.
- C-mount TV adapter included.

Optech Stereomicroscopes Zoom SZ-N series



Greenough optical system stereomicroscope, for basic quality control.

Common features:

- Binocular or Trinocular head, 45° inclined.
- Interpupillary distance adjustment: 48...68 mm.
- Wide field eyepieces WF 10x (20) with dioptric compensation +/- 5.
- Optical system with zoom factor 4,5:1.
- Maximum magnifications with optional optics: 5x...180x.
- Maximum magnifications in standard configuration: 10x...45x.
- Working distance: 97 mm.
- LED sectorial anular lighting system, with adjustable intensity.

Configuration with boom stand:

- Universal stand SU2 complete with stainless column and rectangular metal base. Double horizontal arm with smooth sliding and column edge. X, Y, Z axes adjustment; angular adjustment of the instrument body.

Configuration with geared stand:

- Stand with column or gear, which can mount transmitted lighting device. Variable contrast with progressive adjustment. Electronic adjustment of the light intensity.

Standard equipment:

- Dust cover.
- User & instruction manual.

Optional accessories:

- Additional optics.
- Fluorescent and raking light lighting systems.
- TV adapters.
- Photomicrography adapters.
- Dimensional measures.



SZ-NT with boom stand



SZ-NT with geared stand

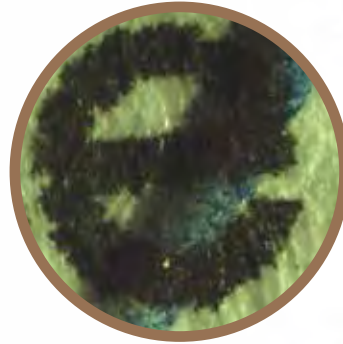
MODELS	STAND AND LIGHTING SYSTEMS
Binocular SZ-N Zoom	SU2 stand and LED sectorial ring lighting system
Trinocular SZ-NT Zoom	SU2 stand and LED sectorial ring lighting system
Binocular SZ-N Zoom	Stand with geared column
Trinocular SZ-NT Zoom	Stand with geared column

Optech Stereomicroscopes Zoom LFZ and SL N series



Greenough optical system stereomicroscope, for basic quality control.

- Metal frame stand.
- Binocular or Trinocular head, 45° inclined.
- Interpupillary distance adjustment: 50...84 mm.
- Dioptic compensation +/- 5.
- Wide field eyepieces WF 10x (20)
- Optical system with zoom factor 6,4:1.
- Maximum magnifications with optional optics: 3,5x...180x.
- Maximum magnifications in standard configuration: 7x...45x.
- Working distance: 90 mm.
- Column stand FLEX with large height adjustment, no lighting system included.



LFZ Flex & LED ring light

Standard equipment:

- Rubber eyepieces.
- Pair of specimen clips.
- Dust cover.
- User & instruction manual.

Optional accessories:

- Additional optics.
- Fluorescent and raking light lighting systems.
- TV adapters.
- Photomicrography adapters.
- Dimensional measures.

Greenough optical system stereomicroscope, for basic quality control & laboratory routine.

- Metal frame stand.
- Binocular or Trinocular head, 45° inclined.
- Interpupillary distance adjustment: 55...75 mm.
- Wide field eyepieces WF 10x (22) with dioptic compensation +/- 5.
- Optical system with zoom factor 9:1.
- Maximum magnifications with optional optics: 3,5x...315x.
- Maximum magnifications in standard configuration: 7x...63x.
- Working distance: 110 mm.
- Macrometric / macro-micrometric focussing system.
- Stand having LED lighting system in both incident and transmitted light.
- Electronic adjustment of the light intensity.



SLN T with geared stand

Standard equipment:

- Dust cover.
- User & instruction manual.

Optional accessories:

- Additional optics.
- Fluorescent and raking light lighting systems.
- TV adapters.
- Photomicrography adapters.
- Dimensional measures.

CODE	MODEL	DIMENSIONS mm (L x P x H)
K71760	Binocular LFZ Flex Zoom	270 x 300 x 580
K71770	Trinocular LFZ T Flex Zoom	270 x 300 x 580
K71585	Binocular SL N Zoom	280 x 310 x 440
K71122	Trinocular SL NT Zoom	280 x 310 x 440

Optech Stereomicroscopes

GZ 808 series



Galilean optical system modular stereomicroscope for accurate quality controls.

Common features:

- Binocular or Trinocular head, 20° inclined.
- Interpupillary distance adjustment: 55...75 mm.
- Wide field eyepieces EW 10x (22) with dioptric compensation +/- 5.
- Optical system with zoom factor 8:1.
- Reference click stops for dimensional measures.
- Plan achromatic - Plan apochromatic objectives connection.
- Maximum magnifications with optional optics: 2,4x...384x.
- AX intermediate module for even more precise images.
- Maximum magnifications in standard configuration: 8x...64x.
- Working distance: 80 mm.
- Macrometric / macro-micrometric focussing system.
- Optical system support and macrometric focussing.

Configuration with boom stand:

- Universal stand SU2 complete with stainless column and rectangular metal base. Double horizontal arm with smooth sliding and column edge. X, Y, Z axes adjustment; angular adjustment of the instrument body.

Configuration with geared stand:

- Metal frame stand with large base and geared high column.

Standard equipment:

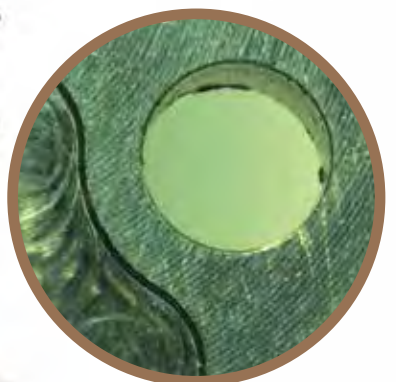
- Dust cover.
- User & instruction manual.

Optional accessories:

- Binocular head with variable inclination.
- Optional optics.
- Intermediate photo/TV modules.
- HBO epifluorescence device.
- Episcopic lighting system.
- Drawing tube.
- Stand having LED lighting system in both incident and transmitted light.
- Transmitted light stand with variable contrast.
- Raking light and anular lighting systems.
- TV adapters.
- Photomicrography adapters.
- Dimensional measures.
- Digital videocameras.



GZ 808 with boom stand



GZ 808 with geared stand

Meiji Techno Stereomicroscopes Zoom **EMZ 8UD series**

Greenough optical system stereomicroscope, for crucial inspections and quality controls.

- Binocular or Trinocular head, 45° inclined.
- Interpupillary distance adjustment: 54...75 mm.
- Dioptic compensation +/- 5.
- Wide field eyepieces SWF 10x (23).
- Vertical lighting system, with guide housing duct built-in in the microscope's body.
- Optical system with zoom factor 6,5:1.
- Maximum magnifications with optional optics: 2,45x...270x.
- Maximum magnifications in standard configuration: 7x...45x.
- Working distance: 104 mm.
- Halogen or LED source, complete with optical fibre light guide.
- Column or geared stand, equipped with transmitted light system
- Variable contrast with progressive adjustment.
- Electronic adjustment of light intensity.
- Optical system support and macrometric focussing.

Standard equipment:

- Rubber eyepieces.
- Pair of specimen clips.
- Dust cover.
- User & instruction manual.

Optional accessories:

- Optional optics.
- LED ring lighting systems, fluorescence and raking light.
- TV adapters.
- Photomicrography adapters.
- Stand for large dimensions samples.
- Translating stages.
- Dimensional measures.
- Digital videocameras.



LED flat transmitted light



Variable contrast transmitted light

Askania Stereomicroscope and Technomicroscope SMT 4 - TM series

Galilean optical system stereomicroscope, for crucial inspections and accurate quality controls.

- Binocular head, 45° inclined.
- Interpupillary distance adjustment: 52...78 mm.
- Dioptic compensation +/- 5.
- Wide field eyepieces GF PW 12,5x (20).
- Vertical coaxial lighting system.
- 5-magnifications optical group.
- Total magnifications: 4x - 8x - 13x - 20x - 40x.
- Working distance: 185 mm.
- Maximum magnifications with optional optics: 2,0x...204x.
- Halogen or LED source, complete with optical fibre light guide.
- Ergonomic stand with ergonomic base or universal stand with boom arm.

Standard equipment:

- Rubber eyepieces.
- Pair of specimen clips.
- Dust cover.
- User & instruction manual.

Optional accessories:

- Optional optics.
- Lighting systems: LED ring, fluorescence and raking light.
- TV adapters.
- Photomicrography adapters.
- Stand for large dimensions samples.
- Systems for sample's movement and slant.
- Dimensional measures.
- Digital videocameras.



Askania Technomicroscope TM 1 series.

- Monocular microscope for fast controls in labs or production process.
- Monocular head, upright or 30° inclined.
- Eyepiece GFP 10x (18).
- Closure ring.
- Cross graticule, with or without micrometric scale.
- TM1 module with objective housing and connection to macrometric focussing system.
- Macrometric focussing system, smooth movement.
- LD 1x or 0,8x objective.
- Column stand.
- Halogen or LED lighting source, complete with optical fibre light guide having 90° edge.

Standard equipment:

- Rubber eyepieces.
- Pair of specimen clips.
- Dust cover.
- User & instruction manual.

Optional accessories:

- Optional optics.
- TV adapters.
- Stand for large dimensions samples.
- Systems for sample's movement and slant.
- Dimensional measures.
- Digital videocameras.



Optech Stereomicroscopes

Independent lighting systems

Ring lighting device with fluorescent lamp.



CODE	FEATURES
K71631	Inner diameter: 62 mm - 220V - 7W

LED ring device, adjustable intensity.



CODE	FEATURES
K71632	Inner diameter: 61 mm - n. 48 Leds

Sector ring LED device, adjustable intensity.



CODE	FEATURES
F719959	Inner diameter: 61 mm - n. 144 Leds

Cold light source model PL2000, complete with 2-arms goose neck.



CODE	FEATURES
B7865	Real diameter of the light beam: 3 mm

LED device for transmitted light.



CODE	FEATURES
K71633	Round plate diameter: 95 mm Thickness: 4,5 mm - Adjustable intensity

LED lighting spot, with 2 semi-rigid arms.



CODE	FEATURES
K71630	Arms length: 48 cm Independent and adjustable intensity

Optech Polarizing microscopes

BM 45 Pol



Polarizing microscope for laboratory routine and high-didactic training.

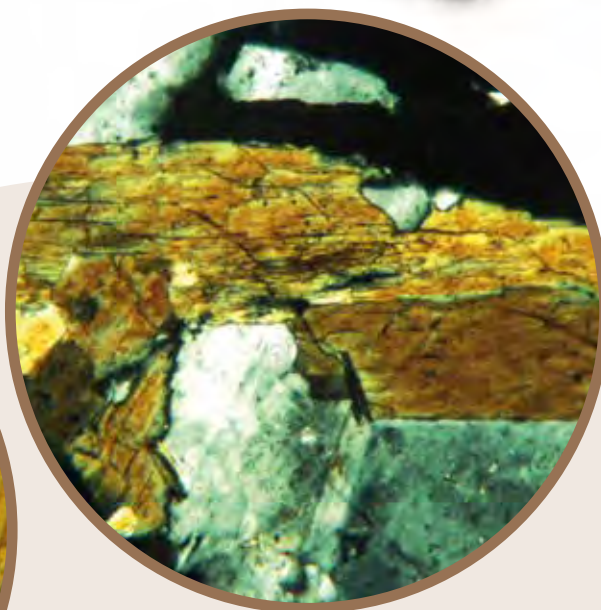
- Metal frame stand.
- Binocular or Trinocular head.
- Wide field eyepieces WF 10x (20) FT - WF 10x (20) FT with graticule housing.
- Cross graticule, with or without micrometric scale.
- Pol device complete with in/out analyzer.
- Amici Bertrand lens.
- Slit for compensators housing.
- Slide compensator, with λ e $\lambda/4$ lamina.
- 4-places revolver with centring system in optic axis.
- Parfocal planachromatic infinity-corrected objectives, strain-free.
- 360° rotatable specimen stage (\varnothing 160 mm), with rotation indexes.
- Pol NA 0,9 condenser, with selectable front lens and aperture diaphragm.
- Rotatable polarizer, which can be fixed in the needed position.
- 12V / 20 W halogen lamp or S Led lighting system.
- Electronic adjustment of the light intensity.

Standard equipment:

- 12V / 20 W halogen lamp.
- Conversion blue filter.
- Dust cover.
- User & instruction manual.

Optional accessories:

- Optional optics.
- Pol specimen guide.
- Kohler lighting system.
- TV adapters.
- Photomicrography adapters.
- Digital videocameras.



CODE	MODEL	BRIGHT FIELD, STRAIN FREE (POL) OBJECTIVES
K71123	Binocular BM 45P	PA 4x / 0,10 P - PA 10x / 0,25 P - PA 40x / 0,65 P
K71646	Trinocular BM 45PT	PA 4x / 0,10 P - PA 10x / 0,25 P - PA 40x / 0,65 P

Optech Polarizing microscopes

B 6 Pol series



Polarizing microscope for laboratory routine and high-didactic training.

- Metal frame stand.
- Binocular or Trinocular head.
- Wide field eyepieces WF 10x (20) FT
WF 10x (20) FT with graticule housing.
- Cross graticule, with or without micrometric scale.
- Pol device complete with in/out analyzer.
- Amici Bertrand lens.
- Slit for compensators housing.
- Slide compensator, with Lamda lamina.



Trinocular B 6 PT

The Transmitted/Reflected light version also includes:

- Intermediate module for Epi Pol incident light, with 360° rotatable polarizer.
- Field and aperture diaphragms.
- External lamp housing with 6V / 30W centrable halogen lamp.
- 4-places revolver nosepiece with centering system in optical axis.
- Parfocal infinity objectives, Plan Achromatic and strain-free.
- Specimen stage 150 mm diameter, 360° rotatable and equipped with rotation indexes.
- Pol NA 1,25 condenser, with wide field selectable lens and aperture diaphragm.
- Rotatable polarizer, which can be fixed in the needed position.
- Kohler lighting system.
- Halogen lamp 6V / 30 W lighting system, with electronic adjustment of the light intensity.

Standard equipment:

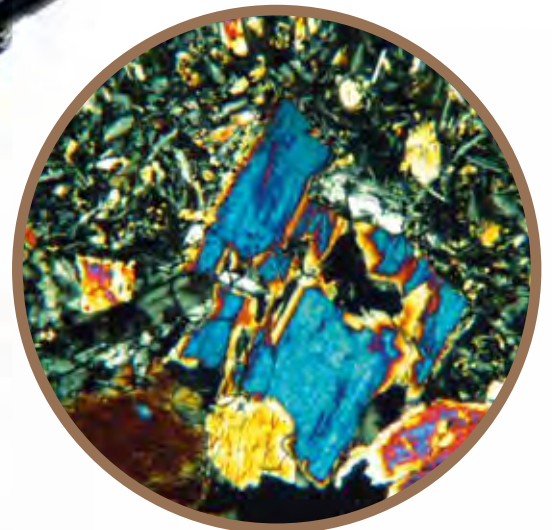
- 12V / 30 W halogen lamp.
- Conversion blue filter.
- Dust cover.
- User & instruction manual.

Optional accessories:

- Optional optics.
- Pol specimen guide.
- TV adapters.
- Photomicrography adapters.
- Digital videocameras.



Trinocular B 6 PT



CODE	MODEL	TRANSMITTED LIGHT CONFIGURATION
K71675	Binocular B 6 P	PL 4x / 0,10 P - PL 10x / 0,25 P - PL 40x / 0,65 P
K71482	Trinocular B 6 PT	PL 4x / 0,10 P - PL 10x / 0,25 P - PL 40x / 0,65 P

CODE	MODEL	TRANSMITTED/INCIDENT LIGHT CONFIGURATION
K71483	Trinocular B 6 PT R	PLL 5x / 0,12 P - PLL 10x / 0,25 P - PLL 40x / 0,60 P - PL 60x / 0,70 P

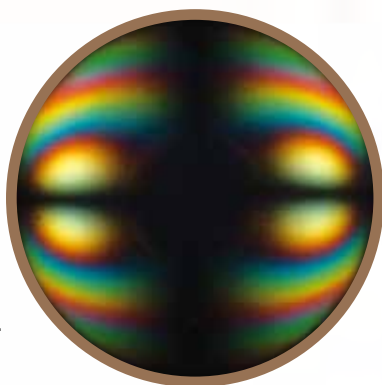
Optech Polarizing microscopes

BM 80 Pol series



Polarizing Microscope for research and accurate analysis in laboratories.

- Metal frame stand.
- Trinocular head, 30° inclined.
- Wide field eyepieces EW 10x (22), EW 10x (22) FT with graticule housing.
- Simple cross graticule or cross graticule with micrometric scale.
- Pol intermediate complete with in/out analyzer.
- Amici Bertrand lens.
- Slit for compensators housing.
- Slide compensator (included): Lamda - Lamda / 4 - Quarzo.
- 5-places revolver nosepiece with centering system in optical axis.
- Parfocal infinity objectives, Plan Achromatic and strain-free.
- Specimen stage 170 mm diameter, 360° rotatable and equipped with rotation indexes.
- Selectable click stop every 45°.
- Pol NA 0,9 / 0,25 condenser, with selectable front lens and aperture diaphragm.
- 360° rotatable polarizer, with adjustable position at 0°.
- Kohler lighting system.
- 24V / 100 W lighting system with centrable halogen lamp in external housing, with electronic adjustment of the light intensity.



The Transmitted/Incident configuration also includes:

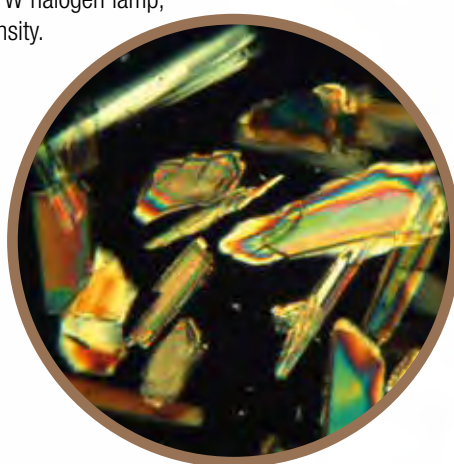
- Intermediate module for Epi Pol incident light with 360° rotatable polarizer.
- Field and aperture diaphragm.
- External housing with centrable 24V / 100 W halogen lamp, with electronic adjustment of the light intensity.

Standard equipment:

- 4V / 100 W 12V / 30 W halogen lamp.
- Conversion blue filter.
- Dust cover.
- User & instruction manual.

Optional accessories:

- Optional optics.
- Epifluorescence device
- Pol specimen guide.
- TV adapters.
- Photomicrography adapters.
- Digital videocameras.



CODE	MODEL	BRIGHT FIELD STRAIN-FREE (POL) OBJECTIVES TRANSMITTED LIGHT CONFIGURATION
K71658	Trinocular BM 80 PT	PL 4x / 0,10 P - PL 10x / 0,25 P - PL 20x / 0,40 P - PL 40x / 0,65 P

CODE	MODEL	BRIGHT FIELD STRAIN-FREE (POL) OBJECTIVES TRANSMITTED/INCIDENT LIGHT CONFIGURATION
K71659	Trinocular BM 80 PTR	PA 5x / 0,12 P - PA 10x / 0,25 P - PA 20x / 0,40 P - PA 40x / 0,65 P - PA 50x / 0,75 P

Microscope Digital videocameras

Visiocam AS - ISHD series

Delta Pix series



Digital videocameras for different applications.

- Resolutions: 1,4...32 Megapixel.
- Sensors: C MOS - CCD.
- Details definition and reliable colours reproduction.
- Pc connection through USB cable.
- Software for view, acquisition and basic image analysis.
- Professional modular software.
- C-mount TV adapters (on request).
- Optical connection for other brands' models.



Digital videocameras Visiocam AS series



CODE	VISIOCAM AS	MPIXELS	RESOLUTION	SENSOR	FRAME/SEC.	DINAMIC RANGE	SOFTWARE
K71655	AS C 560	5.6	2720 x 2048	CCD 1/2"	10	75 db	F Scope
K71643	AS M 510	5.0	2592 x 1944	CMOS 1/2.2"	7	67 db	F Scope

Digital videocameras Visiocam ISHD series



- No "wake effect", thanks to an high Fps value.
- Micro SD card included, for direct image storage.

CODE	VISIOCAM ISHD	MPIXELS	RESOLUTION	PORTS	FRAME/SEC.	SOFTWARE
K71638	IS DV 6000 HD	6.0	3264 x 1836	HDMI - USB 2 - micro SD	60	IS Capture

Digital videocameras Delta Pix Invenio II series



MODEL	MEGAPIXELS	RESOLUTION	SENSOR	FRAME/SEC.	DINAMIC RANGE	SOFTWARE
Invenio 5S II	5.0	2592 x 1944	CMOS 1/2.5"	7	48 db	INSIGHT
Invenio 5D II	5.1	2608 x 1956	CCD 1/1.8"	3	61 db	INSIGHT

Delta Pix (DK) modular professional software INSIGHT

MODULE SOFTWARE	ADVANCED FUNCTIONS	ACTIVATION
INSIGHT BASIC	Reports - Dimensional measures	USB hardware key
INSIGHT EE EF	Focal extension (focal plans recomposition)	USB hardware key

Optional accessories for all models:

- C-mount TV adapters.
- Glass specimens for software calibration.
- INSIGHT software additional modules.

