







λ Slip and quartz wedge

EDUCATIONAL LINE POL

The robust polarising model for your training establishment or workshops

Features

- The KERN OPE is a very easy to use, robust and stable polarisation microscope.
- It is suitable for all common routine applications in training establishments or workshops and produces impressive images.
- This microscope is equipped with a reticule wide field eyepiece, non-stress achromatic objectives, a Bertrand lens and an Abbe condenser as standard.
- A nosepiece for up to 4 objectives and a stage rotatable through 360° are provided as standard.
- The following optional accessories are available: A quartz wedge, additional eyepiece, objectives and a mechanical stage unit.
- One of the central features of this variable and simultaneously robust series of microscopes is the stable and precisely adjustable mechanism. This is underlined by the functional and ergonomic design.

Technical data

- Eyepieces: WF 10x18 mm
- Objectives: Non-stress 4x / 10x / 40x
- Overall dimensions
 WxDxH 242x170x379,3 mm
- Net weight approx. 6,5 kg

Please find detailed information in the following charts.

STANDARD

















Model	Standard configuration			
KERN	Optical system	Tube	Illumination	
OPE 118	Achromatic	Monocular	6V / 20W Halogen (transmitting)	

Polarising microscope KERN OPE-1



Model outfit		Model KERN	Order number
		OPE 118	
Eyepieces	WF 10x / Ø 18 mm (reticule 0,1mm) (non-adjustable)	•	OBB-A1349
	WF 16x / Ø 13 mm	0	OBB-A1354
Non-stress achromatic objectives	4x	•	OBB-A1280
	10x	•	OBB-A1278
	40x (spring)	•	OBB-A1281
	20x	0	OBB-A1279
	60x (spring)	0	OBB-A1282
Monocular tube	onocular tube 30° inclined, 360° rotatable		OBB-A1227
Nosepiece	Quadplex	•	
Analyser unit	0 – 90°, can be moved out of the optical path for single polarising observe	•	OBB-A1118
Bertrand lens	Can be moved out of the optical path	•	OBB-A1120
λ + 1/4 λ Slip	λ Slip and ¼ λ Slip (combination)	•	OBB-A1316
Quartz wedge	(I – IV class)	0	OBB-A1320
Revolving round stage	360° rotatable, division 1°, Vernier division 6', lockable	•	
Polarising attached mechanical stage	Polarising attached mechanical stage	o	OBB-A1337
Condenser	Abbe N.A. 1,25 (aperture diaphragm)	•	OBB-A1101
Polarising unit	Can be moved out of the optical path	•	OBB-A1285
Filter	Blue	•	OBB-A1173
Illumination	6V / 20W Halogen (transmitting)	•	OBB-A1204

• = Standard configuration

o = Option

KERN Pictograms:





360° rotatable microscope head



Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter



Automatic temperature compesation

For measurements between 10 °C and 30 °C



Monocular Microscope

For the inspection with one eye



Fluorescence illumination for compound microscopes With 3W LED illumination and filter



Protection against dust and water splashes IPxx

The type of protection is shown by the pictogram.



Binocular Microscope

For the inspection with both eyes



Phase contrast unit

For a higher contrast



Battery operation

Ready for battery operation. The battery type is specified for each device.



Trinocular Microscope

For the inspection with both eyes and the additional option for the connection of a camera



Polarising unit

To polarise the light



Rechargeable battery pack

Rechargeable set.



Abbe Condenser

With high numerical aperture for the concentration and the focusing of light



Infinity system

Infinity corrected optical system



Mains adapter

230V/50Hz in standard version for EU. On request GB, AUS or USA version.



Halogen illumination

For pictures bright and rich in contrast



Zoom magnification

For stereomicroscopes



Power supply

Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.



LED illumination

Cold, energy saving and especially long-life illumination



Parallel optical system

For stereomicroscopes, enables fatigue-proof working



Package shipment

The time required to manufacture the product internally is shown in days in the pictogram.



Incident illumination

For non-transparent objects



Integrated scale

In the eyepiece



Warranty

The warranty period is shown in the pictogram.



Transmitting illumination

For transparent objects



Integrated USB 2.0 digital camera

For direct transmitting of the picture to a PC



LWD

Fluorescence illumination

For stereomicroscopes



N.A.

Integrated USB 3.0 digital camera

For direct transmitting of the picture to a PC

Abbreviations

C-Mount Adapter for the connection of a

camera to a trinocular microscope

High (Super) Wide Field H(S)WF

> (Eyepiece with high eye point for wearers of glasses)

Long Working Distance

SLR Kamera Single-Lens Reflex camera

Numerical Aperture

W.D. Working Distance

WF

Wide Field (Field number up to

Ø22 mm for 10x eyepiece)

SWF Super Wide Field

(Field number at least Ø 23 mm

for 10x eyepiece)

Your KERN specialist dealer: