Achios-X Inverso

for materials science

HIGHLIGHTS

- **Brightfield, dark field, polarization**
- **Head with ergo tilting 5° - 35° tubes and**
- **Long working distance IOS plan and apochromatic objectives**
- **Low positioned stage adjustment knobs**
- **3 W NeoLED™**
- **LCD screen for Smart Light Control**



AI.2053-PLMi

AI.2053-PLMI
444 (h) x 244 (w) x 655 mm (d) | 20 kg

TECHNICAL SPECIFICATIONS

EYEPIECES

SWF 10x/22 mm widefield eyepieces with adjustable diopter,
ø 30 mm tubes and -5/+5 diopter

HEAD

- Binocular ergo head with 5-35° tilting tubes
- Interpupillary distance of 48 to 75 mm
- Side photo port with 80:20 beamsplitter, C-mount lenses optional

NOSEPIECE

Revolving quintuple nosepiece on ball-bearings, coded

BRIGHTFIELD/DARKFIELD OBJECTIVES

Plan infinity corrected PLi, IOS 45 mm parfocal, high numerical, long working distance, no cover glass correction, M26 mount

- 5x/0.12 WD 20 mm BD
- 10x/0.30 WD 11 mm BD
- 20x/0.45 WD 3.1 mm BD

Plan Apochromatic infinity corrected PL-AMi, IOS 45 mm parfocal, high numerical, long working distance, no cover glass correction, M26 mount

- 50x/0.80 WD 1 mm BD
- 100x/0.90 WD 1 mm BD (optional)

BD = Brightfield/Darkfield
WD = working distance
All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

STAGE

- Stage 226 x 178 mm with Vernier scale
- Equipped with a coaxial mechanical 50 x 50 mm X-Y stage
- Maximum weight for sample: 5 kg

Supplied with:

- Metal insert with hole ø 10 mm
- Metal insert with hole ø 15 mm
- Metal insert with hole ø 25 mm
- Metal insert that can support an object clamp

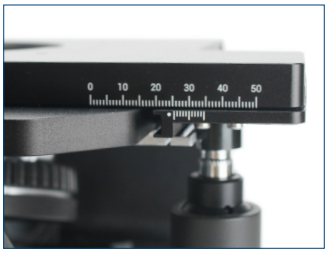
See accessories for more options

FOCUS ADJUSTMENT

- Low positioned for more comfort
- Coaxial 37.5 mm coarse and fine adjustments with 200 graduations
- Precision 1 µm, 0.2 mm per rotation
- Fine focus knobs are left/right interchangeable

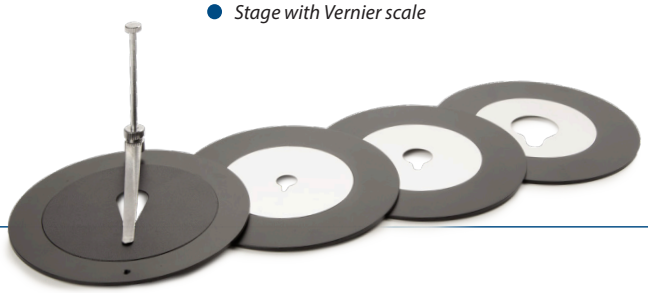
ILLUMINATION AND FILTERS

- Transmitted 3W NeoLED™ illumination with adjustable intensity
- Internal power supply 100-240 V (CE). Fuse 500 mA 250 Vac
- Adjustable field diaphragm and aperture diaphragm (both motorized)
- Adjustable color temperature
- Slot for filter. Blue, green, yellow, frosted white filters included





Stage with Vernier scale



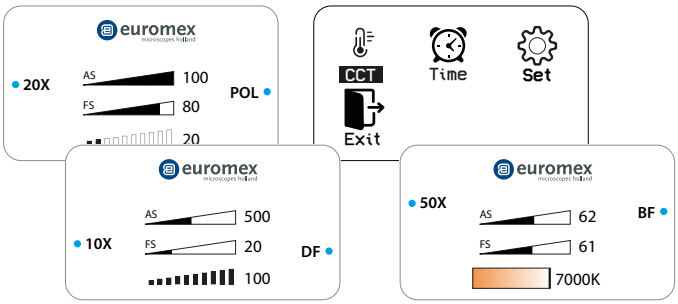
POLARIZATION

- Slot for 360° rotatable polarizer (included)
- Analyzer built in the illumination turret

SMART LIGHT CONTROL

This intelligent function:

- memorizes the light intensity level for each objective
- memorizes field and aperture diaphragm position
- memorizes color temperature
- increases comfort
- saves valuable time during routine magnification shifts
- includes a sleep function



NEOLED

The innovative NeoLED™ design is a combination of a custom LED and a specially designed thin lens with a short focal length

Four main benefits:

- More oblique light from the NeoLED™ light source, which increases the light output significantly
- Less energy is required to achieve this level of light intensity
- The larger aperture of NeoLED™ allows the optical system of the microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics
- Super long life span, up to 50.000 hrs nominal, L70 norm

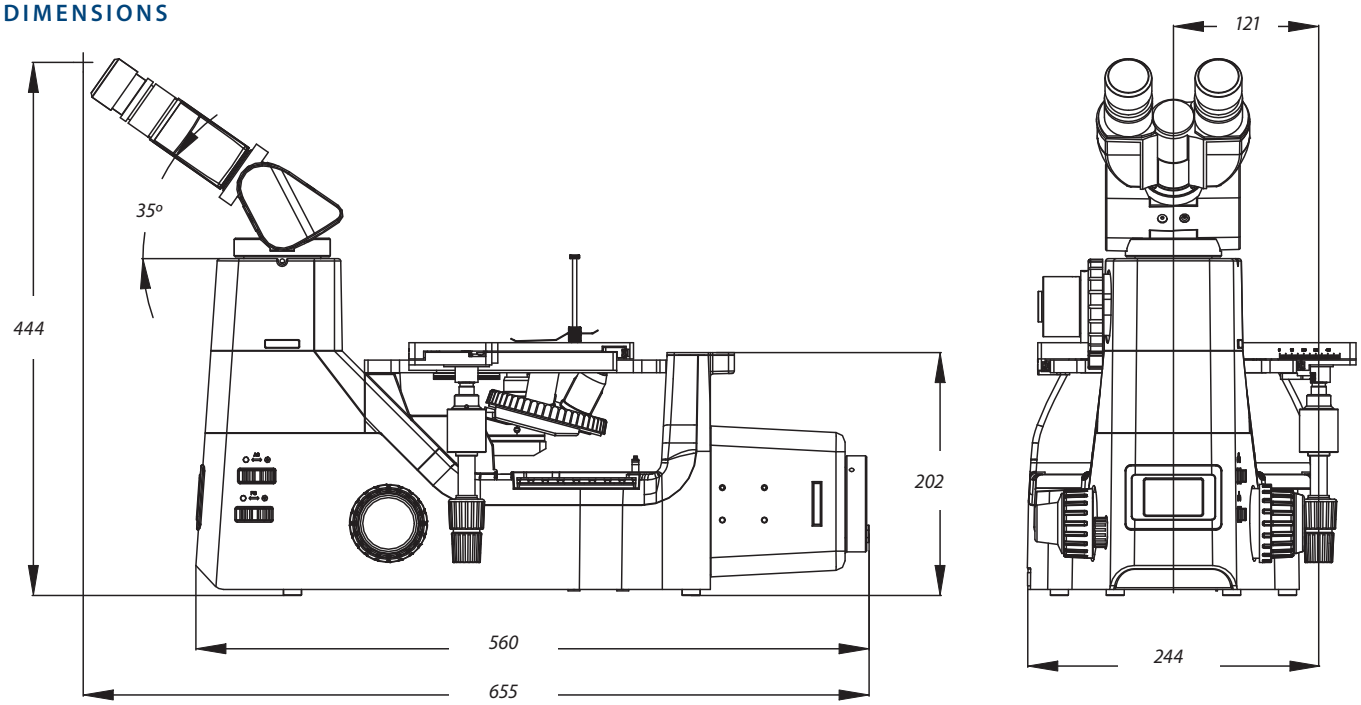
PACKAGE CONTENT

4 Metal inserts for stage with 10/15/25 mm hole, 1 metal insert for holding an object clamp, 1 object clamp, 4 filter sliders: blue/green/yellow/frosted white, a rotatable polarizer slider, a 1x C-mount adapter, power cord, dust cover and user manual

MODEL	Ergo head	Photo port	LWD Plan Semi-Apo 5/10/20x	LWD Plan Apo 50x	LWD Plan Apo 100x	3 W NeoLED™	DIC
AI.1058-PLMI	•	•	•	•	o	•	o

o = optional

DIMENSIONS



ACCESSORIES

EYEPIECES

AI.6010 WF 10x/22 mm eyepiece
AI.6015 WF 15x/16 mm eyepiece
AI.6020 WF 20x/12 mm eyepiece
AI.6099 Pair of eyeshades

OBJECTIVES

Plan Semi-Apochromatic PL-SAMi, infinity corrected, IOS 45 mm parfocal, M26 mounting thread, no cover glass correction

AI.8105 5x/0.15 PL-SAMi BD objective, WD 20 mm
AI.8110 10x/0.30 PL-SAMi BD objective, WD 11 mm
AI.8120 20x/0.40 PL-SAMi BD objective, WD 3.1 mm
AI.8150 50x/0.80 PL-SAMi BD objective, WD 1 mm
AI.8100 100x/0.90 PL-SAMi BD objective, WD 1 mm

BD = brightfield/darkfield
WD = Working distance

CAMERA ACCESSORIES

AI.9810-4 C-mount photo adapter 1x (included)
AI.9870-4 C-mount photo adapter 0.7x
AI.9850-4 C-mount photo adapter 0.5x



● *AI.9810-4*

FILTERS

AI.9720 Blue filter in slider
AI.9722 Green filter in slider
AI.9724 Yellow filter in slider
AI.9726 Frosted filter in slider
AI.9609 Polarizer in slider



● *AI.9609*



MISCELLANEOUS

AI.9513-10 Metal insert for stage with Ø 10 mm hole
AI.9513-15 Metal insert for stage with Ø 15 mm hole
AI.9513-25 Metal insert for stage with Ø 25 mm hole
AI.9571-C Metal insert that can support object clamp
AI.9571 Object clamp for AI.9571-C
AI.9984-R Spare 3 W LED module adjustable color temperature