

Achios-X Observer

METALLURGICAL

HIGHLIGHTS

- Extra Wide field WF 10x/22 mm, Ø 30 mm
- Revolving quintuple reversed nosepiece
- Brightfield and darkfield Epi-illumination
- Nomarski DIC (optional)
- IOS Plan Semi-Apo and Plan Apochromatic objectives
- Low positioned stage adjustment knobs
- Smart Light Control (SLC)
- 3 W NeoLED™ with adjustable color temperature
- 10 years warranty

SPECIFICATIONS

EYEPIECES

- EWF 10x/22 mm eyepiece, with diopter adjustment

HEADS

- Standard Siedentopf binocular or trinocular with 30° inclined tubes. A 0.5x c-mount adapter is included (a 1x is optional)
- Siedentopf trinocular (100:0/0:100 switch) with 30° inclined tubes
- Ergonomic tilting head (0° - 35°). A 23.2 mm phototube is included. Several c-mount adapters are available (lenses optional)

NOSEPIECE

- A quintuple nosepiece on ball- bearings, equipped with gripped ring
- With 26 mm objectives mounting threads

OBJECTIVES - BRIGHTFIELD/DARKFIELD

- Plan Semi apochromatic Infinity corrected 5/10/20x IOS objectives
- Plan Apochromatic Infinity corrected 50/100x IOS objectives

Plan Semi-Apo (PL-SAMi)	5x/0.15, WD 20 mm	10x/0.30, WD 11 mm	20x/0.45, WD 3.1 mm		
Plan Apo (PL-AMi)				50x/0.80, WD 1 mm	100x/0.90, WD 1 mm*

* Optional

All objectives are IOS 45 mm parafoal and have a M26 mm mounting thread
All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

STAGE

- 238 x 140 mm rackless hard coated stage with 78 x 54 mm X-Y mechanical stage
- A glass inlay and a metal inlay

FOCUSING

- Coarse travel 18 mm, fine adjustment 0.2 mm per rotation
- With 0.002 mm divisions
- Range 30 mm



● AX.1053-APLMRI

AX.1053-APLMRI
AX.1058-APLMRI

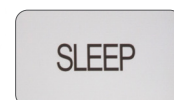
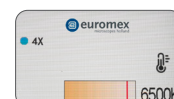
513 (h) x 255 (w) x 487 mm (d) | 15.6 kg
586 (h) x 255 (w) x 487 mm (d) | 17.5 kg

ILLUMINATION

- The Achios-X Observer materials science microscope is equipped with adjustable Epi and Diascopic intensity adjustable 3 W NeoLED™ illumination
- With external 100-240 Vac power supply
- A rotating cassette allows quick selection between reflected darkfield/ brightfield and transmitted brightfield

SMART LIGHT CONTROL

This intelligent feature memorizes the light intensity level for each objective. The color temperature of the NeoLED™ light source can be adjusted and stored. This innovation not only heightens comfort but also saves valuable time during routine magnification shifts. The eco-friendly NeoLED™ light source is both environmentally conscious and built to endure. The sleep function switches the light source off, after a user definable time laps



NEOLED™



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

- collect more oblique light from the NeoLED™ light source, which increases the light output significantly
- consume less energy for a higher level of light intensity
- produce images at higher resolutions due to the larger aperture of the NeoLED™
- achieve a longer life span, up to 50.000 hrs nominal, L70 norm

LONG WORKING DISTANCE CONDENSER

In height adjustable long working distance N.A. 0.65 condenser with numerical aperture identification marks

POLARIZATION

The microscope comes with an analyzer and a polarizer, which can easily be inserted into the free slots of the Epi-Illuminator

DIFFERENTIAL INTERFERENCE CONTRAST (DIC)*

The DIC-module shows differences in height of structures, which - ordinarily - cannot be displayed using only brightfield technique. These relief-like images are ideal for surface inspections of wafers, LCD screens etc.

* Optional

CSS – CABLE STORAGE SYSTEM

Allows users to easily stow away excess cable length onto the back of the instrument during operation, and to roll up the power cable for easy storage



CARRYING GRIP

The integrated carrying grip at the back of the microscope ensures safe transportation of the microscope

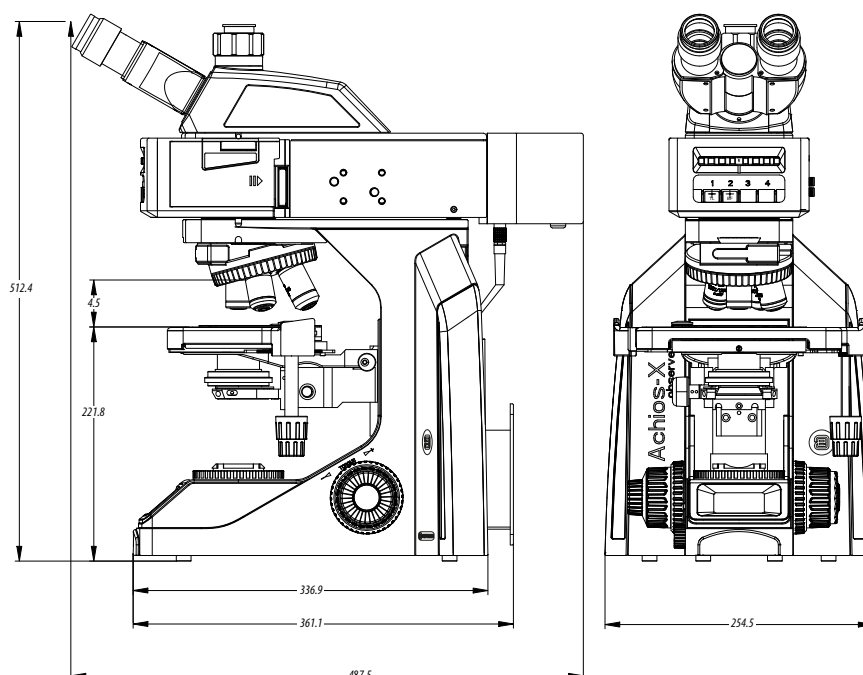
PACKAGING

Supplied with power cord, analyzer, polarizer, dust cover, a spare fuse, user manual and universal tool. All packed in a polystyrene box

MODELS	Trino	Ergo head	EWf 10x/22 mm eyepieces	Plan Semi- Apo BD 5x/10x/20x objectives	Plan Apo BD 50x objective	Plan Apo BD 100x objective	3W NeoLED™ transmitted Köhler illumination	3W NeoLED™ reflected Köhler illumination	Differential Interference Contrast (DIC)
AX.1053-APLMRi	•		•	•	•	o	•	•	o
AX.1058-APLMRi		•	•	•	•	o	•	•	o

o = Optional

DIMENSIONS



ACCESSORIES AND SPARE PARTS

EYEPIECES (Ø 30 MM TUBE)

- AX.6010** EWF 10x/22 mm eyepiece for Achios-X observer.
With diopter adjustment

OBJECTIVES BRIGHTFIELD AND DARKFIELD

*Plan Semi-Apochromatic PL-SAMi infinity corrected, IOS 45 mm parfocal**

- AX.8105** 5x/0.15 PL-SAMi BD objective. WD 20 mm
AX.8110 10x/0.30 PL-SAMi BD objective. WD 11 mm
AX.8120 20x/0.45 PL-SAMi BD objective. WD 3.1 mm

*Plan Apochromatic PL-AMi infinity corrected, IOS 45 mm parfocal**

- AX.8150** 50x/0.5 PL-AMi BD objective. WD 1 mm
AX.8100 100x/0.8 PL-AMi BD objective. WD 1 mm

WD = working distance

BD = Brightfield/Darkfield

*M26 mounting thread, no coverglass correction

HEADS

- AX.5700-ADD** Ergonomical trinocular Siedentopf head with tilting tubes.
Only with the purchase of new microscopes. Order the microscope as AX.1058- APLMRi

PHOTO ADAPTERS FOR MODELS AX.xxx3

- AX.9850** C-mount adapter 0.5x (standard included)
AX.9810-ADD C-mount adapter 1x

PHOTO ADAPTERS FOR MODELS AX.xxx8

- DX.9810** C-mount with 1x magnification for C-mount camera
DX.9835 C-mount with high resolution relay 0.35x objective for 1/3 inch C-mount camera
DX.9850 C-mount with high resolution relay 0.50x objective for 1/2 inch C-mount camera
DX.9863 C-mount with high resolution relay 0.63x objective for 2/3 inch C-mount camera
AE.5130 Universal SLR adapter with built-in 2x lens for standard 23.2 mm tube. Needs T2 adapter
AE.5025 T2 adapter for Nikon D SLR digital camera
AE.5040 T2 adapter for Canon EOS SLR digital camera

MISCELLANEOUS

- AX.9696** DIC attachment
AX.9660 Simple polarization kit (transmitted)
AX.9600-R Slider with polarization filter, fixed position (for reflected attachment, comes as standard)
AX.9609-R Slider with analyzer filter, 360° rotatable (for reflected attachment, comes as standard)



● AX.5700-ADD



● AX.9696



● AX.9660