# Opto-Edu (Beijing) Co., Ltd.

# 50x-1000x OPTO-EDU A13.0921 BD DIC Optical Metallurgical Microscope

#### **Basic Information**

• Place of Origin: China

• Brand Name: CNOEC, OPTO-EDU

Certification: CE, Rohs
Model Number: A13.0921
Minimum Order Quantity: 1 pc

Price: FOB \$1~1000, Depend on Order Quantity
 Packaging Details: Carton Packing, For Export Transportation

• Delivery Time: 5~20 Days

Payment Terms: T/T, West Union, Paypal

Supply Ability: 5000 pcs/ Month



#### **Product Specification**

Magnification: Optical Magnification 50x~1000x, Total

Magnification 135x~2700x

• Eyepiece: High Eyepoint Plan Eyepiece PL10x/22mm,

Diopter Adjustable

• Head: 5º~35º Infinity Gemel Trinocular Head

Working Stage & Manual Stage

Illumination:

Table: Table For Machine

Illumination: Reflect Bright & Dark Field Illumination
 Highlight: DIC Optical Metallurgical Microscope,

BD Optical Metallurgical Microscope, 50x metallurgical microscope

#### **Product Description**

Designed For Powerful Measurement Function, With Reliable Quality And Technology

A13.0921 Precision Measuring Metallurgical Microscope combines the high power observation ability of metallographic microscope with the X, Y, Z axis surface dimension measurement function of image measuring instrument. It has many observation functions such as Bright Field & Dark Field, Differential Interference Contrast (DIC), polarized light, etc. It can be widely used in semiconductor, PCB, LCD, mobile phone industry chain, optical communication, basic electronics, mold hardware, medical equipment, automotive industry, measurement industry and other fields of testing.



### Precision Measuring Metallurgical Microscope, BD, DIC



#### 5º~35º Tiltable Infinity Gemel Trinocular Head

The tilt angle of the observation tube is adjustable from 5° to 35°, can meet the user's operation needs whether standing or sitting, and there is no need to worry about the height difference of users

#### **Large Moving Range Working Stage**

With Japan imported optical grating ruler,

3 Kinds large size working stages optional: moving range 200x100mm, 300x200mm, 300x300mm, for large or small sample observation. The stage size can be customrized according to user's need.

#### **Newly Design With Highly Integrated Functions**

A13.0921 not only reserves the location for desktop computer, but also puts a retractable keyboard in front of user. Hand wheel in two directions and various buttons are ergonomic designed, user does not need to stand up to operate.





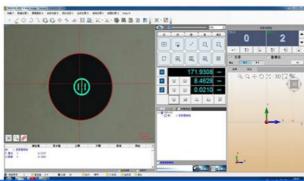
#### **Precision Measuring Tool**

A13.0921 Measuring Microscope use 3D X/Y/Z measuring system with 0.1um reading, the high precision grating ruler integrated in the rack is imported from Japan. The z-axis is controlled by a high-precision electric controller, with 3 speeds available, focusing maneuverability, improve efficiency, reduce cost, and low fatigue.



#### Independent Split Image Illumination Controller

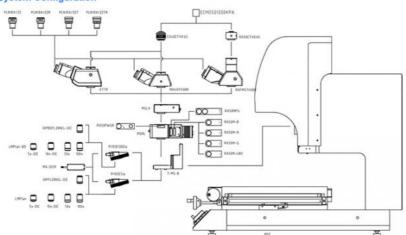
The independent split image illumination controller, can adjust the brightness according to the different background of the sample, to assist focusing more clearly and accurately. There are 2 split image patterns to choose, can be switched easily.



#### **Professional Measuring Software**

A13.0921 measuring microscope is equipped with simple operation, powerful measuring software, customers can set the test preferences according to their needs. The software is equipped with all kinds of measurement functions of manual and automatic point taking, it can be used in a wider range, even for complex shapes, it can make high-precision measurement.

#### **System Configuration**



| A13.0921 Pred | sision Measuring Metallurgical Microscope, BD, DIC -21 -32 -33   |  |  |  |
|---------------|--|--|--|--|
| Magnification | Optical Magnification 50x~1000x, Total Magnification 135x~2700x  |  |  |  |
|               | High Eyepoint Plan Eyepiece PL10x/22mm, Diopter Adjustable   |  |  |  |
| Head          | 5°-35° Infinity Gemel Trinocular Head, Erect Image, 360° Rotating,<br>Interpupillary Range 50~76mm; Light Spliting Ratio Switch<br>E0:P100/E100:P0 |  |  |  |
|               | Long Working Distance Infinity Plan Achromatic Metallurgical Objective   |  |  |  |
|               | 5x-DIC LMPL5x/0.15 W.D.10.8mm  |  |  |  |
|               | 10x-DIC LMPL10x/0.3 W.D.12.20mm  |  |  |  |
|               | 20x-DIC LMPLanFL20x/0.4 W.D.8.8mm, Semi-APO  |  |  |  |

|                                    | 50x LMPLFL50x/0.55 W.D.7.9mm   |                 |       |   |  |
|------------------------------------|--|-----------------|-------|---|--|
|                                    | 100x LMPLFL100x/0.80 W.D.2.1mm   | Ю               | Ю     | О |  |
| Objective                          | Long Working Distance Infinity Plan Achromatic BD Metallurgical Objective  |                 |       |   |  |
|                                    | 5x-DIC/0.15 W.D.9.0mm  | 0               | О     | О |  |
|                                    | 10x-DIC/0.3 W.D.9.0mm  | 6               | 6     | 0 |  |
|                                    | 20x-DIC/0.4 W.D.8.5mm. Semi-APO  | 0               | 0     | 0 |  |
|                                    | 50x/0.55 W.D.7.5mm   | 0               | 0     | 0 |  |
|                                    | 100x/0.80 W.D.2.1mm  | 0               | 6     | 6 |  |
| DIC                                | DIC Prism (Reflection)   | 0               | 6     | 0 |  |
|                                    | Reversed Quintuple Nosepiece, With DIC Slot, For Brigh   | t Fiel          | d     |   |  |
| Vosepiece                          | Reversed Quintuple Nosepiece, With DIC Slot, For Brigh & Dark Field  | it <sub>o</sub> | 0     | 0 |  |
|                                    | Manual Stage, Moving Range 200mm(X) x 100mm(Y), With Digital Indicator. Z Axis With Auto-control Box For Focusing; Z Axia Move Range 175mm. Measuring Precision: X/Y (3+L/200)um, Z Axis Repeatability Precision 2µm (20x Objective), With 5W LED Transmitted Illumination | •               |       |   |  |
| Working<br>Stage &<br>Illumination | Manual Stage, Moving Range 300mm(X) x 200mm(Y), With Digital Indicator. Z Axis With Auto-control Box For Focusing; Z Axia Move Range 175mm. Measuring Precision: X/Y (3+L/200)um, Z Axis Repeatability Precision 2µm (20x Objective), With 5W LED Transmitted Illumination |                 | •     |   |  |
|                                    | Manual Stage, Moving Range 300mm(X) x 300mm(Y), With Digital Indicator. Z Axis With Auto-control Box For Focusing; Z Axia Move Range 175mm. Measuring Precision: X/Y (3+L/200)um, Z Axis Repeatability Precision 2µm (20x Objective), With 5W LED Transmitted Illumination |                 |       | • |  |
| Table                              | Table For Machine  |                 |       |   |  |
| llumination                        | Reflect Bright & Dark Field Illumination, With BD Switch Device; With Filter Slots For Filters And Polarizing Kit; 5W LED, Intensity Adjustable  |                 |       |   |  |
| Focusing                           | Focus Assist Controlled By High-Precision Electric Controller, With 3 Speeds Available, With Double Reticle; Focusing Range >400mm   |                 |       |   |  |
| Polarizing                         | Polarizer Slide For Reflect Illumination 360° Rotatry Analyser Slide For Reflect Illumination  |                 |       |   |  |
| Adapter                            | 0.5x C-Mount, Focus Adjustable 0.65x C-Mount, Focus Adjustable   |                 |       |   |  |
| Digital                            | 1.2M Digital Camera, Pixel 1280(H) x 960(V); 60fps; Inte   | rface           | Gige  | ; |  |
| Camera                             | Sensor CMOS (Color)  |                 |       |   |  |
| Software                           | MSU3D-Pro Measurment software  |                 |       |   |  |
|                                    | DELL 3470, Intel i5 Commercial Office, Desktop Computer (i5-9400 8G 1T WIFI) 21.5" Monitor   |                 |       |   |  |
| Computer                           | 1T WIFI) 21.5" Monitor   | .61 (13         | -9400 |   |  |
| Computer<br>Spanner                |  | .61 (13         | -9400 |   |  |
| •                                  | 1T WIFI) 21.5" Monitor<br>Spanner M5   | .61 (13         |       |   |  |



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