



# Binocular Metallurgical Optical Microscope

#### **Basic Information**

• Place of Origin: China

• Brand Name: CNOEC, OPTO-EDU

Certification: CE, Rohs
Model Number: A13.0209
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**

Application: Research, Metallurgical

Certification: CE, RohsDrawtube: Binocular

• Illumination: Halogen Lamp, LED

• Magnification: 50X - 500X

• Theory: Metallurgical Optical Microscope

 Highlight: reflected light microscope, bright field microscope



## More Images





### **Product Description**

#### Binocular Compound Metallurgical Optical Microscope A13.0209

#### Description:

A13.0209 metallurgical microscope is used for identification and analysis of the structures in different metals and alloys, it is the important instrument for researching metallography in metal physics.

- --Plan achromatic objectives with long working distance (no cover glass)
- --Coaxial coarse/fine focusing system with tension adjustable and up stop
- --6V 20W halogen lamp with brightness control
- --Trinocular head can switch between normal observation and polarizing observation

#### Specifications:

| Plan long working distance (no cover glass) PL5x/0.12 Plan long working distance (no cover glass) PLL10x/0.25 Plan long working distance (no cover glass) PLL50x/0.40 Plan long working distance (no cover glass) PLL50x/0.77 Plan long working distance (no cover glass) PLL60x/0.75 Plan long working distance (no cover glass) PLL60x/0.75 Plan long working distance (no cover glass) PLL40x/0.80 Plan long working distance (no cover glass) PLL60x/0.75(Spring) Plan long working distance (no cover glass) PLL80x/0.80 Plan long working distance (no cover glass) PL100x/1.25 PL10x/0.85(Spring) Plan achromatic (no cover glass) PL100x/1.25 PL5x/4x change over photograph attachment with 10x viewing eypiece  4x focusing photograph attachment MD adapter PK adapter PK adapter   | Specification  |  | A13.0209-<br>A  | A13 0209-B   |              |  |
|--|--|--|---|--|--------------|--|
| Plan long working distance (no cover glass) PLL10x/0.25  | Eyepiece   |  | WF10X(Φ18mm)  |  |              |  |
| Plan long working distance (no cover glass) PLL20x/0.40     Plan long working distance (no cover glass) PLL50x/0.7     Vertical illumination Unit     OV 20W halogen lamp with brightness control     Vertical illumination with field diaphragm, aperture diaphragm and polaizer, (YBG) filter and ground glass     Abbe condenser N.A.=1.25, Rack & pinion adjustable     Blue filter and ground glass     Collector for illumination with halogen lamp (With filed diaphragm)     OV 20W, halogen lamp, adjustable brightness     Coaxial coarse/fine focus system, with tensional adjustable and up stop, minimum division of fine focusing: 2um     Nosepiece   Quadruple back ball bearing inner locating     Stage   Double layer mechanical, size 210x140mm, moving range 75x50mm     Eyepiece   Wide field WF16x/11mm  | Objective  |  | Plan long working distance (no cover glass) PL5x/0.12                   |  |              |  |
| Plan long working distance (no cover glass) PLL20x/0.40 Plan long working distance (no cover glass) PLL50x/0.7  Head Trinocular, inclination of 30°, analyzer with field diaphragm to switch  Vertical illumination Unit  Vertical illumination Unit  Vertical illumination Unit  Vertical illumination Unit  Vertical illumination with field diaphragm, aperture diaphragm and polaizer, (YBG) filter and ground glass  Abbe condenser N.A.=1.25, Rack & pinion adjustable  Blue filter and ground glass  Collector for illumination with halogen lamp (With filed diaphragm)  6V 20W, halogen lamp, adjustable brightness  Focus System  Coaxial coarse/fine focus system, with tensional adjustable and up stop, minimum division of fine focusing: 2um  Nosepiece  Quadruple back ball bearing inner locating  Stage  Double layer mechanical, size 210x140mm, moving range 75x50mm  Optional Accessories  Item No.  Eyepiece  Wide field WF16x/11mm  A51.0203-16A  Dividing 10x, 0.1mm/Div  A51.025-G10  Plan long working distance (no cover glass) PLL40x/0.60  A5M.0212-40  Plan long working distance (no cover glass)  PLL60x/0.75(Spring)  Objective  Plan long working distance (no cover glass) PLL80x/0.80  A5M.0212-60  Plan long working distance (no cover glass) PLL80x/0.80  A5M.0212-100  Nosepiece  Quintruple backward ball bearing inner locating  A55.0202-1  A55.0202-1  A55.0202-2  A55.0202-4  A55.0202-3  A55.0202-1  A55.0202-3  A55.0202-1  A55.0201-1  Photo Adapter  Photo Adapter  PK adapter  A55.0201-3  |  |  |   |  |              |  |
| Trinocular, inclination of 30°, analyzer with field diaphragm to switch   Vertical allumination Unit   6V 20W halogen lamp with brightness control   |  |  | Plan long working distance (no cover glass) PLL20x/0.40                 |  |              |  |
| Vertical illumination Unit    Sevant   |  |  | Plan long working distance (no cover glass) PLL50x/0.7                  |  |              |  |
| Vertical illumination Unit  Vertical illumination with field diaphragm, aperture diaphragm and polaizer, (YBG) filter and ground glass  Abbe condenser N.A.=1.25, Rack & pinion adjustable Blue filter and ground glass  Collector for illumination with halogen lamp (With filed diaphragm)  6V 20W, halogen lamp, adjustable brightness  Focus System  Nosepiece  Quadruple back ball bearing inner locating  Stage  Double layer mechanical, size 210x140mm, moving range 75x50mm  Optional Accessories  Item No.  Wide field WF16x/11mm Divding 10x, 0.1mm/Div  Plan long working distance (no cover glass) PLL40x/0.60  Plan long working distance (no cover glass) PLL60x/0.75(Spring)  Plan long working distance (no cover glass) PLL80x/0.80  A5M.0212-80  Plan long working distance (no cover glass) PLL80x/0.80  A5M.0212-80  Plan long working distance (no cover glass) PLL80x/0.80  A5M.0212-100  Nosepiece  Quintuple backward ball bearing inner locating  0.4x  0.5x  A55.0202-1  1x  0.5x  A55.0202-2  4x55.0202-3  2.5x/4x change over photograph attachment with 10x viewing expiece  4x focusing photograph attachment  MD adapter  PK adapter  A55.0201-1  | Head   |  | Trinocular, inclination of 30°, analyzer with field diaphragm to switch |  |              |  |
| Illumination Unit polaizer, (YBG) filter and ground glass Abbe condenser N.A.=1.25, Rack & pinion adjustable Blue filter and ground glass Collector for illumination with halogen lamp (With filed diaphragm) 6V 20W, halogen lamp, adjustable brightness Focus System Coaxial coarse/fine focus system, with tensional adjustable and up stop, minimum division of fine focusing: 2um Nosepiece Quadruple back ball bearing inner locating Stage Optional Accessories Eyepiece Wide field WF16x/11mm Divding 10x, 0.1mm/Div Plan long working distance (no cover glass) PLL40x/0.60 Plan long working distance (no cover glass) PLL40x/0.60 Plan long working distance (no cover glass) PLL80x/0.75(Spring) Plan long working distance (no cover glass) PLL80x/0.80 Plan long working | Vertical<br>illumination Unit                                      |  | 6V 20W halogen lamp with brightness control                             |  |              |  |
| Transmited Illumination Unit Illumination Unit Illumination Unit Illumination Unit Illumination Unit Illumination Unit Illumination With halogen lamp (With filed diaphragm) 6V 20W, halogen lamp, adjustable brightness  Focus System Coaxial coarse/fine focus system, with tensional adjustable and up stop, minimum division of fine focusing: 2um  Nosepiece Quadruple back ball bearing inner locating  Stage Double layer mechanical, size 210x140mm, moving range 75x50mm  Optional Accessories Ittem No.  Eyepiece Wide field WF16x/11mm A51.0203-16A  Dividing 10x, 0.1mm/Div A51.025-G10  Plan long working distance (no cover glass) PLL40x/0.60 A5M.0212-40  Plan long working distance (no cover glass) PLL60x/0.75(Spring)  Plan long working distance (no cover glass) PLL80x/0.80 A5M.0212-80  Plan long working distance (no cover glass) PLL80x/0.80 A5M.0212-100  Nosepiece Plan ong working distance (no cover glass) PL100x/1.25 A5M.0212-100  Nosepiece Quintuple backward ball bearing inner locating A54.0203-2  CCD Adapter O.5x with dividing 0.1mm/Div A55.0202-4  A55.0202-4  A55.0202-4  A55.0202-3  A55.0201-1  Photo Adapter A55.0201-3  MD adapter A55.0201-4   |  |  |   |  |              |  |
| Iransmited Illumination Unit   | Transmited Illumination Unit                                       |  |   |  |              |  |
| Collector for illumination with halogen lamp (With filed diaphragm)  |  |  |   |  |              |  |
| diaphragm    6V 20W, halogen lamp, adjustable brightness    Focus System   Coaxial coarse/fine focus system, with tensional adjustable and up stop, minimum division of fine focusing: 2um     Nosepiece   Quadruple back ball bearing inner locating     Stage   Double layer mechanical, size 210x140mm, moving range 75x50mm     Optional Accessories   Item No.     Eyepiece   Wide field WF16x/11mm   A51.0203-16A     Divding 10x, 0.1mm/Div   A51.025-G10     Plan long working distance (no cover glass) PLL40x/0.60   A5M.0212-40     Plan long working distance (no cover glass) PLL80x/0.80   A5M.0212-60     Plan long working distance (no cover glass) PLL80x/0.80   A5M.0212-80     Plan long working distance (no cover glass) PLL80x/0.80   A5M.0212-80     Plan long working distance (no cover glass) PL10x/0.85(Spring)   100A     Plan achromatic (no cover glass) PL100x/1.25   A5M.0212-100     Nosepiece   Quintuple backward ball bearing inner locating   A54.0203-2     CCD   Adapter   A55.0202-2     Adapter   A55.0202-3     Adapter   A55.0201-1     Wind adapter   A55.0201-2     A65.0201-3     A65.0201-4     A65.0201-5     A65.0201-6     A65.0201-6     A65.0201-7     A65.0201-7     A65.0201-8     A65.0201-8     A65.0201-9     A65.0201-9     A65.0201-1     A65.0201-1   |  |  | İ   | Collector for illumination with halogen lamp (With filed |              |  |
| Focus System  Coaxial coarse/fine focus system, with tensional adjustable and up stop, minimum division of fine focusing: 2um  Nosepiece  Quadruple back ball bearing inner locating  Stage  Double layer mechanical, size 210x140mm, moving range 75x50mm  Optional Accessories  Item No.  Wide field WF16x/11mm A51.0203-16A  Divding 10x, 0.1mm/Div  Plan long working distance (no cover glass) PLL40x/0.60  Plan long working distance (no cover glass) PLL60x/0.75(Spring)  Plan long working distance (no cover glass) PLL80x/0.80  Plan long working distance (no cover glass) PL100x/1.25  A5M.0212-80  Plan long working distance (no cover glass) PL100x/1.25  A5M.0212-100  Nosepiece  Quintuple backward ball bearing inner locating A54.0203-2  0.4x  0.5x  A55.0202-1  1x  0.5x with dividing 0.1mm/Div  2.5x/4x change over photograph attachment with 10x viewing eypiece  4x focusing photograph attachment  MD adapter  PK adapter  A55.0201-3  PK adapter  A55.0201-4  |  |  |   | diaphragm)   |              |  |
| Nosepiece   Quadruple back ball bearing inner locating   |  |  |   | 6V 20W, halogen lamp, adjustable brightness              |              |  |
| Stage   Double layer mechanical, size 210x140mm, moving range 75x50mm  | Focus System   |  | ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '                                   |  |              |  |
| Coptional Accessories   Item No.   | Nosepiece  |  | Quadruple back ball bearing inner locating                              |  |              |  |
| Wide field WF16x/11mm  | Stage Double layer mechanical, size 210x140mm, moving range 75x50m |  |   |  | 75x50mm      |  |
| Dividing 10x, 0.1mm/Div  |  |  | Or  | otional Accessories                                      | Item No.     |  |
| Dividing 10x, 0.1mm/Div  | Eyepiece   | Wide   | Nide field WF16x/11mm   |  |              |  |
| Plan long working distance (no cover glass)  |  | Divdi  | Divding 10x, 0.1mm/Div  |  |              |  |
| PLL60x/0.75(Spring)  |  | Plan   | Plan long working distance (no cover glass) PLL40x/0.60                 |  |              |  |
| Plan long working distance (no cover glass)  | Objective  | 1  | A5M 0212-60   |  |              |  |
| PLL10x/0.85(Spring)   100A     Plan achromatic (no cover glass) PL100x/1.25   A5M.0212-100     Nosepiece   Quintuple backward ball bearing inner locating   A54.0203-2     0.4x   A55.0202-1     0.5x   A55.0202-4     1x   A55.0202-2     0.5x with dividing 0.1mm/Div   A55.0202-3     2.5x/4x change over photograph attachment with 10x viewing eypiece     4x focusing photograph attachment   A55.0201-2     MD adapter   A55.0201-3     PK adapter   A55.0201-4   |  | Plan   | long workin   | A5M.0212-80  |              |  |
| Plan achromatic (no cover glass) PL100x/1.25   A5M.0212-100  |  | Plan   | Plan long working distance (no cover glass)                             |  |              |  |
| Nosepiece   Quintuple backward ball bearing inner locating   A54.0203-2  |  | PLL1   | PLL10x/0.85(Spring)   |  |              |  |
| 0.4x   |  | Plan achromatic (no cover glass) PL100x/1.25   |   |  | A5M.0212-100 |  |
| CCD Adapter         0.5x         A55.0202-4           1x         A55.0202-2           0.5x with dividing 0.1mm/Div         A55.0202-3           2.5x/4x change over photograph attachment with 10x viewing eypiece         A55.0201-1           4x focusing photograph attachment         A55.0201-2           MD adapter         A55.0201-3           PK adapter         A55.0201-4   | Nosepiece  | Quintuple backward ball bearing inner locating |   |  | A54.0203-2   |  |
| Adapter   0.5x   | CCD<br>Adapter   | 0.4x   |   |  | A55.0202-1   |  |
| 1x   |  | 0.5x   | 0.5x  |  |              |  |
| Photo Adapter  Photo Adapter  2.5x/4x change over photograph attachment with 10x viewing eypiece  4x focusing photograph attachment  A55.0201-2  MD adapter  A55.0201-3  PK adapter  A55.0201-4  |  | I ***  |   |  | A55.0202-2   |  |
| Photo Adapter         Adapter         A55.0201-1           MD adapter         A55.0201-3           PK adapter         A55.0201-4   |  |  |   |  | A55.0202-3   |  |
| Adapter  | Photo  | 1  |   |  | A55.0201-1   |  |
| MD adapter A55.0201-3 PK adapter A55.0201-4  |  | 4x focusing photograph attachment              |   |  | A55.0201-2   |  |
| ·  | Auapter  | MD a   | MD adapter  |  |              |  |
| DC Adapter Digital Camera Adapter for CANON(A610,A620,A630,A640) A55.02024-01  |  | PK a   | PK adapter  |  |              |  |
|  | DC Adapter   | Digita   | al Camera A   | Adapter for CANON(A610,A620,A630,A640)                   | A55.02024-01 |  |





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