



## 4.5 - 6nm High Magnification Scanning Microscope Electron Surface Topography Eco Sem

Our Product Introduction

### Basic Information

- Place of Origin: China
- Brand Name: CNOEC, OPTO-EDU
- Certification: CE,
- Model Number: A63.7062
- 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



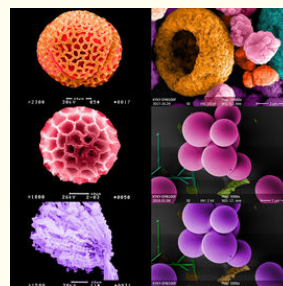
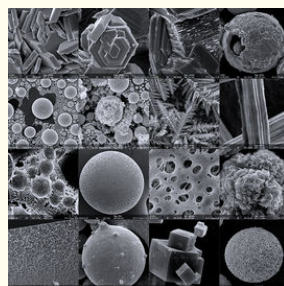
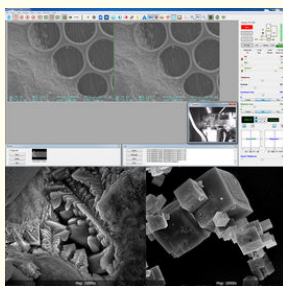
### Product Specification

- Resolution: 4.5nm@30KV(SE); 6nm@30KV(BSE)
- Magnification: Negative Magnification: 15x~250000x;  
Screen Magnification: 30x~500000x
- Electron Gun: Tungsten Heated Cathode-Pre Centered  
Tungsten Filament Cartridge
- Accelerating Voltage: 0~30KV
- Lens System: Three-level Electromagnetic Lens (Tapered Lens)
- Objective Aperture: Molybdenum Aperture Adjustable Outside Vacuum System
- Specimen Stage: Five Axes Stage
- Max Specimen Diameter: 150mm
- Highlight: **6nm scanning microscope electron, high magnification scanning microscope electron**



for more products please visit us on cnoec.com

### More Images



## Product Description

### 4.5 - 6nm High Magnification Scanning Electron Microscope Surface Topography Eco SEM

Scanning electron microscopy (sem) is suitable for the observation of the surface topography of metals, ceramics, semiconductors, minerals, biology, polymers, composites and nano-scale one-dimensional, two-dimensional and three-dimensional materials (secondary electron image, backscattered electron image).It can be used to analyze the point, line and surface components of microregion.It is widely used in petroleum, geology, mineral field, electronics, semiconductor field, medicine, biology field, chemical industry, polymer material field, criminal investigation of public security, agriculture, forestry and other fields.



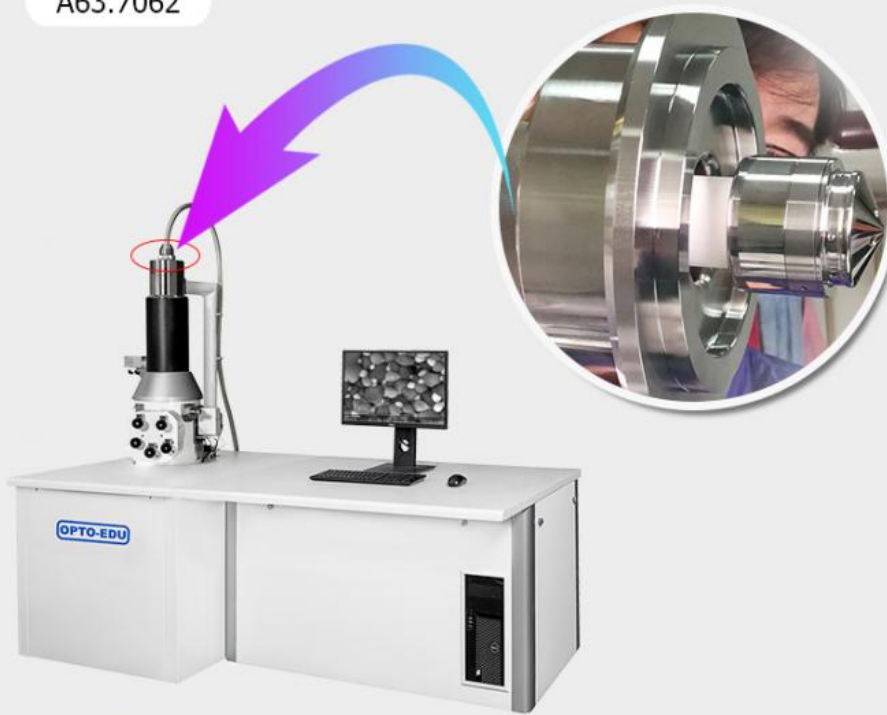
### Product Description

A63.7062 Eco Tungsten Filament SEM		
Resolution	4.5nm@30KV(SE); 6nm@30KV(BSE)	
Magnification	Negative Magnification: 15x~250000x; Screen Magnification: 30x~500000x	
Electron Gun	Tungsten Heated Cathode-Pre Centered Tungsten Filament Cartridge	
Accelerating Voltage	0~30KV	
Lens System	Three-level Electromagnetic Lens (Tapered Lens)	
Objective Aperture	Molybdenum Aperture Adjustable Outside Vacuum System	
Specimen Stage	Five Axes Stage	
Travel Range	X(Auto)	0~50mm
	Y(Auto)	0~50mm
	Z(Manual)	0~25mm
	R(Manual)	360°
	T(Manual)	-5°~90°
Max Specimen Diameter	150mm	
Detector	High Vacuum Secondary Electron Detector (With Detector Protection)	
Modification	Stage Upgrade;EBL;STM;AFM;Heating Stage;Cryo Stage;Tensile Stage;Micro-nano Manipulator;SEM+Coating Machine;SEM+Laser	
Accessories	CCD,LaB <sub>6</sub> ,X-Ray Detector(EDS),EBSD,CL,WDS,Coating Machine	
Vacuum System	Turbo Molecular Pumps;Rotation Pump	
Electron Beam Current	10pA~0.1μA	
PC	Customized Dell Work Station	

### Product Display

# PRODUCT DISPLAY

A63.7062



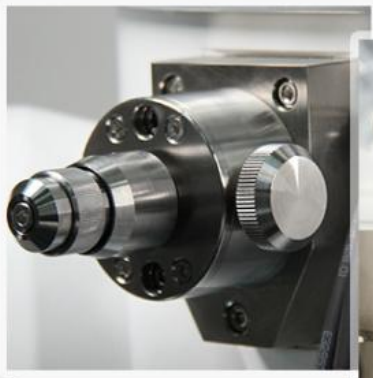
○ Tungsten Heated Cathode-Pre Centered Tungsten Filament Cartridge



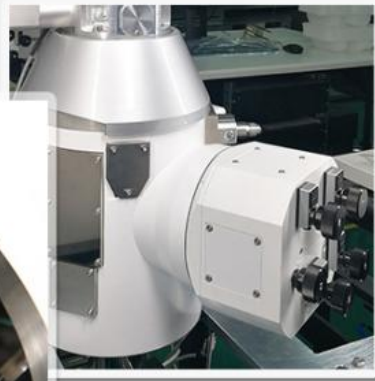
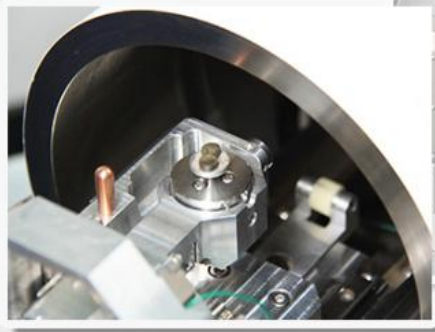
○ The Electromagnetic Lens In This Cylinder



- The Isolating Valve Ensures That The Upper Vacuum Is Not Affected When The Sample Room Is Opened

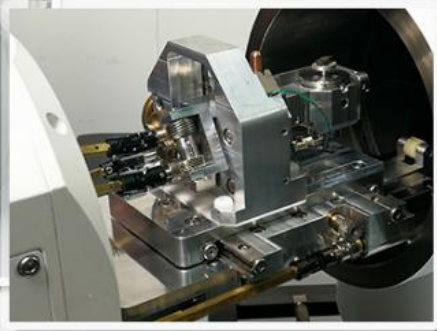
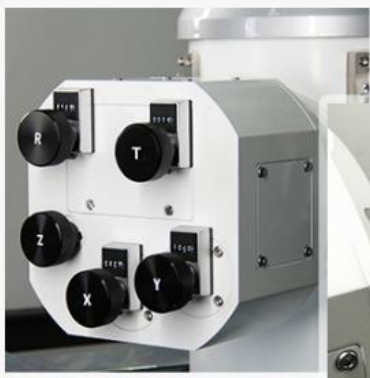


- Objective Aperture



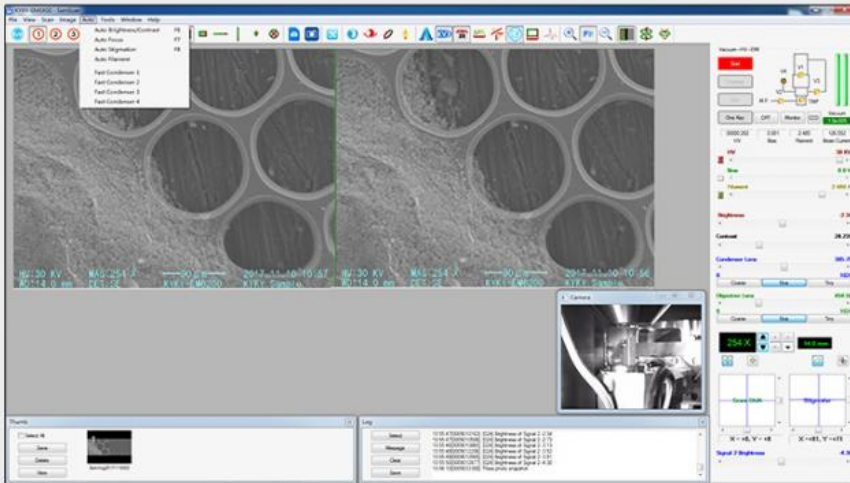
○ The Sample To Be Observed Need To Put IN The Sample Room

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○ Five Axes Stage, X/Y Motorized Control (Small)

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- A63.7062 Support Three Window Synchronous, Two Chanel (SE+BSE)  
With CCD Window; Image Resolution: 4096\*4096 Pixels



Optional Accessories

## Optional Accessories

A50.7001



### ○ BSE Detector

Semiconductor Four Segment Back Scattering Detector;  
Available In Ingredients A+B, Morphology Info A-B;  
Available Sample Observe Without Sputtering Gold;  
Available In Observe Impurity And Distribution From  
Grayscale Map Directly.

A50.7002



### ○ EDS (X Ray Detector)

Silicon Nitride (Si<sub>3</sub>N<sub>4</sub>) Window To Optimize Low Energy  
X-ray Transmission For Light Element Analysis;  
Excellent Resolution And Their Advanced Low-noise  
Electronics Provide Outstanding Throughput Performance;  
The Small Footprint Offers Flexibility To Ensure Ideal  
Geometry And Aata Collection Conditions;  
The Detectors Contain A 30mm<sup>2</sup> Chip.

A50.7010



### ○ Coating Machine

Glass Protecting Shell:  $\varnothing$  250mm; 340mm High;  
Glass Processing Chamber:  
 $\varnothing$  88mm; 140mm High,  $\varnothing$  88mm; 57mm High;  
Specimen Stage Size:  $\varnothing$  40mm (max);  
Vacuum System:molecula Pump And Mechanical Pump;  
Vacuum Detection: Pirani Gage;  
Vacuum: better Than  $2 \times 10^{-3}$  Pa;  
Vacuum Protection: 20 Pa With Microscale Inflation Valve;  
Specimen Movement: Plane Rotation, tilt Precession.

A50.7011



### ○ Ion Sputtering Coater

Glass Processing Chamber:  $\varnothing$  100mm; 130mm High;  
Specimen Stage Size:  $\varnothing$  40mm( Hold 6 Specimen Cups) ;  
Golden Target Size:  $\varnothing$  58mm\*0.12mm(thickness);  
Vacuum Detection: Pirani Gage;  
Vacuum Protection: 20 Pa With Microscale Inflation Valve;  
Medium Gas: argon Or Air With Argon Gas Special Air Inlet  
And Gas Regulating In Microscale.

A50.7012



### ○ Argon Ion Sputtering Coater

The Sample Was Plated With Carbon And Gold Under  
High Vacuum;  
Rotatable Sample Table, Uniform Coating, Particle Size  
About 3-5nm;  
No Selection Of Target Material, No Damage To Samples;  
The Functions Of Ion Cleaning And Ion Thinning Can Be  
Realized.

A50.7013



#### ○ Critical Point Dryer

Inner Diameter: 82mm, Inner Length: 82mm;  
Pressure Range:0-2000psi;  
Temperature Range:0°-50° C (32°-122° F)

A50.7014



#### ○ Electron Beam Lithography

Based On Scanning Electron Microscope, A Novel Nano-exposure System Was Developed;  
The Modification Has Kept All The Sem Functions For Making Nanoscale Line Width Image;  
The Modified Ebl System Widly Applied Into Microelectronic Devices, Optoelectronic Devices, Quantum Devices, Microelectronics System R&d.

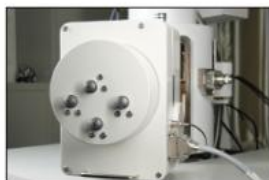
A50.7015



#### ○ Uninterrupted Power Supply

Input Voltage:380v/220v  
Input Voltage Range:120v ~ 275v(176v ~ 275v Fully Loaded Operation)  
Output Voltage/output Distortion:  
220v/230v/240v ± 1%,thdu < 2%  
Output Frequency Range:40hz ~ 70hz,50hz/60hz (self-adaption)  
Efficiency: >93.5%(on-line Mode);98%(eco Mode)  
Overload Capacity:  
105% ~ 125%:10 Mins  
125% ~ 150%:30s  
>150%:500ms  
Parallel Operation:max Three Instruments(optional)  
Battery Voltage:192v(216v,240v Option)  
Charge Current:4a,8a Upgradable  
Display: Led Screen  
Communication Interface:rs232 Standard, Usd Extendable  
Software:winpower  
Operating Environment: 0 ~ 40°C  
Noise: ≅50db  
Size: 212 X 420 X 500 (mm)  
Weight:16.9kg

A50.7021



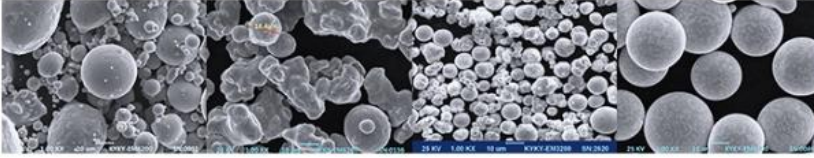
#### ○ Five Axes Eucentric Motorized Stage, X/Y/Z/T/R Motorized Control (Small)

X: 0~80mm  
Y: 0~50mm  
Z: 0~30mm  
R: 360°  
T: -5°~ 70°

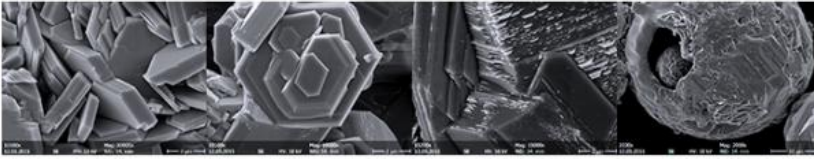
## APPLICATION AND CASE



**Powder Metallurgy Material**



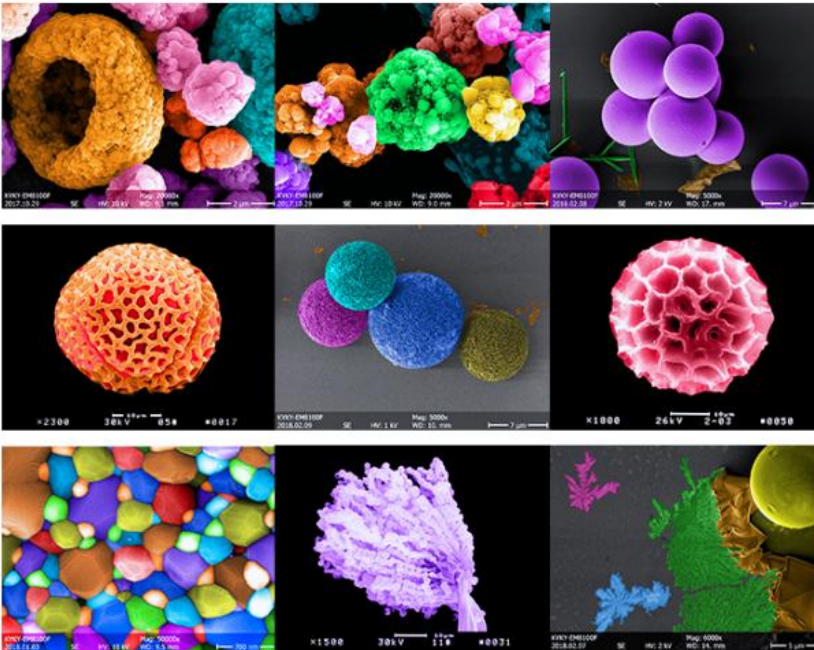
**Ceramic Material**



**Flora And Fauna, Microorganism**



**Pseudo Color Appreciation**



## MORE CHOICES



A63.7069

BUY NOW



A63.7080

BUY NOW



A63.7081

BUY NOW



A50.7011

BUY NOW

## PACKING AND SHIPPING

### Packing :

By Air: The Tube Portion Of An Electron Optical Mirror: 110cm x 110cm x 153cm;

Electrical Cabinet Operation Desk: 163cm x 85cm x 115cm;

Accessories: 130cm x 125cm x 135cm;

G.W.: 700kg

By Sea: The Tube Portion Of An Electron Optical Mirror: 110cm x 110cm x 195cm;

Electrical Cabinet Operation Desk: 163cm x 85cm x 115cm;

Accessories: 130cm x 125cm x 135cm;

G.W.: 700kg

**Shipping Time** : 3-10 Days From Stock

Consumables				
	Name	Specification	Quantity	Unit
1	Centered cartridge filament		5	set
2	Specimen cup	( φ13 )	10	pcs
3	Specimen cup	( φ32 )	10	pcs
4	Carbon conductive tape(double side)	6mm	1	pc
5	Vacuum grease		1	Bottle
6	Lint-free cloth		20	pcs
7	Vent-pipe		5	meter
8	Polishing paste		1	set
Tools				
	Name		Quantity	Unit
1	Allen wrench		1	set
2	Clean stick		1	pc
3	Overshot		1	pc
4	Aperture removing tool		1	pc
5	Tweezers		1	pc
6	Screwdriver		2	pcs

### Company Information

OPTO-EDU is one of the top professional supplier for microscope from China, we focus in microscope & educational field for more than 20 years. As the top recommended seller for microscope on alibaba, we have full types microscopes, including biological microscope, stereo microscope, metallurgical microscope, inverted microscope, fluorescent microscope, polarizing microscope, phase contrast microscope, dark field microscope, multi-viewing microscope, DIC microscope, AFM/STM/SPM microscope, zoom microscope, gem microscope, digital microscope, LCD microscope, comparison microscope, forensic microscope, and all kinds of microscope accessories. Our customer comes from more than 104 countries, such as United States, Britain, Russia, Canada, Germany, Denmark, Poland, Sweden, U.A.E., Qatar, Saudi Arabia, Egypt, Mexico, Argentina,

Chile, Brazil, Korea, Thailand, India, Indonesia, Phillipine and so on. We have been working tirelessly to supply China's nice quality production to the world market!



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