



## A63.7015 Tungsten Filament Scanning Microscope 20x~150000x

Our Product Introduction

### Basic Information

- Place of Origin: China
- Brand Name: OPTO-EDU
- Certification: CE, Rohs
- Model Number: A63.7015
- Minimum Order Quantity: 1 pc
- Price: FOB \$1~100000, 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: 5nm@30KV(BSE)
- Magnification: 20x~150000x
- Electron Gun: Pre-Centered Tungsten Filament Cartridge, Bias Voltage Auto System
- Voltage: "Accelerating Voltage 1KV To 30KV, 1KV/5KV/10KV/15KV/20KV/30KV-6 Steps"
- Lens System: "2-Stage Electromagnetic Condenser Lens, 1-Stage Electromagnetic Objective Lens"
- Max Specimen: 80mm In Diameter, 35mm In Height
- Image Shift: X, Y Image Shift  $\pm 150\mu\text{m}$
- Image Format: BMP, JPEG, PNG, TIFF
- Auto Function: Auto Start, Auto Focus, Auto Brightness/Contrast
- Photo Display: Magnification, Detector Type, Accelerating Voltage, Vacuum Mode, Logo(Text), Date & Time, Text Marker, Scale Bar, Etc.
- Specimen Working Stage: 5-axis System X, Y-axis : 35mm / R-axis :

for more products please visit us on [cnoec.com](http://cnoec.com)

## Product Description

### Tungsten Filament Scanning Electron Microscope, SE, 20x~150000x

20x~150000x Resolution 5nm With Detector SE, Optional BSE, EDS, CCD

Standard X/Y/R 3 Axes Working Stage, Optional Five Axes Working Stage X/Y/Z/R/T

2-Stage Electromagnetic Condenser Lens, 1-Stage Electromagnetic Objective Lens

Vacuum System: 1 Turbo Molecular Pump+ 1 Mechanical Rotary Pump

Auto Start, Auto Focus, Auto Brightness, Contrast Adjust



OPTO-EDU (BEIJING) CO., LTD.

F-1501 Wanda Plaza, No.18 Shijingshan Road, Beijing 100043, China  
Tel:+8610 88696020 Fax:+8610 88696085

## A63.7006

## A63.7015

### Tungsten Filament Scanning Electron Microscope (SEM)



**A63.7006**

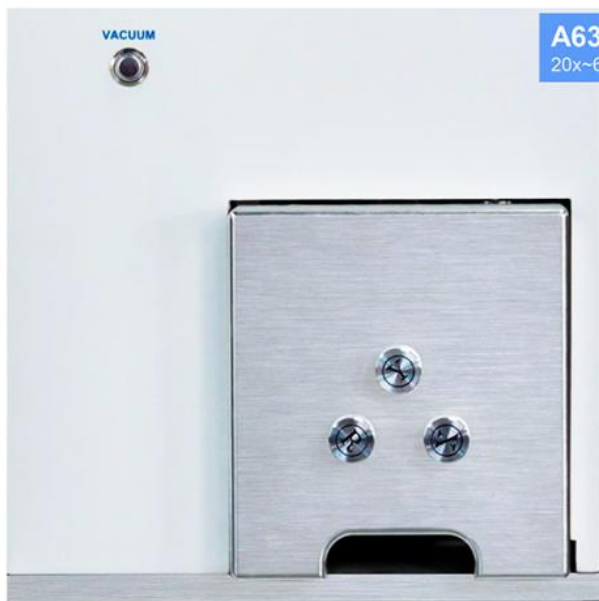
20x~60000x, 15nm@30KV(SE)



**A63.7015**

20x~150000x, 5nm@30KV(SE)  
Adjustable Iris Diaphragm

## A63.7006, A63.7015 SEM



### A63.7006

20x-60000x, 15nm@30KV(SE)

## A63.7006, A63.7015 SEM



### Ion Sputtering Coater

The ion sputtering coater is an electroplating equipment that coats a thin layer of metal (Au/Pt) on the surface of the sample. It covers the surface of the sample by emitting ions from a metal target. The emission of ions is caused by plasma discharge under low vacuum. As the conductivity of the sample increases, the amount of secondary electrons generated increases, allowing for sharper images to be obtained.

#### Technical Parameter

Sample size:  $\Phi 133\text{mm} \times 110\text{mm}$

Target: Au & Pt

Sample stage moving distance: 35mm

Total weight: 15kg

Target size:  $\Phi 50\text{mm}$

Sample stage size:  $\Phi 50\text{mm}$

Dimensions: 505mm(W) x 310mm(D) x 250mm(H)

Power supply: AC220V  $\pm 10\%$ , 50/60Hz

### Energy Spectrometer (EDS)

EDS is a device mounted on the SEM to analyze the surface components of samples. It is mainly used to qualitatively analyze the chemical components of materials, and can be used for inorganic or organic solids such as metals, polymers, ceramics, concrete, organisms, minerals, fibers, etc. material analysis, etc..

#### Technical Parameter

Detector: Ultrathin Silicon Nitride Window

Detection area: 30mm<sup>2</sup>

Elemental analysis range: from boron (5) to americium (95)

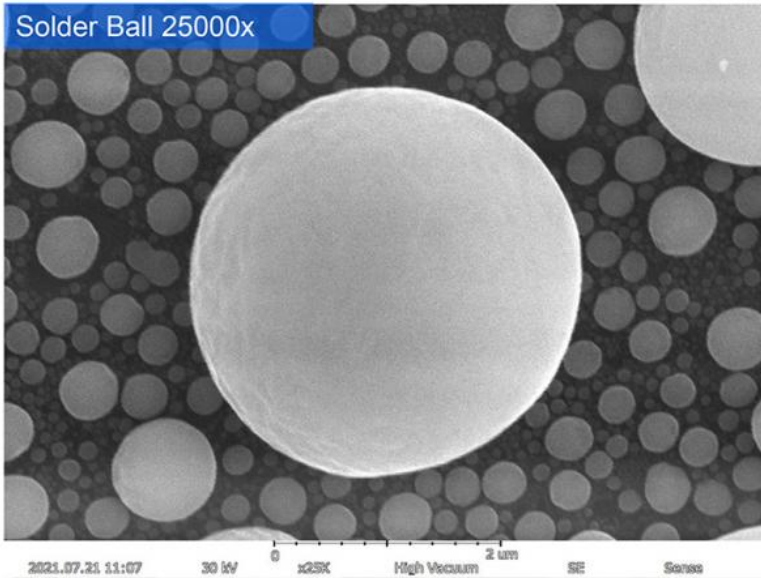
Electron energy resolution: 129eV

Maximum input count rate: >500,000cps

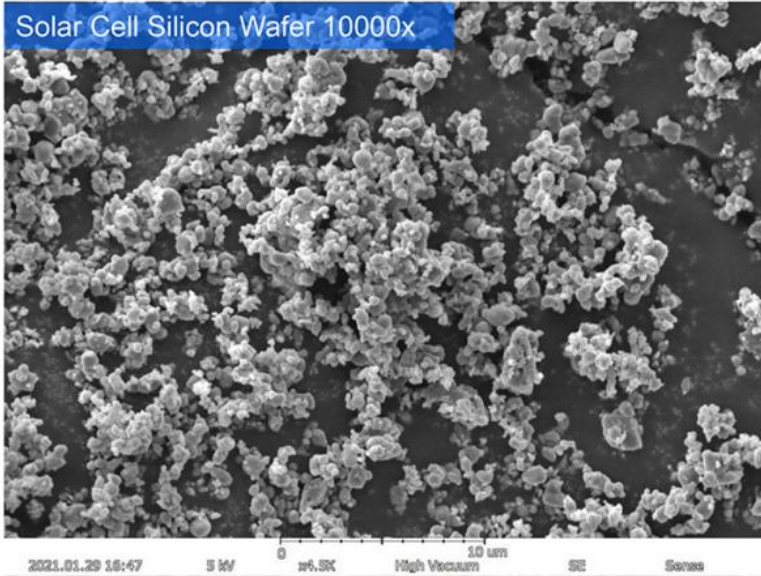


## Sample Images

Solder Ball 25000x



Solar Cell Silicon Wafer 10000x

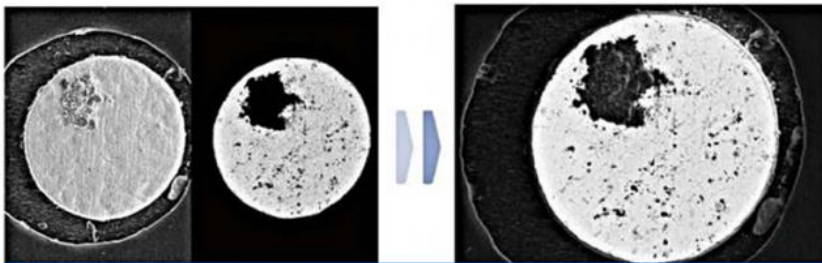




## A63.7006, A63.7015 SEM

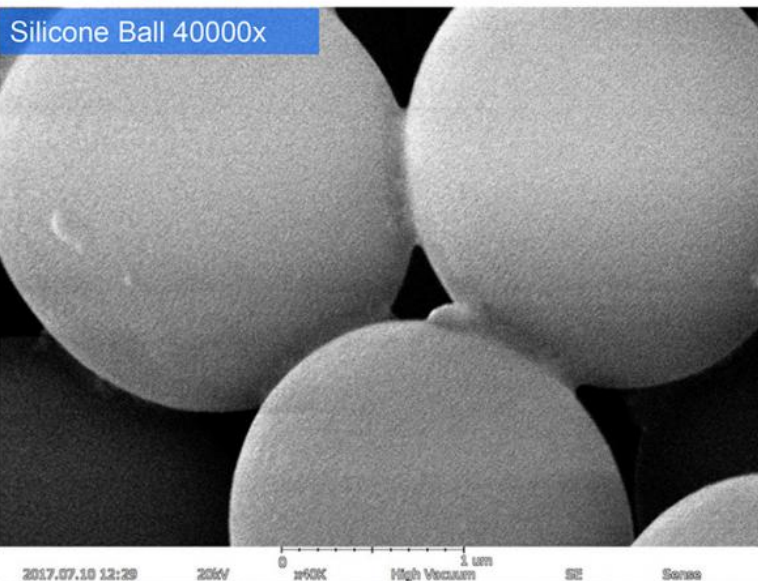


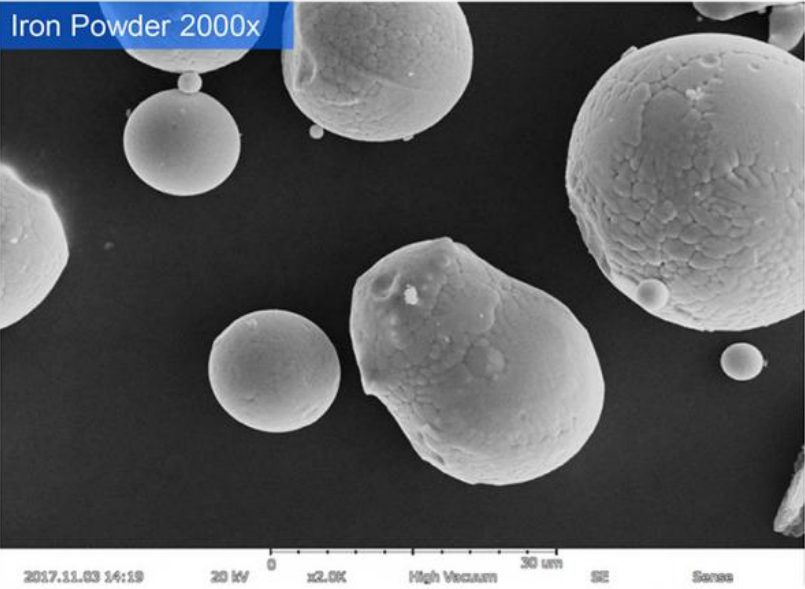
1. Simple and convenient UI structure, maximum convenience for operation.
2. Select various functions in order from top to bottom.
3. The full mouse drag operation supports the function of adjusting the magnification by adjusting the pulley in the display box.



The secondary electron image and the backscattered electron image can be collected at the same time to realize the analysis of the sample morphology and element contrast; in addition, the EDS detector can be selected to quickly analyze the types and distribution of elements contained in the material.

## Sample Images

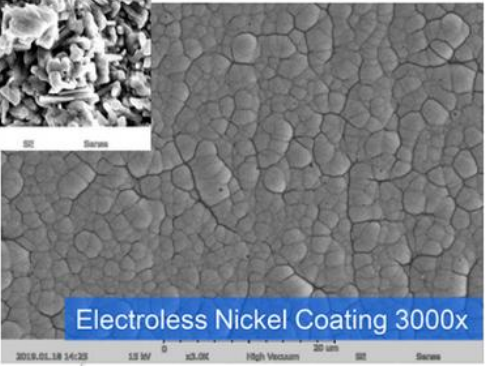
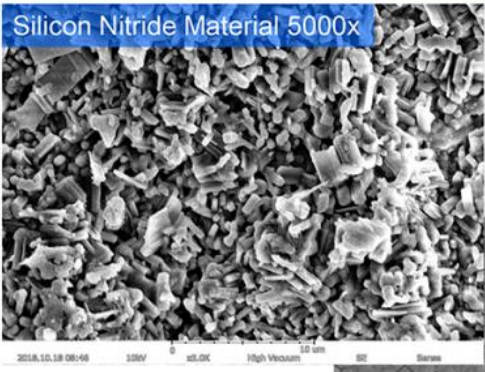




**Detail**

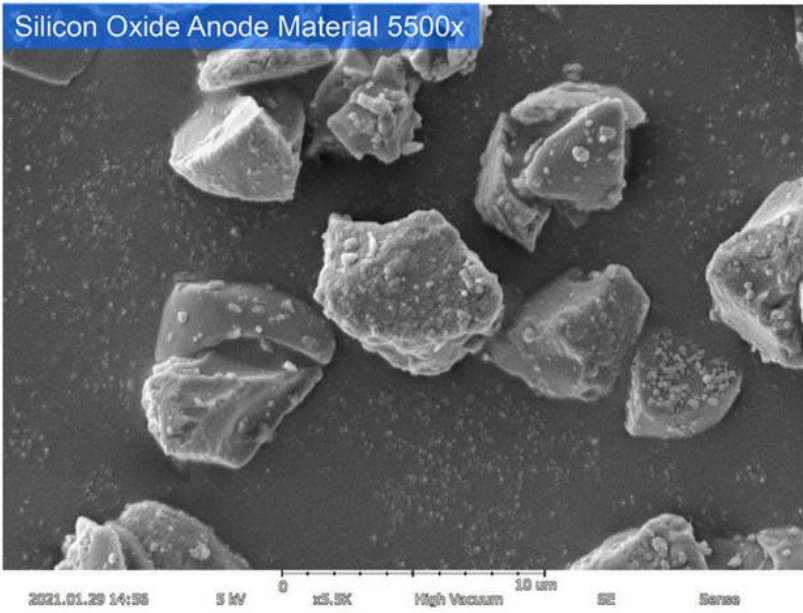


**Applications**

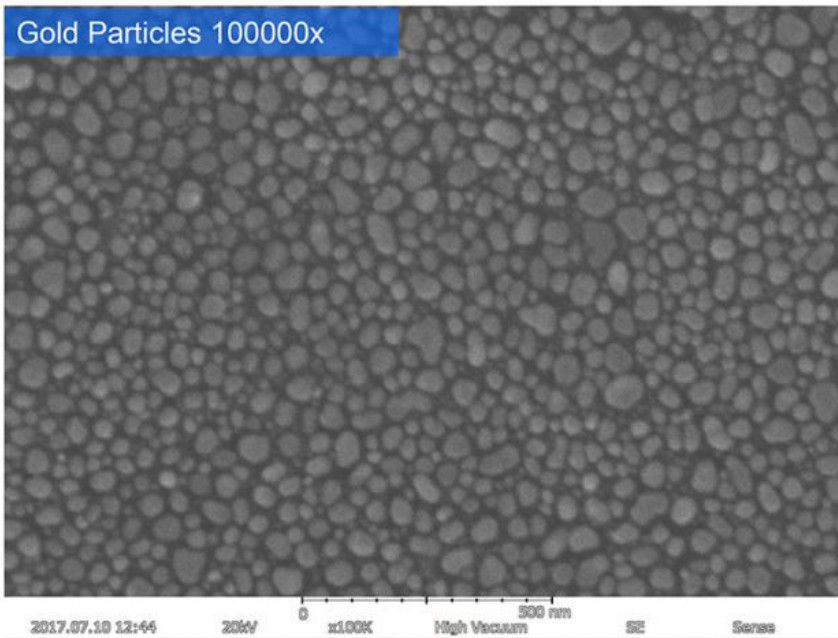


## Sample Images

Silicon Oxide Anode Material 5500x

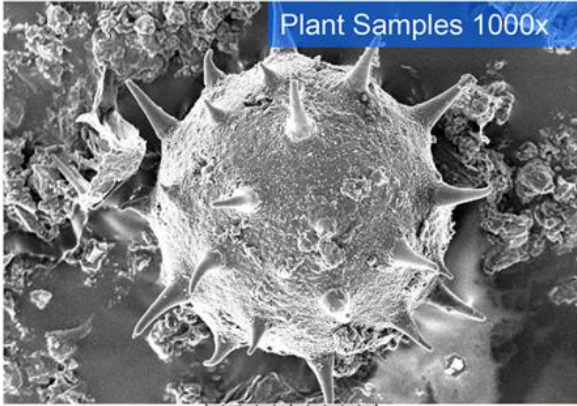


Gold Particles 100000x

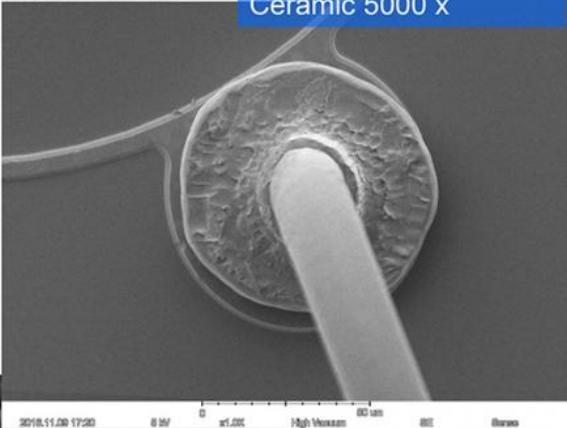


Sample Images

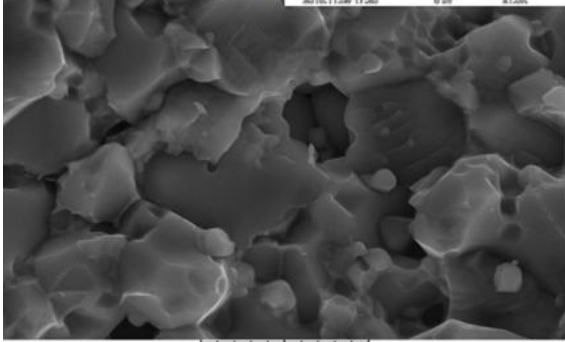
Plant Samples 1000x



Ceramic 5000 x



LED Lead 1000x





Tungsten Filament Scanning Electron Microscope (SEM)		
	A63.7006	A63.7015
Resolution	15nm@30KV(SE)	5nm@30KV(BSE)
Magnification	20x~60000x	20x~150000x
Electron Gun	Pre-Centered Tungsten Filament Cartridge, Bias Voltage Auto System	
Voltage	Accelerating Voltage 1KV to 30KV, 1KV/5KV/10KV/15KV/20KV/30KV-6 Steps	
Lens System	2-Stage Electromagnetic Condenser Lens, 1-Stage Electromagnetic Objective Lens	
Aperture	-	Adjustable Iris Diaphragm 30/50/50/100um, Change Electro Beam To Get High Resolution Image
Vacuum System	Rotary Pump, 100Liters/min Turbo Molecular Pump, 70Liters/sec Pump Down Ttime <3 Minutes Fully Auto Vacuum Control	
Detector	SE: Secondary Electron Detector BSE: Back Scattering Detector (Optional) EDS: (Optional)	
Specimen Working Stage	3 axis System,X, Y-axis : 35mm / R-axis : 360°	5-axis System , X, Y-axis : 35mm / R-axis : 360°, Z : 0~22mm / Tilt-axis : 0~45°
Max Specimen	70mm in Diameter, 30mm in Height	80mm in Diameter, 35mm in Height
Image Shift	X, Y Image Shift ±150um	
Image Scanning System	Fast Scan: 320x240 (Scan Time: 0.1 sec.) Slow Scan: 640x480 (Scan Time: 3 sec.) Photo Mode 1: 1280x960 Photo Mode 2: 2560x1920 Photo Mode 3: 5120x3840	
Image Format	BMP, JPEG, PNG, TIFF	
Auto Function	Auto Start, Auto Focus, Auto Brightness/Contrast	
Photo Display	Magnification, Detector type, Accelerating Voltage, Vacuum mode, Logo(Text), Date & Time, Text Marker, Scale Bar, etc.	
Computer & Software	PC Work Station Win 10 System, With Professional Image Analysis Software To Fully Control Whole SEM Microscope Operation, Computer Specification No Less Than Inter I5 3.2GHz, 4G Memory, 24" IPS LCD Monitor, 500G Hard Disk, Mouse, Keyboard	
Size & Weight	Microscope Body 460x600x950mm, Total Weight 95Kg	
A63.7006, A63.7015 Standard Tools & Parts Outfit		
1	Pre Centered Tungsten Filament	5 pcs/box
2	Sample Stage Dia. 15mm	10 pcs
3	Sample Stage Dia. 25mm	10 pcs
4	Sample Stage Dia. 15mm 45° Tilt	5pcs
5	Sample Stage Dia. 15mm 90° Tilt	5pcs
6	Height Standard Master	1 pc
7	Allen Wrench	1 set
8	SEM Software CD	1 pc
9	Carbon Conductive Tape)	1 pc
10	Scissors	1 pc
11	Aurilave	1 pc
12	Tweezers	1 pc



Opto-Edu (Beijing) Co., Ltd.

☎ 0086 13911110627

✉ sale@optoedu.com

🌐 cnoec.com

F-1501 Wanda Plaza, No. 18 Shijingshan Road, Beijing 100043, China