



OPTO-EDU (BEIJING) CO., LTD.

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

A63.7069

Tungsten Filament
Scanning Electron Microscope,
SED+BSDE+CCD, 8x~300000x

Quotation & After-sale Service



Quotation & Optional Accessories

Model	Configuration	Quantity	Price(USD)
A63.7069 Tungsten Filament SEM	➤ Resolution: 3nm@30KV(SE), 6nm@30KV(BSE) ➤ Magnification: 8x~300000x Negative True Magnification ➤ Electron Gun: Pre-Centered Tungsten Filament Cartridge ➤ Accelerating Voltage: 0~30KV, Continuous Adjustable, Adjust Step 100V@0-10Kv, 1KV@10-30KV ➤ One Key Quick View Image Function ➤ Three-levels Electromagnetic Tapered Lens System ➤ 3 Molybdenum Objective Apertures, Adjustable Outside Of Vacuum System, No Need Disassemble Objective To Change Aperture ➤ Vacuum System: ● 1 Turbo Molecular Pump ● 1 Mechanical Pump Sample Room Vacuum >2.6E-3Pa Electron Gun Room Vacuum >2.6E-3Pa Fully Auto Vacuum Control Vacuum Interlock Function ➤ Detector: ● SE: High Vacuum Secondary Electron Detector (With Detector Protection) ● BSE: Semiconductor 4 Segmentation Back Scattering Detector ● CCD: Infrared CCD Camera ➤ Extend Ports: 2 Extend Ports On Sample Room For EDS, BSD, WDS etc. ➤ Specimen Stage: 5 Axes Stage, 4 Auto +1 Manual Control Travel Range: X=70mm, Y=50mm, Z=45mm, R=360°, T=-5°~+90° (Manual), Touch Alert & Stop Function ➤ Max Specimen: Dia.175mm, Height 35mm ➤ Image System: Real Still Image Max Resolution 4096x4096 Pixels, Image File Format: BMP(Default), GIF, JPG, PNG, TIF ➤ 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 ➤ Photo Display: The Image Level Is Rich And Meticulous, Showing Real Time Magnification, Ruler, Voltage, Gray Curve	1(Set)	\$93,750.0
A63.7069-LV Tungsten Filament SEM(LV) (Optional Model)	➤ Vacuum System: 1 Turbo Molecular Pump 2 Mechanical Pump Low Vacuum Range 10~270Pa For Quick Switch in 90 Seconds For BSE(LV) ➤ Detector: ● SE: High Vacuum Secondary Electron Detector (With Detector Protection) ● BSE(LV): Semiconductor 4 Segmentation Back Scattering Detector ● CCD: Infrared CCD Camera ➤ All Other Specification Same As A63.7069	1(Set)	\$120,880.0

Optional Accessories		Quantity	Price(USD)
A50.7002 EDS Energy Dispersive X-Ray Spectrometer	➤ Silicon Nitride (Si3N4) 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 2 Chip.	1(Set)	\$55,000.0
A50.7011 Sputter Coater	➤ Glass processing chamber: \$ 100mm; 130mm High. ➤ Specimen stage size: \$ 40mm(Hold 6 specimen cups) ➤ Golden target size: \$ 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.	1(Set)	\$4,450.0

A63.7069 Standard Consumables Outfit			
1	Tungsten Filament	Pre-centered, Imported	1 Box (5 pcs)
2	Sample Cup	Dia.13mm	5 Pcs
3	Sample Cup	Dia.32mm	5 Pcs
4	Carbon Double-sided Conductive Tape	6mm	1 Package
5	Vacuum Grease		10 Pcs
6	Hairless Cloth		1 Tube
7	Polishing Paste		1 Pc
8	Sample Box		2 Bags
9	Cotton Swab		1 Pc
10	Oil Mist Filter		1 Pc
A63.7069 Standard Tools & Parts Outfit			
1	Inner Hexagon Spanner	1.5mm~10mm	1 Set
2	Tweezers	Length 100-120mm	1 Pc
3	Slotted Screwdriver	2*50mm, 2*125mm	2 Pcs
4	Cross Screwdriver	2*125mmm	1 Pc
5	Diaphragm Remover		1 Pc
6	Cleaning Rod		1 Pc
7	Filament Adjustment Tool		1 Pc
8	Filament Adjusting Gasket		3 Pc
9	Tube Extractor		1 Pc

A63.7069 Software Main Function		
High pressure regulation	Vertical line scan	Potential shift regulation
Filament current regulation	Condenser adjustment	Multi scale measurement
Astigmatic adjustment	Electric to central adjustment	Automatic brightness / contrast
Brightness adjustment	Objective lens adjustment	Auto focus
Contrast adjustment	Photo Preview	Automatic astigmatism elimination
Magnification adjustment	Active ruler	Automatic filament adjustment
Selected area scanning mode	4 Scanning speed setting	Management of parameters
Point scanning mode	Objective lens inversion	Image snapshot, image freezing
Surface scanning	Condenser reversal	One Key Quick View
Horizontal line scanning	Electric rotation adjustment	

Working Condition, Requirement For Installation

1. Applications:

SEM is mainly applied to the specimen surface appearance analysis. It is equipped with energy spectrum which is used for composition analysis and equipped with a small ion sputtering apparatus to help with sample surface treatment.

2. Power Supply Requirements:

2.1 Voltage: AC 220V $\pm$ 10%, 50Hz $\pm$ 1 Hz, standard sine wave.

2.2 It is not recommended to share the power supply line with the instrument for equipment with high power and large power consumption change.

2.3 Three power sockets needed for:

1. Scanning electron microscope instrument body, computer: AC 220V, 50Hz, 16A
2. Mechanical pump and air compressor: AC 220V, 50Hz, 16A

3. Environmental Requirements For Installation Site:

3.1 It is recommended to keep the temperature between 16~30° C

3.2 The relative humidity shall be less than 60%

3.3 Recommend configuration: air conditioner, dehumidifier and other equipment that can ensure the temperature and humidity of the laboratory.

3.4 Noise: < 68 DB

3.5 The durability of the instrument operation: continuously working

4. A63.7069 Instrument Dimension & Weight

Microscope Body 800x800x1850mm

Working Table 1340x850x740mm

Total Weight 400Kg

The floor bearing capacity should $\geq$ 250kg/m³, and it is recommended to place it on the first floor

5. A63.7069 Packaging Dimension & Weight

1 Set in 3 Wooden Boxes:

110*110*158(cm) *1

127*115*136(cm) *1

160*80*111 (cm) *1

Total Volume 5.3189CBM, Total G.W. 872 kg

Consumable Items & Operation Cost

Periodic Replacement

	A63.7069	A63.7080	A63.7081
Filament	150-200 hours	15000 Hours	15000 Hours
Objective Aperture	Three aperture in each piece (Molybdenum) Exchange 1-2 years	One aperture in each piece (Platinum) Exchange 1-2 years	One aperture in each piece (Platinum) Exchange 1-2 years
Mechanical Pump Oil	1 Liter 1 Year	1 Liter 1 Year	1 Liter 1 Year

Consumable Item

	Brand	Unit	Length	Duration
Carbon conductive Tape	SPI-6	Tape	20m	-
Cooper Conductive Tape	SPI-6	Tape	20m	-
Polishing Paste	SPI	Tube	100ml	2 Years
Vacuum Grease		Box	50ml	2 Years

Basic Operating Cost

	A63.7069	A63.7080.A63.7081
Electric Power	Turn off any time	7/24 hours Operating
Filament	150-200 hours	15000 hours
Conducting Tape	Depends on the usage	Depends on the usage

After-sale Service

- Standard 1 Year Warranty Included
- Extend Warranty 1 Year Cost 12% of Sales Contrast Amount
- On-Site Installation Cost USD6000.0 For 5+2 Days
- On-Site Maintenance Cost USD4500.0 For 3+2 Days
- Free Training for Visiting Customer in Beijing Included (Round Trip Ticket & Lodging Fee Not Included)
- Consumables Items & Accessories Available For All Life Time of Machine

	Service	Visit	Expense Coverage	Price
Standard Warranty	● One Year Warranty After Complete On-site Installation ● Quality Faulty Parts Free Replacement & Shipping ● Artificially Damaged Parts Replacement & Shipping Cost Bear By User		● Quality Faulty Parts Cost & Shipping Charge User Need To Pay: ● Artificially Damaged Parts Cost & Shipping Charge	Free
Extend Warranty	● One Year Warranty After Complete On-site Installation ● Quality Faulty Parts Free Replacement & Shipping ● Artificially Damaged Parts Replacement & Shipping Cost Bear By User		● Quality Faulty Parts Cost & Shipping Charge User Need To Pay: ● Artificially Damaged Parts Cost & Shipping Charge	12% of Contract Amount
On-Site Installation	● On-site Installation ● On-site Training ● Actual stay days can be extended upon user's request with extra charge paid	At least 5 working days, plus 2 days for travelling	● Labor Cost User Need To Pay: ● Round Trip Air ticket ● Boarding/Lodging ● Local Transportation	\$6000.0
On-Site Maintenance	● On-site Maintenance, Repairing, Moving Instrument ● On-site Training ● Actual stay days can be extended upon user's request with extra charge paid	At least 3 working days, plus 2 days for travelling	● Labor Cost User Need To Pay: ● Round Trip Air ticket ● Boarding/Lodging ● Local Transportation	\$4500.0