

**Carton**

# *Stereo Microscopes*

*SHOP MICROSCOPE*

*INDUSTRIAL MICROSCOPE SYSTEM*

*METALLURGICAL MICROSCOPE*

*BIOLOGICAL MICROSCOPE*



BUREAU VERITAS  
Certification



Carton optical (siam) Co., Ltd.  
is certified to be in accordance  
with requirements of ISO 9001 and ISO 14001

# STEREO ZOOM MICROSCOPES Binocular type **SPZ-50J** SERIES

**NEW** ESD COLOR

Carton flagship model **SPZ-50J** series features 6.7x to 50x magnifications with the highest zoom ratio 7.5:1 in this class, 108mm long working distance and 17mm high eye point. The magnification range can be extended down to 3.35x and up to 200x with optional lenses when necessary. The sharp, crisp and clear images are achieved even at the edge of wide field of view with superior optics and craftsmanship mechanisms. The **SPZ-50J** offers excellent performance ideal for visual inspection, precision assembly and observation works in all applications.

## SPZ-50JPFM-LED-M

*Stand Type PFM*  
Large stage pole stand  
with mid-positioned LED ring light



## SPZ-50JSB-PSB-T-M

*Stand Type SB*  
Small stage pole stand  
with mid-positioned LED ring light  
and separate power controller



## SPZ-50JPFM-X

*Stand Type P*  
Large stage pole stand  
without light



## SPZ-50JUN-PSB-T-M

*Stand Type UN*  
Universal boom stand  
with mid-positioned LED ring light  
and separate power controller



## SPZ-50JPITF-LED

*Stand Type PITF*  
Large stage pole stand  
with LED ring light  
Transmitted & Incident  
Lights are built in the stand  
\* with mid-positioned LED ring light \*



Models	SPZ-50JPFM-LED-M	SPZ-50JSB-PSB-T-M	SPZ-50JPFM-X	SPZ-50JUN-PSB-T-M	SPZ-50JPITF-LED
Magnification	6.7x to 50x (field of view : 34.3mm to 4.6mm)				
Objective Lenses	0.67x to 5.0x (zoom ratio : 7.5:1)				
Eyepieces	Wide Field 10x (DHW10x), Field Number 23				
Optical Body	360 degrees rotatable binocular type, 45 degrees inclined eyepiece tubes				
Working Distance	108mm				
Interpupillary Distance	52mm to 75mm				
Diopter Adjustment	+/- 7.2D on both eyepiece tubes				
Stand (Height)	Pole type (300mm)	Pole type (300mm)	Pole type (300mm)	Universal boom type (490mm)	Pole type (300mm)
Incident Illumination	Built-in LED ring light with intensity control	LED with intensity control supply box	Nil	LED with intensity control supply box	Built-in LED ring light with intensity control
Transmitted Light					Fluorescent Lamp 5W
Stage plate					Round plastic stage (Ø = 80mm)
Base Size	220mm x 284mm	144mm x 260mm	220mm x 284mm	230mm x 230mm	180mm x 265mm
Overall Height	328mm	328mm	328mm	544mm	328mm
Net Weight	5.6kg	5.0kg	4.9kg	24.4kg	5.6kg
Accessories	Rubber eyeguards, Tension control pin, Dust cover				

Same as the **SPZ-50J** series, but the **SPZT-50J/SPZV-50J** series has a vertical C mount tube to accept a C mount CCD/CMOS camera and the click stop mechanism incorporated into zoom knobs to ensure re-positioning at each magnification during zooming. The **SPZV-50J** is a "Multi-View" model with a beam splitter enabling simultaneous observation through eyepieces and on monitor screen.

# STEREO ZOOM MICROSCOPES Trinocular type **SPZT-50J/SPZV-50J** SERIES

**NEW** ESD COLOR

## SPZT-50JPFM-LED-M SPZV-50JPFM-LED-M

*Stand Type PFM*  
Large stage pole stand  
with mid-positioned LED ring light



## SPZT-50JSB-PSB-T-M SPZV-50JSB-PSB-T-M

*Stand Type SB*  
Small stage pole stand  
with mid-position LED ring light  
and separate power controller



## SPZT-50JPFM-X SPZV-50JPFM-X

*Stand Type P*  
Large stage pole stand  
without light



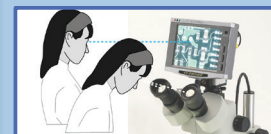
## SPZT-50JUN-PSB-T-M SPZV-50JUN-PSB-T-M

*Stand Type UN*  
Universal boom stand  
with mid-positioned LED ring light  
and separate power controller



## SPZT-50JPITF-LED SPZV-50JPITF-LED

*Stand Type PITF*  
Large stage pole stand  
with LED ring light  
Transmitted & Incident  
Lights are built in the stand  
\* with mid-positioned  
LED ring light \*



Multi-view function

Models	SPZT-50JPFM-LED-M / SPZV-50JPFM-LED-M	SPZT-50JSB-PSB-T-M / SPZV-50JSB-PSB-T-M	SPZT-50JPFM-X / SPZV-50JPFM-X	SPZT-50JUN-PSB-T-M / SPZV-50JUN-PSB-T-M	SPZV-50JPITF-LED / SPZV-50JPITF-LED
Magnification	6.7x to 50x (field of view : 34.3mm to 4.6mm)				
Objective Lenses	0.67x to 5.0x (zoom ratio : 7.5:1)				
Eyepieces	Wide Field 10x (DHW10x), Field Number 23				
Optical Body	360 degrees rotatable trinocular type, 45 degrees inclined eyepiece tubes, vertical C mount tube, (SPZV : Multi-Viewing)				
Working Distance	108mm				
Interpupillary Distance	52mm to 75mm				
Diopter Adjustment	+/- 7.2D on both eyepiece tubes & 4mm on vertical tube				
Stand (Height)	Pole type (300mm)	Pole type (300mm)	Pole type (300mm)	Universal type (490mm)	Pole type (300mm)
Incident Illumination	Built-in LED ring light with intensity control	LED with intensity control supply box	Nil	LED with intensity control supply box	Built-in LED ring light with intensity control
Transmitted Light					Fluorescent Lamp 5W
Stage plate					Round plastic stage (Ø= 80mm)
Base Size	220mm x 284mm	144mm x 260mm	220mm x 284mm	230mm x 230mm	180mm x 265mm
Overall Height	328mm	328mm	328mm	544mm	328mm
Net Weight	5.7kg	5.2kg	4.9kg	24.4kg	5.6kg
Accessories	Rubber eyeguards, Tension control pin, Dust cover				

# STEREO ZOOM MICROSCOPES

## Binocular type

### DSZ-44J SERIES

**NEW** ESD COLOR

The **DSZ-44J** series features 10x to 44x (zoom ratio 4.4:1) magnification with 90mm working distance necessary and sufficient for every application. The magnification can be extended up to 140.8x with optional lenses.

#### DSZ-44JPFM-LED

*Stand Type PFM*  
Large stage pole stand  
with LED ring light



#### DSZ-44JPITF-LED

*Stand Type PITP*  
Large stage pole stand  
with LED ring light  
Transmitted & Incident  
Lights are built in the stand



#### DSZ-44JPFM-LED

*Stand Type PFM*  
Large stage pole stand  
with LED ring light



#### DSZ-44JUN-PSB-T

*Stand Type UN*  
Universal boom stand  
with LED ring light  
and separate power controller



#### DSZ-44JBRF-LED

*Stand Type T*  
Incident Light : LED 6w  
Transmitted Light : Fluorescent Lamp 5w



Models	DSZ-44JPFM-LED	DSZ-44JPITF-LED	DSZ-44JPFM-LED	DSZ-44JUN-PSB-T	DSZ-44JBRF-LED
Magnification	10x to 44x (field of view : 23mm to 5.2mm)				
Objective Lenses	1.0x to 4.4x (zoom ratio : 4.4:1)				
Eyepieces	Wide Field 10x (DSW10x), Field Number 23				
Optical Body	360 degrees rotatable binocular type, 45 degrees inclined eyepiece tubes				
Working Distance	90mm				
Interpupillary Distance	52mm to 75mm				
Diopter Adjustment	± 7.2D on both eyepiece tubes				
Stand (Height)	Pole type (300mm)	Pole type (300mm)	Pole type (300mm)	Universal boom type (490mm)	Regular type
Incident Illumination	Built-in LED ring light with intensity control	Built-in LED ring light with intensity control	Built-in LED ring light with intensity control	LED with intensity control supply box	Built-in LED ring light with intensity control
Transmitted Light		Fluorescent Lamp 5W			Fluorescent Lamp 5W
Stage plate		Round plastic stage (Ø = 80mm)			Frosted glass plate (Ø = 80mm) Frosted blue filter (Ø = 37mm)
Base Size	220mm x 284mm	180mm x 265mm	220mm x 284mm	230mm x 230mm	160mm x 219mm
Overall Height	328mm	354mm	328mm	544mm	352mm [DSZT: 379mm]
Net Weight	5.4kg	5.6kg	5.4kg	23.9kg	4.4kg [DSZT: 4.7kg]
Accessories	Rubber eyeguards, Tension control pin, Dust cover				



Same as the **DSZ-44J** series, but the **DSZT-44J** has a vertical photo-tube for photomicrography and screen observation with cameras, while the **DSZV-44CT** has a vertical CS mount tube to accept a CS mount CCD/CMOS camera, and its "Multi-View" function for simultaneous observation through eyepieces and on monitor screen.

## STEREO ZOOM MICROSCOPES

Trinocular type

**DSZT-44J/DSZV-44CT SERIES**

NEW

ESD COLOR

### DSZT-44JPFM-LED

*Stand Type PFM*  
Large stage pole stand  
with LED ring light



### DSZV-44CTPFM-LED

*Stand Type PFM*  
Large stage pole stand with LED ring light



### DSZV-44CTPITF-LED

*Stand Type PITF*  
Large stage pole stand  
with LED ring light  
Transmitted & Incident  
Lights are built in the stand



### DSZT-44JBRF-LED

*Stand Type T*  
Incident Light : LED 6w  
Transmitted Light : Fluorescent Lamp 5w



### DSZV-44CTUN-PSB-T

*Stand Type UN*  
Universal boom stand  
with LED ring light  
and separate power controller



Multi-view function

### PT-24U001

*C mount tube for*  
1/2 CCD/CMOS  
(Option for DSZV-44CT series)



Models	DSZT-44JPFM-LED	DSZV-44CTPFM-LED	DSZV-44CTPITF-LED	DSZT-44JBRF-LED	DSZV-44CTUN-PSB-T
Magnification	10x to 44x (field of view : 23mm to 5.2mm)				
Objective Lenses	1.0x to 4.4x (zoom ratio : 4.4:1)				
Eyepieces	Wide Field 10x (DSW10x), Field Number 23				
Optical Body	DSZT : 360 deg. rotatable trinocular type, 45 deg. inclined eyepiece tubes, vertical photo-tube DSZV : 360 deg. rotatable trinocular type, 45 deg. inclined eyepiece tubes, vertical CS mount tube for 1/3 CCD/CMOS, Multi-Viewing				
Working Distance	90mm				
Interpupillary Distance	52mm to 75mm				
Diopter Adjustment	DSZT : +/- 7.2D on both eyepiece tubes & 12mm on vertical tube / DSZV : +/- 7.2D on both eyepiece tubes & 4.7mm on vertical tube				
Stand (Height)	Pole type (300mm)	Pole type (300mm)	Pole type (300mm)	Regular type	Universal type (490mm)
Incident Illumination	Built-in LED ring light with intensity control				LED with intensity control supply box
Transmitted Light			Fluorescent Lamp 5W		
Stage plate			Round plastic stage (φ = 80mm)	Frosted glass plate (φ = 80mm) Frosted blue filter (φ = 37mm)	
Base Size	220mm x 284mm	220mm x 284mm	180mm x 265mm	160mm x 219mm	230mm x 230mm
Overall Height	328mm	328mm	354mm	379mm	544mm
Net Weight	5.6kg	5.6kg	5.6kg	4.7kg	DSZV:24.1kg
Accessories	Rubber eyeguards, C-Dust cover, Tension control pin,				

# STEREO ZOOM MICROSCOPES

## Binocular type

### DSZ-70J SERIES

The **DSZ-70J** series is the high zoom magnification model featuring 20x - 70x (zoom ratio 3.5:1) and the working distance of 80mm, designed for observations, inspections and works especially of fine parts.

#### DSZ-70JPFM-LED-M

*Stand Type PFM*  
Large stage pole stand  
with mid-positioned LED ring light



#### DSZ-70JSB-PSB-T-M

*Stand Type SB*  
Small stage pole stand  
with mid-positioned LED ring light  
and separate power controller



#### DSZ-70JBRF-LED

*Stand Type T*  
Incident Light : LED 6w  
Transmitted Light : Fluorescent Lamp 5w



#### DSZ-70JPITF-LED

*Stand Type PITF*  
Large stage pole stand  
with LED ring light  
Transmitted & Incident  
Lights are built in the stand



#### DSZ-70JUN

*Stand Type UN*  
Universal boom stand without light



Models	DSZ-70JPFM-LED-M	DSZ-70JSB-PSB-T-M	DSZ-70JBRF-LED	DSZ-70JPITF-LED	DSZ-70JUN
Magnification	20x to 70x (field of view : 10mm to 2.8mm)				
Objective Lenses	2.0x to 7.0x (zoom ratio : 3.5:1)				
Eyepieces	Wide Field 10x (DSW10xZ), Field Number 20				
Optical Body	360 degrees rotatable binocular type, 45 degrees inclined eyepiece tubes				
Working Distance	80mm				
Interpupillary Distance	52mm to 75mm				
Diopter Adjustment	+/- 7.2D on both eyepiece tubes				
Stand (Height)	Pole type (300mm)	Pole type (300mm)	Regular type	Pole type (300mm)	Universal boom type (490mm)
Incident Illumination	Built-in LED ring light with intensity control	LED with intensity control supply box	Built-in LED ring light with intensity control	Built-in LED ring light with intensity control	Nil
Transmitted Light			Fluorescent Lamp 5W	Fluorescent Lamp 5W	
Stage plate			Frosted glass plate (Φ = 80mm) Frosted blue filter (Φ = 37mm)	Round plastic stage (Φ = 80mm)	
Base Size	220mm x 284mm	144mm x 260mm	160mm x 219mm	180mm x 265mm	230mm x 230mm
Overall Height	328mm	328mm	352mm	354mm	544mm
Net Weight	5.7kg	5.2kg	4.5kg	5.6 kg	21.4kg
Accessories	Rubber eyeguards, Tension control pin, Dust cover				

Same as the DSZ-70J series, but the **DSZT-70J** series is the trinocular type with vertical photo-tube for photomicrography or TV micrography.

# STEREO ZOOM MICROSCOPES Trinocular type **DSZT-70J SERIES**

## DSZT-70JPFM-LED-M

*Stand Type PFM*  
*Large stage pole stand*  
*with mid-positioned LED ring light*



## DSZT-70JSB-PSB-T-M

*Stand Type SB*  
*Small stage pole stand*  
*with mid-positioned LED ring light*  
*and separate power controller*



## DSZT-70JPFM-X

*Stand Type P*  
*Large stage pole stand without light*



## DSZT-70JUN-PSB-T-M

*Stand Type UN*  
*Universal boom stand*  
*with mid-positioned LED ring light*  
*and separate power controller*



## DSZT-70JBRF-LED

*Stand Type T*  
*Incident Light: LED 6w*  
*Transmitted Light: Fluorescent Lamp 5w*



Models	DSZT-70JPFM-LED-M	DSZT-70JSB-PSB-T-M	DSZT-70JPFM-X	DSZT-70JUN-PSB-T-M	DSZT-70JBRF-LED
Magnification	20x to 70x (field of view : 10mm to 2.8mm)				
Objective Lenses	2.0x to 7.0x (zoom ratio : 3.5:1)				
Eyepieces	Wide Field 10x (DSW10xZ), Field Number 20				
Optical Body	360 degrees rotatable trinocular type, 45 degrees inclined eyepiece tubes, vertical photo tube				
Working Distance	80mm				
Interpupillary Distance	52mm to 75mm				
Diopter Adjustment	+/- 7.2D on both eyepiece tubes & 12mm on vertical tube				
Stand (Height)	Pole type (300mm)	Pole type (300mm)	Pole type (300mm)	Universal boom type (490mm)	Regular type
Incident Illumination	Built-in LED ring light with intensity control	LED with intensity control supply box	Nil	LED with intensity control supply box	Built-in LED ring light with intensity control
Transmitted Light					Fluorescent Lamp 5W
Stage plate					Frosted glass plate (Φ = 80mm) Frosted blue filter (Φ = 37mm)
Base Size	220mm x 284mm	144mm x 260mm	220mm x 284mm	230mm x 230mm	160mm x 219mm
Overall Height	325mm	328mm	328mm	544mm	352mm
Net Weight	5.7kg	5.2kg	4.9kg	24.1kg	4.7kg
Accessories	Rubber eyeguards, Tension control pin, Dust cover, Photo-eyepiece with ring				

# STEREO MICROSCOPES

## Binocular type

### NSW SERIES

The **NSW** series is the economical model having a dual magnification of 10x & 20x, 10x & 30x, 20x & 40x or 6x & 20x, or a single magnification of 10x or 20x. The NSW-620PG and NSW-620P (6x & 20x) offer the extremely wide field of view 38.3mm at 6x to aim at an object more easily in the field of view while more details can be observed at 20x.

#### NSW-((0.6/2), (12), (13)) PFM-LED

*Stand Type PFM*  
Large stage pole stand  
with LED ring light



#### NSW-24PFM-LED-M

*Stand Type PFM*  
Large stage pole stand  
with mid-positioned LED ring light



#### NSW-12PFM-X

*Stand Type P*  
Large stage pole stand  
without light



#### NSW-(0.6/2), (12),(13),(24) BRF-LED

*Stand Type T*  
Incident Illumination: Built-in LED ring light  
with intensity control.  
Transmitted Light:  
Fluorescent Lamp 5W



#### NSW-13PITF-LED

*Incident Illumination: Built-in LED ring light  
with intensity control.*  
*Transmitted Light:  
Fluorescent Lamp 5W*



Models	NSW-1	NSW-2	NSW-0.6/2	NSW-12	NSW-13	NSW-24
Magnification (Field of View)	10x (23mm)	20x (11.5mm)	6x(38.3mm) & 20x(11.5mm)	10x(23mm) & 20x(11.5mm)	10x(23mm) & 30x(7.6mm)	20x(11.5mm) & 40x(5.7mm)
Objective Lenses	1x	2x	0.6x & 2x	1x & 2x	1x & 3x	2x & 4x
Eyepieces	Wide Field 10x (DSW10X), Field Number 23					
Optical Body	360 degrees rotatable binocular type, 45 degrees inclined eyepiece tubes					
Working Distance	113.0mm	113.0mm	82.5mm	82.5mm	82.5mm	64.3mm
Interpupillary Distance	52mm to 75mm					
Diopter Adjustment	+/- 7.2D on left eyepiece tube					
Stand (Height)	Pole type (300mm)			Regular type	Pole type (300mm)	
Stand Type	PFM-LED	PFM-LED-M		BRF-LED	PITF-LED	PFM-X
Incident Illumination	Built-in LED ring light with intensity control					Nil
Transmitted Light	Nil			Fluorescent Lamp 5W		
Stage plate	Nil			Frosted glass plate (Ø=80mm) Frosted bule filter (Ø=37mm)	Round plastic stage (Ø=80mm)	Nil
Base Size	220mm x 284mm			160mm x 219mm	180mm x 265mm	220mm x 284mm
Overall Height	328mm			352mm	328mm	
Net Weigth	5.1kg		5.2kg	3.8kg	5.6kg	4.3kg
Accessories	Rubber eveguards, Tension control pin, Dust cover					



## NEWLY LAUNCHED

NEW

### PARALLEL OPTICS STEREO ZOOM MICROSCOPE



CPZ-60ST-PKTLE

- \* AFFORDABLE AND RELIABLE QUALITY
- \* EXCELLENT OPTICS CREATING SHARP, CRISP AND BRIGHT IMAGE AND DEEP FIELD OF VIEW
- \* HIGH COMPATIBILITY WITH ACCESSORIES AVAILABLE IN MARKET
- \* IDEAL FOR VARIOUS APPLICATION IN MANY INDUSTRIES.

Model	CPZ-60ST-PKTLE	CPZ-60ST-PE
Observation tube	Binocular tube, View inclination angle 30°	Binocular tube, View inclination angle 30°
Magnification	8.5x-60x	8.5x-60x
Eyeieces	10x (Field Number 22)	10x (Field Number 22)
Zoom microscope body	0.85x-6x (Zoom ratio 7:1)	0.85x-6x (Zoom ratio 7:1)
Objective lens	Plan Achromatic 1x	Plan Achromatic 1x
Working distance	94mm	94mm
Observable height	110mm	110mm
Stage plate (diameter)	100mm	100mm
Incident illuminator	SMD LED (70 pcs), Ring type, Dimmable	Nil
Transmitted illuminator	SMD LED (28 pcs), Dimmable	Nil
ESD safe	0	0
AC Adapter	Input : AC 100-240V 50/60Hz 0.4A Output : DC 24V 0.5A	Nil Nil
Base size (Width x Depth)	266.1MM x 193mm	266.1MM x 193mm
Weight: Microscope body / Stand	2.3kgs / 2.9kgs	2.3kgs / 2.5kgs
Optional accessories	CPZ-BS Light beam splitter, CPZ-PHA Photo adapter, CPZ-C035 C mount adapter 0.35x	

NEW

### STAND LED RING LIGHT, CHIP TYPE



SCW-PFM-LEDK

Model	SCW-PFM-LEDK
Stand (Height)	Pole type (300mm)
Incident Illumination	Built-in LED ring light with intensity control
Transmitted illuminator	SMD LED (70 pcs) , Ring type, Dimmable
AC Adapter	Input : AC 100-240V 50/60Hz 0.4A Output : DC 24V 0.5A
Base Size	220mm x 284mm
Overall Height	328mm
Net Weight	5.4kg

NEW

### LCD SCREEN CAMERA



XR 9024

Model	XR9024
Camera	CMOS, 2M pixels (1920 x 1080), 2.97mm x 5.28mm size, 30 fps
Monitor	11.6 inch IPS Color LCD, Full HD (1920 x 1080), Tilttable up to 90°
Mount type	C mount (with 5mm ring) and CS mount
SDHC card slot	1 (SDHC card is not included.)
USB Port	2 (1 for mouse, 1 for connection with PC)
Functions	Parameter Adjustment / View Control / Image Saving / Grid Control Image process and measurement (option)
Accessories	Wireless Mouse / USB Cable
Options	DP5-A Eyepiece Adapter DP5-SP Image Process & Measurement Software (for Win 7,8 and10)



# OPTIONAL ACCESSORIES

## Eyepieces



### DHW10X

10x F.N. 23  
(for SPZ-50J / SPZT-50J / SPZV-50J)

### DSW10X

10x, F.N. 23  
(for DSZ-44J / DSZT-44J / DSZV-44CT / NSW)



### DHW15X

15x, F.N. 15  
(for SPZ-50J)

### DSW15X

15x, F.N. 15  
(for DSZ-44J / NSW)



### DHW20X

20x, F.N. 11.4  
(for SPZ-50J)

### DSW20X

20x, F.N. 11.4  
(for DSZ-44J / NSW)

## Focusing Eyepieces 10x with Reticle



### DFHW10X

F.N.23  
(for SPZ-50J)



### DFSW10X

F.N.23  
(for DSZ-44J / NSW)

**DFHW10X10/100 • DFSW10X10/100**  
with 10:100mm scale

**DFHW10X5/100 • DFSW10X5/100**  
with 5:100mm scale

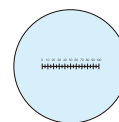
**DFHW10XH10/20 • DFSW10XH10/20**  
with 20x20 0.5mm squares

**DFHW10XH10/10 • DFSW10XH10/10**  
with 10x10 1mm squares

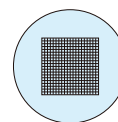
**DFHW10XH5/5 • DFSW10XH5/5**  
with 5x5 1mm squares

**DFHW10XCROSS • DFSW10XCROSS**  
with 10:100mm scale and cross line

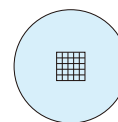
**DFHW10XLINE • DFSW10XLINE**  
with cross line



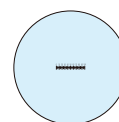
10:100mm scale



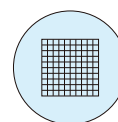
20x20 0.5mm squares



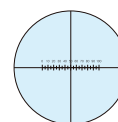
5x5 1mm squares



5:100mm scale



10x10 1mm squares



10:100mm scale  
with cross line

## Auxiliary Objective Lenses & Objective Lens Covers

0.45x/0.5x/0.75x/0.7x lenses reduce magnifications and extend working distances while 1.6x/2x lenses increase magnifications and shorten working distances.



### NSAL0.45X

0.45x

(not available with SPZ-50J/SPZT-50J/  
SPZV-50J with pole type stand)

### NSAL0.5X

0.5x



### NSAL1.6X

1.6x

### NSAL2X

2x

(available with  
SPZ-50J/SPZT-50J/SPZV-50J only)

### NSAL0.75X

0.75x

### NSAL0.7X

0.7x

### PT-20U008

Objective lens cover

### RM-1/18M

Objective lens cover with screw threads on both sides



## Optical Data for SPZ-50J / SPZT-50J / SPZV-50J

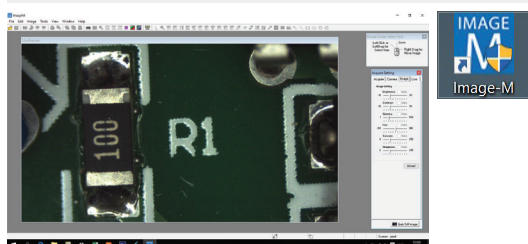
Eyepiece	DHW10X (F.N.23)					DHW15X (F.N.15)					DHW20X (F.N.11.4)				
	Nil	0.5x	0.75x	1.6x	2x	Nil	0.5x	0.75x	1.6x	W/2x	Nil	0.5x	0.75x	1.6x	2x
Magnifications	6.7x-50x	3.35x-25x	5x-37.5x	10.72x-80x	13.4x-100x	10.05x-75x	5.02x-37.5x	7.53x-56.25x	16.08x-120x	20.1x-150x	13.4x-100x	6.7x-50x	10.05x-75x	21.44x-160x	26.8x-200x
Working Distance	108mm	225mm	132mm	50mm	41mm	108mm	225mm	132mm	50mm	41mm	108mm	225mm	132mm	50mm	41mm
Field of view	34.3-4.6mm	68.9-9.2mm	45.7-6.1mm	21.4-2.8mm	17.1-2.3mm	22.3-3mm	44.7-6mm	29.8-4mm	13.9-1.8mm	11.1-1.5mm	17-2.2mm	34-4.5mm	22.6-3mm	10.6-1.4mm	8.5-1.1mm

## Optical Data for DSZ-44J / DSZT-44J / DSZV-44CT

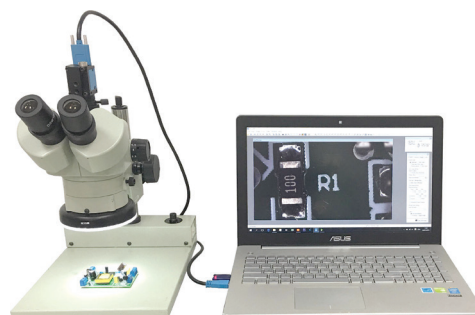
Eyepiece	DSW10X (F.N.23)				DSW15X (F.N.15)				DSW20X (F.N.11.4)			
	Nil	W/0.5x	W/0.75x	W/1.6x	Nil	W/0.5x	W/0.75x	W/1.6x	Nil	W/0.5x	W/0.75x	W/1.6x
Magnifications	10x-44x	5x-22x	7.5x-33x	16x-70.4x	15x-66x	7.5x-33x	11.25x-49.5x	24x-105.6x	20x-88x	10x-44x	15x-66x	32x-140.8x
Working Distance	90mm	150mm	105mm	45mm	90mm	150mm	105mm	45mm	90mm	150mm	105mm	45mm
Field of view	23-5.2mm	46-10.4mm	30.6-6.9mm	14.3-3.2mm	15-3.4mm	30-6.8mm	20-49.5mm	9.3-2.1mm	11.4-2.5mm	22.8-5.1mm	15.2-3.45mm	7.1-1.6mm

# OPTIONAL ACCESSORIES

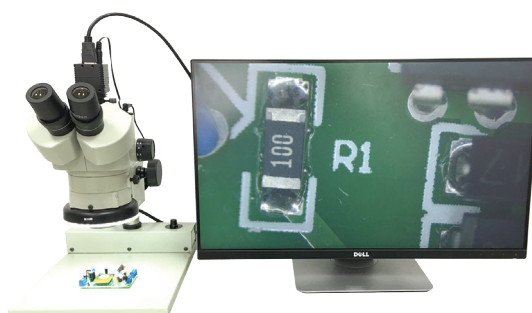
## USB/Digital Cameras



Model	DFK23
Image Sensor	1/2.5" CMOS
Resolution (RGB6 RGB24 RGB32 Y800 Y16)	2592x1944(5MP) 15 fps 1920x1080(2MP) 30 fps 1280x720(5MP) 60 fps
Exposure	Auto/Manual
White Balance	Auto/Manual
Mount Type	C mount
Interface	USB3.0
Application	Image-M Image Processing & Measurement Software
Measurement Tools	Distance, Rectangle, Ellipse, Polyline, Polygon, Angle, Radius, Point
OS	Windows XP / 7 / 8 (32 & 64 bit)

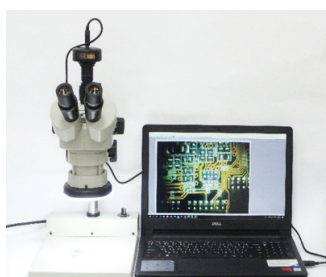


Model	STC-HD
Image Sensor	1/2.8" CMOS
Resolution	1920x1080 60 fps
Exposure	Auto/Manual
White Balance	Auto/Manual
Mount Type	C mount
Interface	HDMI
Application	Monitor
Measurement Tools	-
OS	-



## UCM-3100USB

A digital camera especially designed for a microscope, Fast Live Image, Fits Easily into any Laboratory



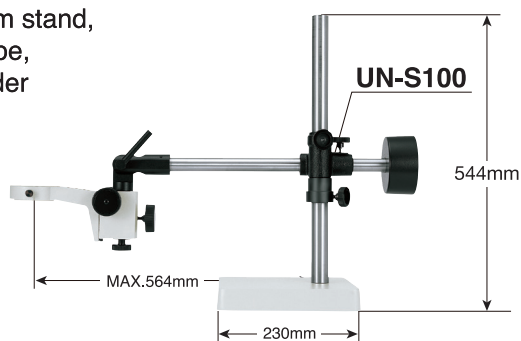
Model	UCM-3100USB
PC Interface	USB 2.0, support
Image Pickup Device	APTINA Super Color CMOS
Maximum Resolution	2048 x 1536 (3.1M pixels)
Frame Rate	11fps at 2048x1536, 50fps at 512x384
Video Mode	2048x1536, 1024x768, 640x480, 512x384
Image Sensor	1/2 inch color CMOS
Dynamic Range	75dB
Sensitivity	1.5V/lux-sec@550nm
Color	Max 1.64 million 24Bit Color
Color Mode	Color / Mono, R-G-B / B-G-R
Driver	Direct Show & Twain
Power Source	From USB 2.0 Port
Mount Type	C-mount
OS	Windows XP/Vista 7.8 (32&64 bit) Mac osx , Linux

## OPTIONAL ACCESSORIES

### Boom Stands

#### UN-S100

Universal boom stand,  
Single Arm Type,  
with body holder



#### UN-S200

Universal boom stand,  
Desk Clamp Type,  
with body holder

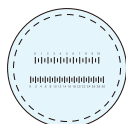


## SHOP MICROSCOPES



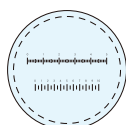
#### M1752

40x,  
scale 3.0mm/0.1"



#### M1754

100x,  
scale 1.0mm/0.05"



Model	M1752	M1754
Magnification (field of view)	40x (4.5mm)	100x (1.8mm)
Objective	4x	10x
Eyepiece	10x with scale	
Measuring Range	3.0mm/0.1"	1.0mm/0.05"
Minimum Graduation	0.02mm/0.001"	0.01mm/0.001"
Working Distance	15mm	5.5mm
Net Weight	580g	
Accessory	Penlight	

## INDUSTRIAL MICROSCOPES

### MacroViewScope Video Microscope System MVS SERIES



The MVS series offers easy observation on LCD monitor. All-in-one scope consisting of lens, camera, monitor and stand. High or low magnification simply selectable by rotating the lens. 2X and 4X optional lenses available to get more enlarged images.

Magnification	10x & 15x (on screen)	
Field of view	20mmx15mm & 13.3mmx10mm	
Working distance	145mm	
Screen	10 inch color LCD, 800x600 SVGA	
Camera (*)	1/4 type color CCD, 310000 pixels, PAL, BNC connector	
Stand	Pole type (300mm)	
Illumination	Built-in LED ring light with intensity control	Nil
Optional Accessories	MVS-2X Auxiliary objective lens 2x (WD 69mm)	
	MVS-4X Auxiliary objective lens 4x (WD 29mm)	

(\*) Replaceable with other cameras in your possession subject to the size within W50mm x L50mm



# INDUSTRIAL MICROSCOPES

## Monocular Zoom Microscope NXZ-10 SERIES



The **NXZ-10** functions as not only a zoom microscope but a zoom lens with C mount to pair with a C mount camera.

Model	NXZ-10 PFM-PSB-T
Magnification	7x - 45x (as microscope)
Objective Lens	0.7x - 4.5x (zoom ratio 6.4 : 1)
Eyepieces	Wide Field 10x, Field Number 18
Camera mount	C mount (replaceable with eyepiece)
Working Distance	93.7mm
Diopter Adjustment	6.25mm
Stands	Pole type
Incident Illumination	Nil
Optional Accessories	NNL-0.3X Auxiliary objective lens 0.3x (WD: 286mm)
	NNL-0.5X Auxiliary objective lens 0.5x (WD: 165mm)
	NNL-2X Auxiliary objective lens 2x (WD: 38mm)
	MIC-56A LED ring illuminator with adapter

## Metallurgical Microscopes CS SERIES



Model	CSD-MS4	CSD-MS-T4	CSD-MS-T5	CSD-MG-T5
Head	Binocular	Trinocular with photo-tube & C mount tube		
Eyepieces	WF10x (pair), Field Number 20			
Infinity Plan Achro	5x, 10x, 20x, 50x		5x, 10x, 20x, 50x, 100x	
Nosepiece	Quadruple (4-hole)		Quintuple (5-hole)	
Mechanical Stage	Without glass stage			With glass stage
Epi-illumination	6V/20W Halogen, Koehler with iris aperture and iris field diaphragms, center adjustable			
Transmitted Illu.	Nil			6V/20W Halogen
Filters	Blue, Yellow, Green and Ground glasses			
Options	Infinity Plan Achro Obj 4x, 5x, 10x, 20x, 40x, 50x, 80x, 100x			
	Eyepieces 12.5x/FN15 (pair)			
	Polarizing attachment			

## Biological Microscope CGT-15



Model	CGT-15
Head Type	Trinocular with 0.5x C mount tube
Eyepieces	WH10X, FN20
Objective Lenses	Plan 4x,10x,40x,100xR(oil)
Nosepiece	Inward quadruple (4-hole)
Substage	N.A.1.25 Abbe type with iris diaphragm
Stage	Rackless Mechanical Stage, Hard-coated
Focusing	Coaxial coarse and fine adjustment
Illumination	1W LED simple Koehler type

# INDUSTRIAL MICROSCOPES

## Biological Microscope CS SERIES



<b>Magnification</b>	40x-1500x
<b>Eyepieces</b>	WF10x FN18, WF15x FN15
<b>Objective Lenses</b>	4x, 10x, 40x, 100x
<b>Condenser</b>	ABBE type NA1.25 with iris diaphragm and filter holder
<b>Stage</b>	Size 141 x 131 mm adjustable length 75 x 50 mm
<b>Focusing</b>	Fine focus with stopper and tension control
<b>Illumination</b>	LED 3w with dimmer
<b>Accessories</b>	Green and white filter, cover, immersion oil

## CN SERIES



<b>Magnification</b>	40x-1000x
<b>Eyepieces</b>	WF10x FN18
<b>Objective Lenses</b>	4x, 10x, 40x, 100x
<b>Condenser</b>	ABBE type NA1.25 with iris diaphragm and filter holder
<b>Stage</b>	Size 134 x 125 mm adjustable length 70 x 30 mm
<b>Focusing</b>	Fine focus with stopper and tension control
<b>Illumination</b>	Day light LED 3w(temperature 6000k) with dimmer
<b>Accessories</b>	White filter, cover, fuse, immersion oil

## NDL SERIES



<b>Magnification</b>	40x-600x
<b>Eyepieces</b>	WF10x FN18, WF15x FN15
<b>Objective Lenses</b>	DIN Achromatic 4x, 10x, 40x
<b>Condenser</b>	ABBE type NA1.25 with iris diaphragm and filter holder
<b>Stage</b>	Size 125 x 115 mm adjustable length 80 x 62 mm
<b>Focusing</b>	Fine focus with stopper
<b>Illumination</b>	LED 1w with dimmer
<b>Accessories</b>	Green and white filter, cover

## Scale Loupes



### M1207

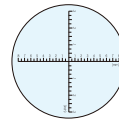
25mm, 7x, with 33mmφ scale #1, 2, 3 or 4  
4 glass lenses (4 elements), fully coated,  
12mm eye relief, in vinyl case  
57mm height, N.W.84g



### M1210

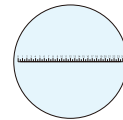
19mm, 10x, with 33mmφ scale #1, 2, 3 or 4  
2 glass lenses (3 elements), fully coated,  
12mm eye relief, in vinyl case  
35mm height, N.W.43g

### Scale Patterns



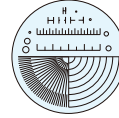
#### No.1

Increments in millimeters and inches  
Max: 16mm and 0.6"



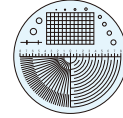
#### No.2

Increments in millimeters  
Max: 16mm



#### No.3

Increments in inches  
Angles, radius, diameters, widths, etc.



#### No.4

Increments in millimeters  
Angles, radius, diameters, widths, etc.

## Magnifying Lamp

### Desktop Clamp type



127mm, 3x, 5x, 8x, 10x glass lens  
LEDs, with AC adapter

### Table base type



#### M1242

125mm, 2x glass lens  
48 pcs. LEDs with AC adapter  
N.W. 3.8kg

#### M1243

125mm, 3.5x glass lens  
48 pcs. LEDs with AC adapter  
N.W. 3.7kg



#### X-Y Type

127mm  
3x, 5x, 8x, 10x  
glass lens  
LEDs, with AC adapter

## LED Loupes, pocketable type

### R7519

26mm, 10x glass lens  
\*) AAA cell battery x 3  
are not included.

### R7526

21mm, 15x glass lens  
\*) AAA cell battery x 3  
are not included.



## Professional Inspection Loupes

### R2450

18mm, 10x  
Steinheil triplet lens  
No coating for true color  
Resolution: 67 lines/mm

### R7520

18mm, 10x  
Triplet lens  
Resolution: 64 lines/mm



### R230

15mm, 18x  
Quadruplet lens

### R237

12mm, 20x  
Triplet lens



## LED Set **NEW** ESD COLOR AND LED CHIP TYPE

### Model PSB-T



Carton



Other

PK-S (NEW)

Input Voltage	100-240V A.C. 50/60Hz
Consume Power	5w/60LEDS
Color Temperature	7500K
Lamp Life	Greater than 20,000 hours
Operating Temperature	32 to 104 f (0 to 40 C)
Humidity Range	0 to 80% non-condensing
Mounling Diameler	70 mm
Adapter Dimensions	124x96x45mm
Adapter Shell Material	ABS Plastic



Transmitted illuminator	SMD LED (70 pcs) , Ring type, Dimmeble
AC Adapter	Input : AC 100-240V 50/60Hz 0.4A
	Output : DC 24V 0.5A



**Agent :**

**CARTON TRADING CO.,LTD.**

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