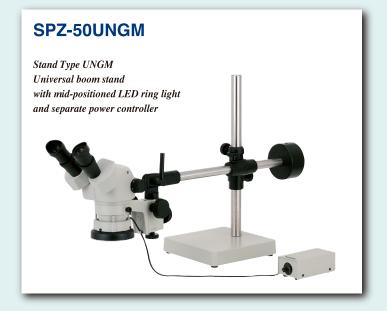
STEREO ZOOM MICROSCOPES Binocular type SPZ-50 SERIES

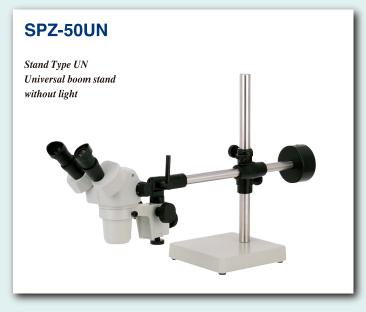
Carton flagship model **SPZ-50** series features 6.7x to 50x magnifications with the highest zoom ratio 7.5:1 in this class, 108mm long working distance and 17mm high eye point. The magnification range can be extended down to 3.35x and up to 200x with optional lenses when necessary. The sharp, crisp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











Models	SPZ-50PGM	SPZ-50SBGM	SPZ-50P	SPZ-50UNGM	SPZ-50UN						
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 (356mm)	Pole type (326mm)	Pole type (326mm)	Universal boom	type (544mm)						
Incident Illumination	Built-in LED ring ligh	t with intensity control	Nil	Built-in LED ring light with intensity control	Nil						
Base Size	220mm x 284mm	144mm x 260mm	220mm x 284mm	230mm x 230mm							
Overall Height	369mm	369mm	369mm	544mm	544mm						
Net Weight	5.5kg	5.0kg	4.9kg	23.4.kg	20.8kg						
Accessories		Rubber eyeguards, C-wrench, Dust cover									

Same as the **SPZ-50** series, but the **SPZT-50D/SPZV-50** 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-50** is a "Multi-View" model with a beam splitter enabling simultaneous observation through eyepieces and on monitor screen.

STEREO ZOOM MICROSCOPES Trinocular type SPZT-50D/SPZV-50 SERIES













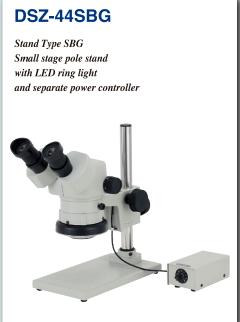
Multi-view function

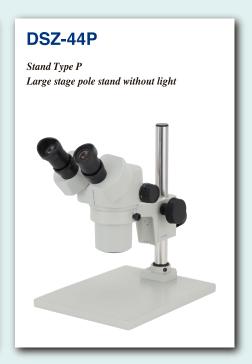
Models	SPZT-50D-PGM / SPZV-50PGM	SPZT-50D-SBGM / SPZV-50SBGM	SPZT-50D-P / SPZV-50P	SPZT-50D-UNGM / SPZV-50UNGM	SPZT-50D-UN / SPZV-50UN						
Magnification		6.7x to	50x (field of view : 34.3mm to	4.6mm)	,						
Objective Lenses		0.67x to 5.0x (zoom ratio : 7.5:1)									
Eyepieces		Wide Field 10x (DHW10x), Field Number 23									
Optical Body	360 degrees	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 (356mm)	Pole type (326mm)	Pole type (326mm)	Universal ty	pe (544mm)						
Incident Illumination	Built-in LED ring ligh	t with intensity control	Nil	Built-in LED ring light with intensity control	Nil						
Base Size	220mm x 284mm	144mm x 260mm	220mm x 284mm	230mm	x 230mm						
Overall Height	369mm	369mm	369mm	544mm	544mm						
Net Weight	5.7kg	5.2kg	4.9kg	23.4kg	20.8kg						
Accessories		Rubber eyeguards, C-wrench, Dust cover									

STEREO ZOOM MICROSCOPES Binocular type **DSZ-44** SERIES

The **DSZ-44** 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.







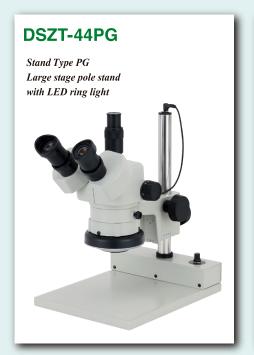


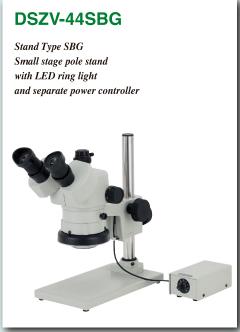


Models	DSZ-44PG	DSZ-44SBG	DSZ-44P	DSZ-44UNG	DSZ-44UN						
Magnification		10x	to 44x (field of view : 23mm to 5	.2mm)	'						
Objective Lenses			1.0x to 4.4x (zoom ratio : 4.4:1)							
Eyepieces		Wide Field 10x (DSW10x), Field Number 23									
Optical Body		360 degrees rotatable binocular type, 45 degrees inclined eyepiece tubes									
Working Distance			90mm								
Interpupillary Distance		52mm to 75mm									
Diopter Adjustment		+/- 7.2D on both eyepiece tubes									
Stand (Height)	Pole type (356mm)	Pole type (326mm)	Pole type (326mm)	Universal boon	n type (544mm)						
Incident Illumination	Built-in LED ring ligh	t with intensity control	Nil	Built-in LED ring light with intensity control	Nil						
Base Size	220mm x 284mm	144mm x 260mm	220mm x 284mm	230mm	x 230mm						
Overall Height	356mm	326mm	326mm	544mm	544mm						
Net Weight	5.2kg	4.7kg	4.4kg	22.9kg	20.3kg						
Accessories		Rubber eyeguards, C-wrench, Dust cover									

Same as the DSZ-44 series, but the **DSZT-44** has a vertical photo-tube for photomicrography and screen observation with cameras, while the **DSZV-44** 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-44/DSZV-44 SERIES











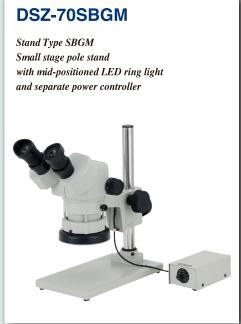


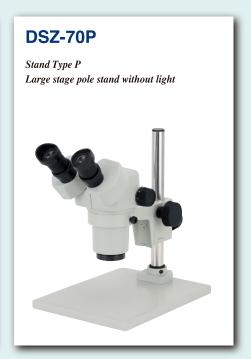
Models	DSZT-44PG / DSZV-44PG	DSZT-44SBG / DSZV-44SBG	DSZT-44P / DSZV-44P	DSZT-44UNG / DSZV-44UNG	DSZT-44UN / DSZV-44UN						
Magnification		10x t	o 44x (field of view : 23mm to 5.	2mm)							
Objective Lenses			1.0x to 4.4x (zoom ratio : 4.4:1)								
Eyepieces		Wide Field 10x (DSW10x), Field Number 23									
Ontinal Rady		DSZT: 360 deg. rotatable trinocular type, 45 deg. inclined eyepiece tubes, vertical photo-tube									
Optical Body	DSZV : 360 deg. re	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 o	n both eyepiece tubes & 12mm	on vertical tube / DSZV : +/- 7.2[O on both eyepiece tubes & 4.7m	nm on vertical tube						
Stand (Height)	Pole type (356mm)	Pole type (326mm)	Pole type (326mm)	Universal typ	oe (544mm)						
Incident Illumination	Built-in LED ring ligh	t with intensity control	Nil	Built-in LED ring light with intensity control	Nil						
Base Size	220mm x 284mm	144mm x 260mm	220mm x 284mm	230mm	x 230mm						
Overall Height	356mm	DSZT:352mm / DSZV:326mm	DSZT:352mm / DSZV:326mm	544mm	544mm						
Net Weight	DSZT:5.3kg / DSZV:5.4kg	DSZT:4.8kg / DSZV:4.9kg	DSZT:4.5kg / DSZV:4.6kg	DSZT:23.0kg / DSZV:23.1kg	DSZT:20.4kg / DSZV:20.5kg						
Accessories		Rubber eyeguards, C-wrench, Dust cover, (Photo-eyepiece with ring for DSZT-44)									

STEREO ZOOM MICROSCOPES Binocular type **DSZ-70** SERIES

The **DSZ-70** 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.









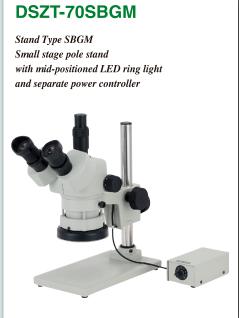


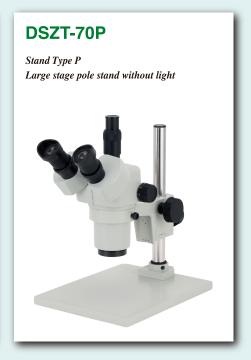
Models	DSZ-70PGM	DSZ-70SBGM	DSZ-70P	DSZ-70UNGM	DSZ-70UN							
Magnification		20x to 70x (field of view : 10mm to 2.8mm)										
Objective Lenses		2.0x to 7.0x (zoom ratio : 3.5:1)										
Eyepieces		Wide	Field 10x (DSW10xZ), Field Nur	nber 20								
Optical Body		360 degrees rotatab	le binocular type, 45 degrees in	clined eyepiece tubes								
Working Distance			80mm									
Interpupillary Distance		52mm to 75mm										
Diopter Adjustment		+/- 7.2D on both eyepiece tubes										
Stand (Height)	Pole type (356mm)	Pole type (326mm)	Pole type (326mm)	Universal boon	n type (544mm)							
Incident Illumination	Built-in LED ring ligh	t with intensity control	Nil	Built-in LED ring light with intensity control	Nil							
Base Size	220mm x 284mm	144mm x 260mm	220mm x 284mm	230mm	x 230mm							
Overall Height	356mm	326mm	326mm	544mm	544mm							
Net Weight	5.3kg	4.8kg	4.5kg	23kg	20.4kg							
Accessories		Rub	ber eyeguards, C-wrench, Dust	cover								

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

STEREO ZOOM MICROSCOPES Trinocular type DSZT-70 SERIES











Models	DSZT-70PGM	DSZT-70SBGM	DSZT-70P	DSZT-70UNGM	DSZT-70UN					
Magnification		20x t	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 (356mm)	Pole type (326mm)	Pole type (326mm)	Universal boom	type (544mm)					
Incident Illumination	Built-in LED ring ligh	t with intensity control	Nil	Built-in LED ring light with intensity control	Nil					
Base Size	220mm x 284mm	144mm x 260mm	220mm x 284mm	230mm x 230mm						
Overall Height	365mm	365mm	365mm	544mm	544mm					
Net Weight	5.4kg	4.9kg	4.6kg	23.1kg	20.5kg					
Accessories		Rubber eyeguard	ds, C-wrench, Dust cover, Photo	-eyepiece with ring						

STEREO ZOOM MICROSCOPES

Binocular type / Trinocular type SPZH-135/SPZHT-135 SERIES

The **SPZH-135** series is a unique model featuring the extremely high magnification of 21x to 135x (zoom ratio 6.4:1) with standard DHW15X eyepieces and the coaxial coarse and fine focus adjustment which makes it easy to focus at high magnifications. The **SPZHT-135** is the trinocular type with a vertical C mount tube to accept a CCD/CMOS camera and the click stop mechanism incorporated in zoom knobs to ensure re-positioning at each magnification during zooming.

SPZH-135PGLC

Stand Type PGLC
Large stage pole stand,
coarse and fine focusing,
with low-positioned LED ring light



SPZH-135SBGLC

Stand Type SBGLC Small stage pole stand, coarse and fine focusing, with low-positioned LED ring light and separate power controller



SPZH-135PC

Stand Type PC
Large stage pole stand, coarse
and fine focusing, without light



SPZHT-135PGLC

Stand Type PGLC Large stage pole stand, coarse and fine focusing, with low-positioned LED ring light



SPZHT-135SBGLC

Stand Type SBGLC Small stage pole stand, coarse and fine focusing, with low-positioned LED ring light and separate power controller



SPZHT-135PC

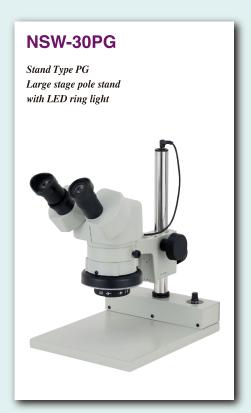
Stand Type PC Large stage pole stand, coarse and fine focusing, without light

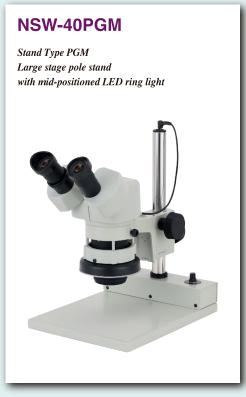


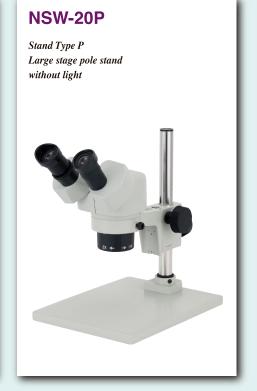
Models	SPZH-135PGLC	SPZH-135SBGLC	SPZH-135PC	SPZHT-135PGLC	SPZHT-135SBGLC	SPZHT-135PC				
Magnification		•	21x to 135x (field of vi	ew: 10.7mm to 1.6mm)						
Objective Lenses		1.4x to 9x (zoom ratio 6.4 : 1)								
Eyepieces			Wide Field 15x (DHW	15X), Field Number 15						
Optical Body	360 deg. rotatable	360 deg. rotatable binocular type, 45 deg. inclined eyepiece tubes 360 deg. rotatable trinocular type, 45 deg. inclined eyepiece tubes, vertical C mount tube								
Working Distance		84mm								
Interpupillary Distance		50mm to 74mm								
Diopter Adjustment	+/-	- 7.2D on both eyepiece tub	oes	+/- 7.2D on bo	oth eyepiece tubes & 4mm o	n vertical tube				
Stand (Height)	Pole type (356mm)	Pole type	(326mm)	Pole type (356mm) Pole type (326mm)						
Incident Illumination	Built-in LED ring ligh	nt with intensity control	Nil	Built-in LED ring light with intensity control Nil						
Base Size	220mm x 284mm	144mm x 260mm	220mm	x 284mm	144mm x 260mm	220mm x 284mm				
Overall Height	364mm	364mm	364mm	364mm	364mm	364mm				
Net Weight	5.6kg	5.1kg	4.8kg	5.8kg	5.3kg	5.0kg				
Accessories			Rubber eyeguards,	C-wrench, Dust cover						

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.

STEREO MICROSCOPES Binocular type NSW SERIES







Models	NSW-1PG	NSW-2PG	NSW-20PG	NSW-30PG	NSW-40PGM	NSW-620PG				
Magnification (field of view)	10x (23mm)	20x (11.5mm)	10x (23mm) & 20x (11.5mm)	10x (23mm) & 30x (7.6mm)	20x (11.5mm) & 40x (5.7mm)	6x (38.3mm) & 20x (11.5mm)				
Objective Lenses	1x	2x	1x & 2x	1x & 3x	2x & 4x	0.6x & 2x				
Eyepieces			Wide Field 10x (DSW	10X), Field Number 23						
Optical Body		360 degrees rotatable binocular type, 45 degrees inclined eyepiece tubes								
Working Distance	102mm	102mm 102mm 82.5mm 82.5mm 64.3mm 8								
Interpupillary Distance		52mm to 75mm								
Diopter Adjustment		+/- 7.2D on left eyepiece tube								
Stand (Height)		Pole type (356mm)								
Incident Illumination			Built-in LED ring light	t with intensity control						
Base Size			220mm :	x 234mm						
Overall Height			356	6mm						
Net Weight	4.8	4.8kg 4.9kg								
Accessories		Rubber eyeguards, C-wrench, Dust cover								

Models	NSW-1P	NSW-2P	NSW-20P	NSW-30P	NSW-40P	NSW-620P				
Magnification (field of view)	10x (23mm)	20x (11.5mm)	10x (23mm) & 20x (11.5mm)	10x (23mm) & 30x (7.6mm)	20x (11.5mm) & 40x (5.7mm)	6x (38.3mm) & 20x (11.5mm)				
Objective Lenses	1x	2x	1x & 2x	1x & 3x	2x & 4x	0.6x & 2x				
Eyepieces			Wide Field 10x (DSW	10X), Field Number 23						
Optical Body		360 degrees rotatable binocular type, 45 degrees inclined eyepiece tubes								
Working Distance	113mm	113mm	113mm	82.5mm	64.3mm	113mm				
Interpupillary Distance		52mm to 75mm								
Diopter Adjustment		+/- 7.2D on left eyepiece tube								
Stand (Height)		Pole type (356mm)								
Incident Illumination			Ν	lil						
Base Size			220mm :	c 234mm						
Overall Height			356	mm						
Net Weight	4.0	Okg		4.1	kg					
Accessories		Rubber eyeguards, C-wrench, Dust cover								

Eyepieces



DHW10X 10x, F.N. 23 (for SPZ-50 / SPZT-50D / SPZV-50)

DSW10X 10x, F.N. 23 (for DSZ-44 / DSZT-44 / DSZV-44 / NSW)



DHW15X 15x, F.N. 15 (for SPZ-50)

DSW15X 15x, F.N. 15 (for DSZ / NSW)



DHW20X 20x, F.N. 11.4 (for SPZ)

DSW20X 20x, F.N. 11.4 (for DSZ / NSW)

Focusing Eyepieces 10x with Reticle



DFHW10X F.N.23 (for SPZ)



DFSW10X F N 23 (for DSZ/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

NSAL_{0.5}X

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



NSAL1.6X

1.6x

NSAL2X

(available with

SPZ-50/SPZT-50D/SPZV-50 only)

NSAL_{0.75}X 0.75x

NSAL_{0.7}X

0.7x

NSCG49 Objective lens cover

NSCG49/D

Objective lens cover with screw threads on both sides



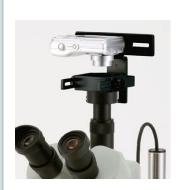
Optical Data for SPZ-50 / SPZT-50D / SPZV-50

Eyepiece		DHW10X (F.N.23)			DHW15X (F.N.15)					DHW20X (F.N.11.4)					
Auxiliary Lens	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-44 / DSZT-44 / DSZV-44

<u> </u>												
Eyepiece	DSW10X (F.N.23)			DSW15X (F.N.15)				DSW20X (F.N.11.4)				
Auxiliary Lens	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

Digital Camera Adapters



Z1018Adapter for compact cameras



T-Mount Adapters T-NIKON T-PENTAX/K T-SONY T-CANON/EOS



USB/Digital Cameras

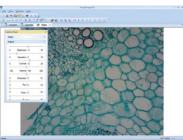
The **VD-PC5** and the **HDCE-X5** cameras with Image processing and measurement software which can easily convert a conventional microscope into "Digital Microscope" capable of processing, measuring and saving images.





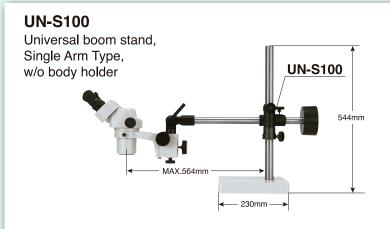
Model	VD-PC5 (code: UCMOS05100KPA)
Image Sensor	1/2.5" CMOS
	2592x1944 5 fps
Resolution / Max Frame Rate	1280x960 18 fps
	640x480 60 fps
Exposure	Auto/Manual
White Balance	Auto/Manual
Mount Type	C mount, 23.2mm dia. relay lens & 30mm dia. and 30.5mm dia. eyepiece sleeve adapters
Interface	USB2.0
Application	"ToupView" Video/Image Processing & Measurement Software
Measurement Tools	Angle, Point, Line, Parallel, Two Paralles, Vertical, Rectangle, RoundRect, Ellipse, Circle, Annulus, Two Circles, Arc, Polygon
OS	Windows XP / Vista / 7 /8 (32 & 64 bit), Mac OS X, Linux



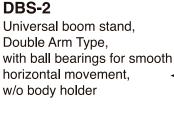


Model	HDCE-X5		
Image Sensor	1/2.5" CMOS		
Resolution / Max Frame Rate	2592~1944 2.5 fps		
	1024~768 10 fps		
Exposure	Auto/Manual		
White Balance	Auto/Manual		
Mount Type	C mount with 23.2mm dia. relay lens & 30mm dia. eyepiece sleeve adapter		
Interface	USB2.0		
Application	"Scopelmage9.0" Image Process & Measurement Software		
Measurement Tools	Line, Angle, Circle, Rectangle, Polygon		
os	Windows 2000/XP/Vista/Win 7 32bit or 64bit		

Boom Stands



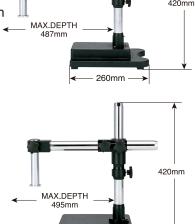


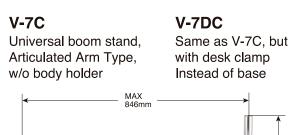


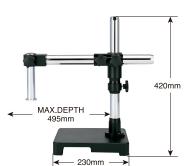
SBS-1

Universal boom stand,

Single Arm Type, w/o body holder

















Illuminators

LED-60T

LED ring illuminator

- * 60 LEDs
- * 7-step intensity control
- * 4 lighting modes (1/4, 2/4, 3/4 & full)





LED-SL

LED spot illuminator with double light guides * Intensity control



MIC-56

LED ring illuminator

- * 54 LEDs
- * Separate intensity controller



RFL10-2T

Fluorescent ring illuminator

* Intensity control



LED-TI

LED base illuminator for transmitted illumination

* Separate intensity controller



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	