

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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2015 CATALOG



# ProVue Deluxe LED Magnifying Lamp

# **Efficient and Powerful**











Heavy-Duty Mounting Clamp

The innovative ProVue Deluxe LED Magnifying lamp from Aven is the new standard in inspection lighting. This durable aluminum design features a 5 inch, 5 diopter glass lens for crystal clear, distortion-free viewing. Featuring 72 energy-efficient LED lights for shadow-free illumination.

The 36" adjustable friction arm provides a large working range. Simply set your lamp position and lock it in. No springs, no exposed wires and no pinching hazards. The lamp head rotates in any direction to suit your inspection needs, and the convenient built-in dimmer allows you to control the lamp brightness.

PROVUE DELUXE LED			
MAGNIFICATION		2.25X (5-Diopter)	
LENS DIAMETER		5in	
ADJUSTABLE ARM LE	NGTH	36in	
<b>COLOR</b> Brushed Silver			
LIGHTING 72 LED Lights			
HHH			(-)
26501-DSG-LED	ProVu	e Deluxe LED Magnifying Lamp	5 Diopter



# Macro Vue HD Video Inspection Systems



Product # 26700-107-15

Product # 26700-107-10

# Tailored For Your Productivity

Eye strain and neck fatigue are a common problem with modern microscopes and can make routine inspection challenging. Aven's Macro Vue HD systems frees your eyes from microscope eyepieces and provides a crisp inspection image at eye level. Stay focused, reduce fatigue and enhance productivity while saving valuable bench top space with Aven's all-in-one Macro Vue systems.

Item #	Description
26700-107-10	Macro Vue HD Video Inspection System with Standard Stand
26700-107-15	Macro Vue HDVideo Inspection System with Dual-Arm Boom Stand

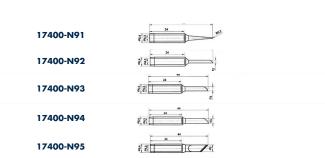


# **ESD Safe Soldering Stations**



Compact & Convenient Soldering

17400	Soldering Station with LCD Display ESD Safe 400 Series	\$134.95
17405	Soldering Station with LCD Display ESD Safe	\$54.95



# Soldering Iron 80W with Fine Tip



This professional grade soldering iron produces 80 watts (up to 500°C) and is ideal for general purpose soldering applications including metal board, tube or large components, electrical/electronic components, audio equipment, RC hobbies and more.

POWER	80W
TEMPERATURE	Up to 500°C (932°F)
DIMENSIONS	285mm x 35mm x 35mm (11.25" x 1.375" x 1.375")
TIP	Fine
TIP POWER SOURCE	Fine Corded Electrical

Part #	Description	Price
17510	Soldering Iron 80W with Fine Tip	\$16.50



# Mighty Cam 3.0 USB Camera

# **Expererience USB 3.0 Speed**

Aven's Mighty Cam 3.0 is the new generation USB3.0 camera. Capable of frame rates more than double of USB 2.0 devices, the Mighty Cam 3.0 is ideal for applications that require reduced image lag times. Simply attach the Mighty Cam 3.0 to your microscope, plug in the USB 3.0 cable and connect to your computer. Includes ezMeasure software to capture stunning images, record video, make accurate measurements and more.

Part #	Description	Sensor
26100-244	Mighty Cam 3.0	CMOS



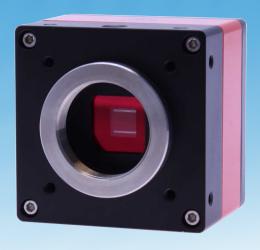
- USB 3.0 interface provides high speed image transfer rates.
- ► Automatic/Maunual White Balance
- Progressive Scan
- ► USB cable plugs into any computer to save, process and share images
- ► Windows 7 & 8-compatible ezMeasure Software
- Ideal for applications that require reduced lag times

# Mighty Cam CCD USB Camera

# **See the CCD Difference**

The Mighty Cam CCD is designed for challenging lighting and color conditions. The CCD sensor provides precise color reproduction and highly detailed images for your demanding applications. The Mighty Cam CCD is capable of high resolution images with low noise and can precisely capture moving objects.

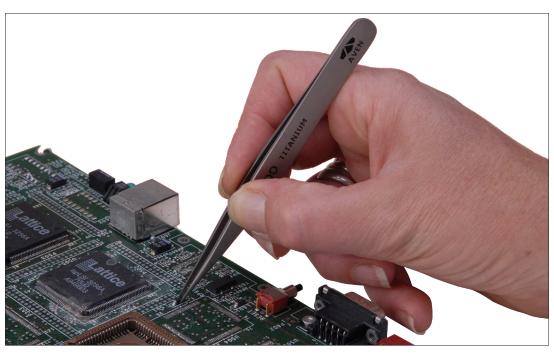
Part #	Description	Sensor
26100-245	Mighty Cam CCD	CCD



- ▶ 1/2" 1.4MP Color CCD Sensor provides crisp images with accurate color
- Automatic/Maunual White Balance
- Progressive Scan
- USB cable plugs into any computer to save, process and share images
- ▶ Windows 7 & 8-compatible ezMeasure Software
- Ideal for challenging lighting and color conditions



# 2015 Digital Catalog



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# **Digital Microscopes**



### Mighty Scope USB Digital Microscopes

- New Models available with 1.3 and 5MP CMOS sensor
- Active Pixel Technology produces sharp and accurate color images
- Microtouch shutter allows for quick and convenient image capture
- Compatible with Windows and Mac
- ► 10-200x, 500x, UV and Near Infrared models
- Ergonomic design allows comfortable use in either hand
- Includes measurement software and adjustable metal stand
- 10-200x available with polarizer



Product ID	Description
26700-200	Mighty Scope 1.3M USB Digital Microscope (10x-200x)
26700-200-PLR	Mighty Scope 1.3M USB Digital Microscope w/Polarizer (10x-200x)
26700-204	Mighty Scope 1.3M USB Digital Microscope (500x)
26700-205	Mighty Scope 1.3M USB Digital Microscope w/ UV Illumination (10x-200x)
26700-207	Mighty Scope 5M USB Digital Microscope w/NIR Illumination (10x-200x)
26700-209	Mighty Scope 5M USB Digital Microscope (10x-200x)
26700-209-PLR	Mighty Scope 5M USB Digital Microscope with Polarizer (10x-200x)
26700-216	Mighty Scope 1.3M Polarizer
26700-217	Mighty Scope 5M Polarizer

## Mighty Scope Analog Microscope

- Easy to use 6-LED compact & handy analog microscope with RCA outputs
- Ideal for applications where it is not feasible to have a PC, such as assembly lines and workbenches with space limitations
- ► High resolution magnification at your fingertips
- Detailed examination of any area you choose
- Active Pixel Technology produces sharp images and accurate color reproduction
- ► LED's can be turned on or off with brightness control wheel on the body
- Magnification range from 10x to 50x

Product ID	Description
26700-202	Mighty Scope 0.3M Analog Microscope (10x-50x)

26700-202

### Mighty Scope Connect Wi-Fi Digital Microscope

- 6-inch-long microscope can be hand-held or standmounted
- ► 10x to 80x magnification, controlled by changes in working distance
- Creates wi-fi hotspot with 30foot range
- Works with Androids, Apple iOS tablets and phones
- Snap button on body saves high-quality images



\* iPad not included

Product ID	Description
26700-201	Mighty Scope Connect Wi-Fi Digital Microscope (10x-80x)

# iLoupe XL2 Digital Microscope

- ► Large 2.8" LCD color screen
- Built-in 2 gigabyte flash memory
- 4 white LED lights with brightness control
- ► Magnification: 10x, 40x (optical) 15x to 200x (digital)
- USB port and cable for computer link and charging
- Adjustable-height stand
- Lithium-ion battery
- Advanced application software



Product ID	Description
26700-520	iLoupe XL2 Digital Microscope

# zipScope USB Digital Microscopes

- New models available with 2 and 9 MP CMOS sensor
- ► Anti-slip coating engineered for comfort and cushioning
- 2-stage intensity control of 8 LEDs for shadowfree lighting
- USB cable plugs into any computer to save, process and share images
- Snapshot button conveniently captures crisp, clear, true-color images
- Windows-compatible measurement and imaging software
- Broad magnification range (10x 200x)
- Ideal for general inspection and use in labs, medical offices, classrooms and by hobbyists



26700-302

Product ID	Description
26700-300	zipScope 2M USB Digital Microscope
26700-302	zipScope 9M USB Digital Microscope



# **Digital Microscopes**

### Cyclops Digital Microscope

This innovative inspection scope connects directly to an HD monitor as well as to a computer. Operators observe magnified videos or single frames while looking directly at the monitor, rather than straining over narrow eyepieces. A large working distance and 30 LEDs allow examination of sizable objects. Magnification ranges up to 270x on a 215" extended manitor or 574x for PC viewing.

- 270x on a 21.5" extended monitor or 534x for PC viewing.
- Dual output HDMI and USB
- Auto Focus enabled
   Designed to maximize efficiency and operator comfort
- ▶ 5-megapixel sensor
- High magnification range and extended working distance
- Up to 273x magnification in HDMI mode and 534x in PC mode
- ► LED illumination with intensity control
- Infrared remote control for all major features
- Includes standard 4x objective lens and measurement software
- Optional articulating arm stands and 10x lens available

Product ID	Description	
26700-400	Cyclops Digital Microscope	
26700-400-L10X	Cyclops Objective Lens 10X	
26700-400-L4X	Cyclops Objective Lens 4X	
26700-400-RC	Cyclops Remote Control	
26700-400-STN	Cyclops Stand	
26700-400-GN	Cyclops Gooseneck LED Lights	



# **Digital Microscope Stands**



Product ID	Description
26700-210	Mighty Scope Boom Stand
26700-211	Mighty Scope Standard Stand
26700-212	Mighty Scope Flex Stand
26700-213	Mighty Scope Cradle Stand
26700-214	Mighty Scope Stand with Fine Adjustment
26700-215	Mighty Scope Dual View Stand
26700-311	Universal Digital Microscope Stand w/Backlight
26700-312	3D Stand for Digital Microscopes and Cameras
26700-312-LED	3D Stand with LED for Digital Microscopes and Cameras
26700-410-C18	Cyclops Articulating Arm Stand, Post Height 17-in
26700-411-C15	Cyclops Articulating Arm Stand, Post Height 12-in



SPZV-50



**SPZH-135** 

NSW-620

### SPZ-50 Series Stereo **Zoom Microscopes**

▶ Magnification Range: 6.7x to 50x (3.35x to 200x with optional lenses)

Large 7.46:1 Zoom Ratio (best Zoom Ratio in this class)

Field of View: 34.3mm to 3.6mm (1.35" to

- Working Distance: 108mm (4.25")
- Includes high eye point DHW10x (F.N.23) eyepieces for comfortable viewing even for operators with eyeglasses
- Optional eyepieces available include DHW15x (F.N.15) & DHW20x (F.N.11.4)
- Trinocular body type features click stop zoom adjustment for extremely accurate measuring
- Trinocular port includes easy adjust C-mount camera adapter for
- Includes rubber eyeguards and dust cover

Product ID	Description
SPZ-50	SPZ-50 Stereo Zoom Binocular Microscope
SPZV-50	SPZV-50 Stereo Zoom Trinocular Microscope

Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x	w/2x
Magnifications	6.7x-50x	3.35x-25x	5x-37.5x	10.72x-80x	13.4x-100x
Working Dist.	108mm	240mm	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

Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x	w/2x
Magnifications	10.05x-75x	5.02x-37.5x	7.53x-56.25x	16.08x-120x	20.1x-150x
Working Dist.	108mm	240mm	132mm	50mm	41mm
Field of View	22.3-3mm	44.7-6mm	29.8-4mm	16-1.8mm	11.1-1.5mm

Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x	w/2x
Magnifications	13.4x-100x	6.7x-50x	10.05x-75x	21.44x-160x	26.8x-200x
Working Dist.	108mm	240mm	132mm	50mm	41mm
Field of View	17-2.2mm	34-4.5mm	22.6-3mm	10.6-1.4mm	8.5-1.1mm

NOTE: When creating your own microscope system, the 0.5x Auxiliary Lens cannot be used on the SPZ series body with stands P, PF, T and TL.

> Register online to receive updates on the newest products and for the latest specials from Aven.

### SPZH-135 Series Stereo Zoom Microscopes

- ► Magnification Range: 21x to 135x (14x to 180x with optional lenses)
- 6.4:1 Zoom Ratio
- Field of View: 34.3mm to 3.6mm (1.35" to 0.14")
- Working Distance: 84mm (3.3")
- Includes high eye point DHW15x (F.N.15) eyepieces for comfortable viewing even for operators with eyeglasses
- DHW20x (F.N.11.4) optional eyepieces available
- Trinocular body type features click stop zoom adjustment for extremely accurate measuring
- Trinocular port includes easy adjust C-mount camera adapter for fine focusing
- Includes rubber eyeguards and dust cover

Product ID	Description
SPZH-135	SPZH-135 Stereo Zoom Binocular Microscope
SPZHT-135	SPZHT-135 Stereo Zoom Trinocular Microscope

Auxiliary Lens	Nil	w/0.5x	Nil	w/0.5x
Magnifications	21x-135x	10.5x-67.5x	28x-180x	14x-90x
Working Dist.	84mm	135mm	84mm	135mm
Field of View	10.7-1.6mm	21.4-3.3mm	8.1-1.2mm	16.2-2.5mm

### **NSW Series Binocular Stereo Microscopes**

- Dual magnification (10x/20x; 10x/30x; 6x/20x)
- Field of view 38.3mm at 6x
- Field of view 23mm at 10x
- Field of view 11.5mm at 20x
- Field of view 7.6mm at 30x
- Includes DSW10x (F.N.23) eyepieces
- Includes rubber eyeguards and dust



Magnification (Field of View)	10x (23mm) 20x (11.5mm)	10x (23mm) 30x (7.6mm)	6x (38.3mm) 20x (11.5mm)
Objective Lenses	1x & 2x		
Eyepieces	Wi	ide Field DSW10x (F.N.:	23)
Optical Body	360° rotatable binocular type 45° inclined eyepiece tube		
Working Distance	82.5mm	82.5mm	82.5mm



#### **DSZ-44 Series Stereo Zoom Microscopes**

- ► Magnification Range: 10x to 44x (2.5x to 140.8x with optional lenses)
- Zoom ratio: 4.4:1
- Field of view 23mm to 5.2mm (0.90" to 0.20")
- Working distance: 90mm (3.54
- Includes Wide Field DSW10x (F.N.23) eyepieces
- Optional eyepieces available include DSW5x (F.N.22.5), DSW15x (F.N.15) & DSW20x (F.N.
- Trinocular port includes easy a C-mount camera adapter for fine focusing
- Includes rubber eyeguards and dust cover



DSZV-44
N.11.4) adjust

**DSZ-70 Series Binocular Stereo Zoom Microscopes** 

- ▶ Magnification Range: 20x to 70x (5x to 224x with optional lenses)
- 3.5:1 Zoom Ratio
- Field of View: 10mm to 2.8mm (0.39) to 0.11")
- Working Distance: 80mm (4.25")
- ► Includes DSW10xZ (F.N.20) eyepieces
- Optional evepieces available include DSW5xZ (F.N.20), DSW15x (F.N.15) & DSW20x (F.N.11.4)
- Versatile binocular microscope best suited for high magnification applications
- Includes rubber eyeguards and dust cover

Pi	roduct ID	Description
DS	SZ-70	DSZ-70 - Binocular Stereo Zoom Microscope

Product ID	Description
DSZ-44	DSZ-44 - Stereo Zoom Binocular Microscope
DSZV-44	DSZV-44 - Stereo Zoom Trinocular Microscope

Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	5x-22x	2.5x-11x	3.75x-16.5x	8x-35.2x
Working Dist.	90mm	150mm	105mm	45mm
Field of View	22.5-5.1mm	45-10.2mm	30-6.8mm	14-3.1mm

Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	10x-44x	5x-22x	7.5x-33x	16x-70.4x
Working Dist.	90mm	150mm	105mm	45mm
Field of View	23-5.2mm	46-10.4mm	30.6-6.9mm	14.3-3.2mm

Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	15x-66x	7.5x-33x	11.25x-49.5x	24x-105.6x
Working Dist.	90mm	150mm	105mm	45mm
Field of View	15-3.4mm	30-6.8mm	20-49.5mm	9.3-2.1mm

Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	20x-88x	10x-44x	15x-66x	32x-140.8x
Working Dist.	90mm	150mm	105mm	45mm
Field of View	11.4-2.5mm	22.8-5.1mm	15.2-3.45mm	7.1-1.6mm

Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	10x-35x	5x-17.5x	7.5x-26.25x	16x-56x
Working Dist.	80mm	120mm	85mm	41mm
Field of View	10-2.9mm	20-5.7mm	13.3-3.8mm	6.2-1.7mm

Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	20x-70x	10x-35x	15x-52.5x	32x-112x
Working Dist.	80mm	120mm	85mm	41mm
Field of View	10-2.8mm	20-5.7mm	13.3-3.8mm	6.2-1.7mm

Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	30x-105x	15x-52.5x	22.5x-78.75x	48x-168x
Working Dist.	80mm	120mm	85mm	41mm
Field of View	7.5-2.1mm	15-4.2mm	10-2.8mm	4.6-1.3mm

Auxiliary Lens	Nil	w/0.5x	w/0.75x	w/1.6x
Magnifications	40x-140x	20x-70x	30x-105x	64x-224x
Working Dist.	80mm	120mm	85mm	41mm
Field of View	5.7-1.6mm	11.4-3.2mm	7.6-2.1mm	3.5-1mm



# **Design Your Own Microscope System**

With a large variety of cameras, lighting options, and stands and focus mounts, you can create and order your own customized microscope system on our website. If you need help creating a custom system, please call our experienced sales team and let them assist you in creating a tailor made solution that will meet your specific requirements.



www.aveninc.com

AVEN, INC. | 4330 VARSITY DRIVE | ANN ARBOR, MI 48108

**DSZ-70** 

26800B-351

26800B-352



26800B-353

26800B-354

### SPZH-135 Stereo Zoom Binocular Microscope on Stand PLED

- Magnification Range: 21x to 135x
- Zoom Ratio: 6.4:1
- Field of View: 10.7-1.6mm (0.42" to
- Working Distance: 84mm (3.3")
- Includes high eye point DHW15x (F.N.15) evepieces for comfortable viewing even for operators with eyeglasses
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 50mm to 74mm (1.96" to 2.91") accommodates any operator
- Pole stand with built in LED illumination with dimmer control
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

Product ID	Description
26800B-351	SPZH-135 Stereo Zoom Binocular Microscope on Stand PLED

### SPZH-135 Stereo Zoom Microscope with DBL Arm Boom, EARM, LED FOI illumination

- Magnification Range: 21x to 135x
- Zoom Ratio: 6.4:1
- Field of View: 10.7-1.6mm (0.42" to 0.6")
- Working Distance: 84mm (3.3")
- Includes high eye point DHW15x (F.N.15) evepieces for comfortable viewing even for operators with eyeglasses
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 50mm to 74mm (1.96" to 2.91") accommodates any operator
- Mounted in an E-ARM focus mount attached to a Double Arm Boom Stand that delivers the smooth movement of a ball bearing slide, letting the microscope glide easily over and across objects being viewed
- High Output LED fiber optic illuminator and ring light provide clear illumination for imaging
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

	Product ID	Description
ı	26800B-352	SPZH-135 Stereo Zoom Microscope w/ DBL Arm Boom, EARM, LED FOI

Register online to receive updates on the newest products and for the latest specials from Aven.

### SPZHT-135 Stereo Zoom Trinocular Microscope on Stand PLED with HD Monitor

- Magnification Range: 21x to 135x
- On screen Magnification Range: 27x to 179x
- Zoom Ratio: 6.4:1
- Field of View: 10.7-1.6mm (0.42" to
- Working Distance: 84mm (3.3")
- Includes high eye point DHW15x (F.N.15) eyepieces for comfortable viewing even for operators with eyeglasses
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 50mm to 74mm (1.96" to 2.91") accommodates any
- Click stop zoom adjustments for accurate, repeatable measurement
- 1080P HD camera for unsurpassed imagery
- One touch fine focus trinocular camera port adjustment for quick, easy camera focus and parfocaling the scope
- Pole stand with built in LED illumination with dimmer control
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work
- Monitor helps increase productivity by reducing eye & neck strain

Product ID	Description
26800B-353	SPZHT-135 Stereo Zoom Trinocular Microscope on Stand PLED with HD Monitor

# SPZHT-135 Stereo Zoom Trinocular Microscope on Stand LW w/ FOI



On screen Magnification Range: 76x to 494x

Zoom Ratio: 6.4:1

- Field of View: 10.7-1.6mm (0.42" to 0.6")
- Working Distance: 84mm (3.3")
- Includes high eye point DHW15x (F.N.15) eyepieces for comfortable viewing even for operators with eyeglasses
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 50mm to 74mm (1.96" to 2.91") accommodates any operator
- Click stop zoom adjustments for accurate, repeatable measurement
- 1080P HD camera for unsurpassed imagery
- One touch fine focus trinocular camera port adjustment for quick, easy camera focus and parfocaling the scope
- Mounted in an E-ARM focus mount attached to a LW articulating arm stand that extends area of view and working distance
- High Output LED fiber optic illuminator and ring light provide clear illumination for imaging
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work
- Monitor helps increase productivity by reducing eye & neck strain

Product ID	Description
26800B-354	SPZHT-135 Stereo Zoom Trinocular Microscope on Stand LW with LED Fiber Optic Illuminator



## SPZ-50 Stereo Zoom Binocular Microscope on Stand DABS w/ Integrated LED Ring Light

- ► Magnification Range: 6.7x to 50x
- ► Large Zoom Ratio: 7.46:1
- Field of View: 34.3mm to 4.6mm (1.35" to 0.18")
- Working Distance: 108mm (4.25")
- Includes high eye point DHW10x (F.N.23) eyepieces for comfortable viewing even for operators with eyeglasses
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator
- Double Arm Boom Stand delivers smooth movement of a ball bearing slide, letting the microscope glide easily over and across objects being viewed
- Tiltable arbor enables you to angle the microscope for maximum comfort and viewing
- ► Integrated 60 LED Ring Light with dimmer
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

Product ID	Description
26800B-369	SPZ-50 Stereo Zoom Binocular Microscope on Stand DABS & Integrated LED Ring Light

# SPZ-50 Stereo Zoom Binocular Microscope on Stand DABS with LED FOI

- ▶ Magnification Range: 6.7x to 50x
- ▶ Large Zoom Ratio: 7.46:1
- Field of View: 34.3mm to 4.6mm (1.35" to 0.18")
- ► Working Distance: 108mm (4.25")
- Includes high eye point DHW10x (F.N.23) eyepieces for comfortable viewing even for operators with eyeglasses
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator
- ▶ Double Arm Boom Stand delivers smooth movement of a ball bearing slide, letting the microscope glide easily over and across objects being viewed
- Tilt able arbor enables you to angle the microscope for maximum comfort and viewing
- High Output LED fiber optic illuminator and ring light provide clear illumination for imaging
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

Product ID	Description
26800B-370	SPZ-50 Stereo Zoom Binocular Microscope on Stand DABS w/ LED FOI



### SPZ-50 Stereo Zoom Binocular Microscope on Stand PLED



Large Zoom Ratio: 7.46:1

26800B-369

26800B-370

- Field of View: 34.3mm to 4.6mm (1.35" to 0.18")
- ► Working Distance: 108mm (4.25")
- Includes high eye point DHW10x (F.N.23) eyepieces for comfortable viewing even for operators with eyeglasses
- Diopter adjustment on both eyepiece tubes
- ► Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator

26800B-371

26800B-372

- ▶ Pole stand with built in LED illumination with dimmer control
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

Product ID	Description
26800B-371	SPZ-50 Stereo Zoom Binocular Microscope on Stand DABS & Integrated LED Ring Light

# SPZ-50 Stereo Zoom Binocular Microscope

# on Stand LW & LED Ring Light

- ► Magnification Range: 6.7x to 50x
- ► Large Zoom Ratio: 7.46:1
- ► Field of View: 34.3mm to 4.6mm (1.35" to 0.18")
  - Working Distance: 108mm (4.25")
- Includes high eye point DHW10x (F.N.23) eyepieces for comfortable viewing even for operators with eyeglasses
- Diopter adjustment on both eyepiece tubes
- ► Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator
- Mounted in an E-ARM focus mount attached to a LW articulating arm stand that extends area of view and working distance
- ▶ 60 LED Ring Light with brightness and 4 sector control
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

Product ID	Description
26800B-372	SPZ-50 Stereo Zoom Binocular Microscope on Stand LW & LED Ring Light

# SPZ-50 Stereo Zoom Microscope on Stand P with Diffuse Axial LED Illuminator

- Magnification Range: 6.7x to 50x
- ► Large Zoom Ratio: 7.46:1
- ▶ Field of View: 34.3mm to 4.6mm (1.35" to 0.18")
- ► Working Distance: 108mm (4.25")
- Includes high eye point DHW10x (F.N.23) eyepieces for comfortable viewing even for operators with eyeglasses
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator
- Compact lightweight pole stand with focus mount
- Diffuse Axial LED Illuminator, ideal for viewing highly relective parts, eliminates hot spots & reduces glare
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

Product ID	Description
26800B-384	SPZ-50 Stereo Zoom Binocular Microscope on Stand P w/ Diffuse Axial Illuminator



26800B-384

26800B-303



# DSZ-44 Stereo Zoom Binocular Microscope on Stand DABS with LED FOI

- Magnification Range: 10x to 44x
- ▶ Zoom Ratio: 4.4:1
- ► Field of View: 23-5.2mm (0.91" to 0.2")
- Working Distance: 90mm (3.54")
- Includes wide field DSW10x (F.N.23) eyepieces
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator
- ▶ Double Arm Boom Stand delivers smooth movement of a ball bearing slide, letting the microscope glide easily over and across objects being viewed
- ► Tiltable arbor enables you to angle the microscope for maximum comfort and viewing
- High Output LED fiber optic illuminator and ring light provide clear illumination for imaging
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

Product ID	Description
26800B-303	DSZ-44 Stereo Zoom Binocular Microscope on Stand DABS with LED Fiber Optic Illuminator

# DSZ-44 Stereo Zoom Binocular Microscope on Stand LW with LED Ring Light

- ► Magnification Range: 10x to 44x
- ▶ Zoom Ratio: 4.4:1
- Field of View: 23-5.2mm (0.91"-0.2")
- ► Working Distance: 90mm (3.54")
- ► Includes wide field DSW10x (F.N.23) eyepieces
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator
- ▶ Mounted in an E-ARM focus mount attached to a LW articulating arm stand that extends area of view and working distance
- ▶ 60 LED Ring Light with brightness and 4 sector control
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

Product ID	Description
26800B-308	DSZ-44 Stereo Zoom Binocular Microscope on Stand LW with LED Ring Light

See Aven's exclusive article

13

"How to Select the Right Microscope or Video Inspection System"



26800B-308

#### **DSZ-44 Gemscope**

- ► Magnification Range: 10x to 44x
- Zoom Ratio: 4.4:1
- Field of View: 23-5.2mm (0.91"-0.2")
- ► Working Distance: 90mm (3.54")
- ► Includes wide field DSW10x (F.N.23) eyepieces
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator
   Gemology stand (inclines from 0-10°) with independently
- controllable fluorescent front light and dimmable halogen pipe light with separate controls
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

Product ID	Description
26800B-386	DSZ-44 Gemscope

# DSZV-44 Gemscope w/1080P HD Camera

- ▶ Magnification Range: 10x to 44x
- Zoom Ratio: 4.4:1
- Field of View: 23-5.2mm (0.91"-0.2")
- Working Distance: 90mm (3.54")
- Includes wide field DSW10x (F.N.23) eyepieces
- Diopter adjustment on both eyepiece
- Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator

26800B-387

26800B-323

- ▶ 1080P HD camera for unsurpassed imagery
- Gemology stand (inclines from 0-10°) with independently controllable fluorescent front light and dimmable halogen pipe light with separate controls
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work
- ▶ Monitor helps increase productivity by reducing eye & neck strain

Product ID [	Description
26800B-387	DSZV-44 Gemscope w/1080P HD Camera

# DSZV-44 Stereo Zoom Trinocular Microscope on Stand PLED with Mighty Cam USB 5M CMOS Camera

- Magnification Range: 10x to 44x
- Zoom Ratio: 4.4:1
- ► Field of View: 23-5.2mm (0.91"-0.2")
- ► Working Distance: 90mm (3.54")
- ► Includes wide field DSW10x (F.N.23) eyepieces
- ▶ Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator
- Mighty Cam USB 5M CMOS Camera with ezMeasure software
- ► Pole stand with built in LED illumination with dimmer control
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work





### DSZV-44 Stereo Zoom Trinocular Microscope on Stand PLED HD Camera and 8" HD Monitor

- Magnification Range: 10x to 44x
- Zoom Ratio: 4.4:1
- Field of View: 23-5.2mm (0.91"-0.2")
- Working Distance: 90mm (3.54")
- Includes wide field DSW10x (F.N.23) eyepieces
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any
- 1080P HD camera for unsurpassed imagery
- Pole stand with built in LED illumination with dimmer control
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

Product ID	Description
26800B-327	DSZV-44 Stereo Zoom Trinocular Microscope on Stand PLED HD Camera and 8" HD Monitor

#### DSZ-70 Stereo Zoom Binocular Microscope on Stand P with LED FOI 26800B-344

- Magnification Range: 20x to 70x
- Zoom Ratio: 3.5:1
- Field of View: 10-2.8mm (0.39"-
- Working Distance: 80mm (3.15")
- Includes wide field DSW10xZ (F.N.20) eyepieces
- Diopter adjustment on both eyepiece
- Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator
- Compact lightweight pole stand with focus mount
- High Output LED fiber optic illuminator and ring light provide clear illumination for imaging
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

Product	ID	Description
26800B-3	44	DSZ-70 Stereo Zoom Binocular Microscope on Stand P with LED Fiber Optic Illuminator

# NSW-20 Stereo Binocular Microscope with Stand PLED

Magnification: 10x & 20x

spherical aberration

- Field of View 10x; 23mm (0.91")
- Field of View 20x: 11.5mm (0.45")
- 26800B-360 Working Distance: 113mm (4.45")
- Includes wide field DSW10x (F.N.23) eyepieces Diopter adjustment on both eyepiece
- tubes Adjustable Interpupillary Distance of
- 52mm to 75mm (2.04" to 2.95") accommodates any operator Pole stand with built in LED illumination with dimmer control
- Multi coated optical components, free from chromatic and
- Coarse and fine focusing, ideal for fine detail work

Product ID	Description
26800B-360	NSW-20 Stereo Binocular Microscope with Stand PLED

### NSW-30 Stereo Binocular Microscope with LW Stand & LED Ring Light



26800B-327

- Field of View 30x: 7.6mm (0.30")
- Working Distance: 107mm (4.21")
- Includes wide field DSW10x (F.N.23) eyepieces
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator
- Mounted in an E-ARM focus mount attached to a LW articulating arm stand that extends area of view and working distance
- 60 LED Ring Light with brightness and 4 sector control
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail work

Product ID	Description
26800B-361	NSW-30 Stereo Binocular Microscope with LW Stand & LED Ring Light

## NSW-620 Stereo Binocular **Microscope with Stand PLED**

- Magnification: 6x & 20x
- Field of View 6x; 38.3mm (1.51")
- Field of View 20x: 11.5mm (0.45")
- Working Distance: 82.5mm (3.24")
- Includes wide field DSW10x (F.N.23) evepieces
- Diopter adjustment on both eyepiece tubes
- Adjustable Interpupillary Distance of 52mm to 75mm (2.04" to 2.95") accommodates any operator
- Pole stand with built in LED illumination with dimmer control
- Multi coated optical components, free from chromatic and spherical aberration
- Coarse and fine focusing, ideal for fine detail

26800B-365

Product ID	Description
26800B-365	NSW-620 Stereo Binocular Microscope with Stand PLED





#### Micro Lens System Zoom 640

- Infinity Optical Design for large depth of field and zoom ratio
- Parfocal throughout zoom range
- Compact design
- ► High contrast images and vivid colors

Aven Micro Lens System produces crisp and clear images that are distortion free and void of chromatic aberration. This lens system comes with detents which allows you to calibrate the lens for measurement repeatability. Comes standard with 1x C mount coupler and 1x objective lens. Total magnification is 0.6x to 4.0x, Field of View is 6 x 8mm at low magnification and 0.8 x 1.2mm at high magnification. Working Distance is 82mm. Additional couplers and objective lenses are available to help you configure a lens system to meet your application.



26700-151

Product ID	Description
26700-151	Micro Lens System Zoom 640

### Micro Lens System Zoom 640 with In Line LED Coaxial Illumination

- Inline Coaxial Illumination for highly reflective surfaces
- ► Infinity Optical Design for large depth of field and zoom ratio
- Parfocal throughout zoom range
- Compact design
- ► High contrast images and vivid colors



Aven Micro Lens System with inline Coaxial Illumination is ideal for applications involving highly reflective surfaces, such as wafers, polished parts and fluids. This lens system will provide even illumination in high magnification applications. This lens system comes with detents which allows you to calibrate the lens for measurement repeatability. Comes standard with 1x C-mount coupler and 1x objective lens and LED illuminator with intensity control. Total magnification is 0.6x to 4.0x, Field of view is 6 x 8mm at low magnification and 0.8 x 1.2mm at high magnification. Working distance is 82mm. Additional couplers and objective lenses are available to help you configure a lens system to meet your application.

Product ID	Description
26700-151-CX	Micro Lens System Zoom 640 with In Line LED Coaxial Illumination

### Micro Lens System FM123

- Four Lenses
- Switchable Magnification
- Object stays in focus when switching magnification
- Can be used as a monocular microscope with included 10x eyepiece
- C-Mount Adapter Included

The Micro FM123 lens has four switchable lenses, 0.78x, 1.56x, 2.34x and 3.12x, located in the unit. Simply rotate the head to switch between magnifications. It includes a 10x eyepiece which allows you to use the lens as a monocular microscope with magnification of 7.8x, 15.6x, 23.4x and 31.2x. Using a 1/3" CCD camera and a 19" monitor, the on screen magnification is about 62x, 125x, 188x and 250x subject to 4:3 aspect ratio of both screen and camera chip. For other aspect ratio such as 16:9, these magnifications may change depending on the screen and the camera used. Ideal for high magnification field of view measurement.



26700-151

Product ID	Description
26700-151	Micro Lens System FM123

### Macro Lens System Zoom 7000

- ▶ 6:1 zoom ratio
- 6x magnification over focal range of 18mm to 108mm (0.71" to 4.25")
- ▶ Working distance 127mm (5") to Infinity
- Compatible with cameras 16.9mm (0.67") or smaller

The Zoom 7000 is a close focusing macro video lens ideal for applications where objects over 25mm (1") in diameter must be imaged. It offers unsurpassed clarity and parfocal zoom capabilities. Compatible with cameras 2/3"



26700-180

(16.9mm) or smaller. Ideal for quality assurance or assembly applications where easy to view, sharp and true to life magnified image of your product is required.

Product ID	Description
26700-180	Macro Lens System Zoom 7000

# Create Your Own Custom Video Inspection System

With a large variety of adapters, auxiliary lenses, cameras, lighting options, video capture cards and stands you can create and order your own customized video inspection system on our website. If you need help creating a custom video inspection system, please call our experienced sales team and let them assist you in creating a tailor made solution that will meet your specific requirements. Whether you are inspecting objects like integrated circuits, solder joints and small parts, or you require magnification for precision assembly we can provide a customized solution to fit your needs.





#### Adapter Plate for Macro Lens Zoom 7000

- Adaptor for Macro Lens Zoom 7000
- For focus mounts (26800B-517 & 26800B-518)
- Outside diameter: 73mm
- Inside diameter: 46.75mm
- 22.5mm height

26800B-430



Product ID	Description
26800B-430	Adapter Plate for Macro Lens Zoom 7000

### Adapter Plate for Micro Lens 640

- Adaptor for Micro Lens 640
- For focus mounts (26800B-517 & 26800B-518)
- Outside diameter: 73mm
- Inside diameter: 35.25mm
- ▶ 24mm height

26700-151AP

Product ID	Description
26700-151AP	Adapter Plate for Micro Lens 640

### C-Mount Coupler 0.5x

- ▶ Mounts to Micro Video Lens System Zoom 640
- ► Reduces magnification by 0.5x
- Ideal for cameras with sensors 12.7mm (1/2") or larger
- Can be used with any C-Mount camera
- See optical specification chart for more details

Product ID	Description
26700-156	C-Mount Coupler 0.5x

### **C-Mount Coupler 1.0x**

- Mounts to Micro Video Lens System Zoom 640
- ► Increases magnification by 1x
- ▶ Ideal for with sensors less than 16.9mm (2/3")
- Can be used with any C-Mount camera
- See optical specification chart for more details



26700-162

26700-156

Product ID	Description
26700-158	C-Mount Coupler 1.0x

#### Objective Lens 0.5x

- Objective Lens for Micro Video Lens System Zoom 640
- Reduces magnification by 0.5x
- Color corrected lens system
- ► Working distance 175mm (6.9")
- See optical specification chart for more details

Product ID	Description
26700-162	Objective Lens 0.5x

#### **Objective Lens 0.75x**

- Objective Lens for Micro Video Lens System Zoom 640
- Reduces magnification by 0.75x
- Color corrected lens system
- Working distance 117mm (4.6")
- See optical specification chart for more details

Product ID	Description
26700-163	Objective Lens 0.75x

0.75X WD:117

1X WD:82

1.5X WD:

### Objective Lens 1x

- Objective Lens for Micro Video Lens System Zoom 640
- Color corrected lens system 26700-164
- ► Working distance 82mm (3.2")
- See optical specification chart for more details

Product ID	Description
26700-164	Objective Lens 1x

# Objective Lens 1.5x

- Objective Lens for Micro Video Lens System Zoom 640
  - Increases magnification by 1.5x
- Color corrected lens system
- Working distance 54mm (2.1") 26700-165
- ▶ See optical specification chart for more details

Product ID	Description
26700-165	Objective Lens 1.5x

#### **Objective Lens 2x**

- Objective Lens for Micro Video Lens System Zoom 640
- ▶ Increases magnification by 2x
- ▶ Color corrected lens system
- ► Working distance 35mm (1.4")
- See optical specification chart for more details

Product ID	Description
26700-166	Objective Lens 2x

26700-166

### **Optical Data Chart**

Magnification	Working Distance		0.5X	1X
0.3X	WD:293mm	Total Mag.	0.09X0.6X	0.18X1.2X
0.5X		FOV(mm)	40X53.336X8	20X26.673X4
0.5X	WD:175mm	Total Mag.	0.15X1X	0.3X2X
0.5X		FOV(mm)	24X323.6X4.8	12X161.8X2.4
O FEW	WD:117mm	Total Mag.	0.225X1.5X	0.45X3X
0.75X		FOV(mm)	16X21.33-2.4X3.2	8X10.67-1.2x1.6
1X	WD: 82mm	Total Mag.	0.3X-2X	0.6X-4X
IX.		FOV(mm)	12X16-1.8X2.4	6X8-0.9X1.2
157	WD:54mm	Total Mag.	0.45X-3X	.9X-6X
1.5X		FOV(mm)	8X10.67-1.2X1.6	4X5.33-0.6X0.8
2X	WD:35mm	Total Mag.	0.6X-4X	1.2X-8X
28		FOV(mm)	6X8-0.9X1.2	3X4-0.45X0.6



26700-102-00



26700-102-30

26700-102-35

#### Micro Zoom Series 640 PK1

- PC not required for image processing
- ► Produces crisp clear images
  ► White LED illumination with
- White LED illumination with intensity control
- Color camera with movable and switchable crosshairs
- On screen menu for controlling color, contrast, white balance etc.
- Heavy Duty Post Stand includes 10 tapped holes for mounting x-y stages
- ▶ Compact system, helps save bench space
- ▶ On screen magnification: 14.25x to 190x
- ▶ Working distance: 82mm with 1x Objective Lens
- ▶ Field of view: 6 x 8 to 0.9 x 1.2mm with 1x Objective
- Parfocal lens system

Product ID	Description
26700-102-00	Micro Zoom Series 640 PK1

### Micro Zoom Series 640 PK2

- PC not required for image processing
- Produces stunning clear and crisp HD images
- White LED Fiber Optic Illumination provides shadow free illumination
- ≥ 1080P Color Camera with HDMI output;
  On screen menu for controlling color, contrast, white balance etc
- Dual Arm Boom Stand provides stability and eliminates vibrations while allowing you to move over large areas of the object being viewed
- ▶ Lens can be angled in any direction for enhanced viewing
- On screen magnification: 19.5x to 263x
- ▶ Working distance: 82mm with 1x Objective Lens
- ▶ Field of view: 6 x 8 to 0.9 x 1.2mm with 1x Objective
- ▶ Parfocal lens system

Product ID	Description
26700-102-10	Micro Zoom Series 640 PK2

### Micro Zoom Series 640 PK3 Benchtop Measurement System

- Produces crisp clear images; PC not required for image processing
- White LED Fiber Optic Illumination
- ► HD 1080p Color camera with USB mouse control and Built In Measurement Software
- Software 26700-102-15

  Measure lines/distance,
  circles, arcs, squares, polygon, perimeters, angles, center to center distance
- ▶ Compact system, helps save bench space
- On screen magnification: 19.5x to 263x
- ▶ Working distance: 82mm with 1x Objective Lens
- ▶ Field of view: 6 x 8 to 0.9 x 1.2mm with 1x Objective
- Parfocal lens system

Product ID	Description
26700-102-15	Micro Zoom Series 640 PK3 Benchtop Measurement System

### Micro Series FM123 PK4 Benchtop Measurement System

- Measure lines/distance, circles, arcs, and polygons
- Produces crisp and clear images
- White LED Fiber Optic Illumination
- Color camera with USB mouse control and Built in Measurement Software
- On screen menu for controlling color, contrast, white balance etc



- On screen magnification from 44.2x to 176.9x
- ► Working distance: 64.3mm
- ▶ Four switchable lens system: 0.78x, 1.56x, 2.34x, and 3.12x
- Field of view: 6 x 4.5mm @ 0.78x; 3 x 2.2mm @ 1.56x; 2 x 1.5mm @ 2.34x; 1.5 x 1.1mm @ 3.12x

Product ID	Description	
26700-102-20	Micro Series FM123 PK4 Benchtop Measurement System	

#### Micro Zoom Series 745 PK1

- Produces crisp clear images
- View object on a large 22" HD Color LED Monitor
- ► Working distance: 46mm
- Field of view: 8.8 to 1.3mm
- On screen magnification from 50x to 340x
- Compact system helps save bench space
- White top and bottom LED illumination with intensity control
- 720p VGA color camera with cross hair and on screen menu for controlling color, contrast, white balance etc.

	Product ID	Description
	26700-102-30	Micro Zoom Series 745 PK1

# Micro Zoom Series 640 with Coaxial Illumination PK 5

- In line coaxial LED illumination helps reduce glare when inspecting shiny parts
- Color HD camera with movable and switchable crosshairs
- On screen menu for controlling color, contrast and white balance
- ► Parfocal lens system
- ► Working distance: 46mm
- ▶ Field of view: 8.8 to 1.3mm
- On screen magnification from 50x to 340x

Product ID	Description
26700-102-35	Micro Zoom Series 640 with Coaxial Illumination PK 5





#### Macro Series Zoom 7000 PK M1

- Stunning Life Like Picture on 22" HD LCD Monitor
- Large Magnification Range 3.7x to 61.9x
- Large working distance; 117.8 to 304.8mm
- 6:1 zoom allows for quick magnification of area of interest
- Parfocal over entire zoom range
- PC not required for image processing
- Heavy Duty Post Stand includes 10 tapped holes for mounting x-y

Product ID	Description
26700-103-00	Macro Series Zoom 7000 PK M1

#### Macro Series Zoom 7000 PK M2

- Stunning Life Like Picture on 22" HD LCD Monitor
- Large Magnification Range 3.7x to 61.9x
- Large working distance; 117.8 to 304.8mm
- Double Arm "Easy Glide" Boom Stand with heavy base for stability
- Parfocal over entire zoom range
- PC not required for image processing
- 6:1 zoom allows for quick magnification of area of interest

Product ID	Description	
26700-103-10	Macro Series Zoom 7000 PK M2	

#### Macro Series Zoom 7000 PK M3

- Stunning Life Like Picture on 22" HD LCD Monitor
- Large Magnification Range 3.7x to 61.9x
- Large working distance: 117.8 to 304.8mm
- 6:1 zoom allows for quick magnification of area of interest
- Light weight articulating arm with E-Arm allows users to cover a large working area and move microscope out of the way when not

26700-103-20

- Parfocal over entire zoom range
- PC not required for image processing

Product ID	Description	
26700-103-20	Macro Series Zoom 7000 PK M3	

### **Macro View** All in One Scope

- Wide field of view and long working distance
- Two parfocal lenses (10x & 15x)
- Built in 60 LED ring light with intensity control
- 2x Digital Zoom and Mirror function built into camera
- Compact and Easy to Use

26700-103-00

26700-103-10

- Focus mount includes course and fine adjustment knobs
- On screen Magnification: 10x and 15x; 20x and 30x with optional 2x lens; 40x and 60x with optional 4x lens
- Working distance: 145mm; 69mm with optional 2x lens; 29mm with optional 4x lens
- Field of view: 20 x 15mm at 10x: 13.3 x 10mm at 15x



26700-104-00

### Auxiliary Lens 2x for Macro All in One Scope

- Increases on screen magnification for Macro View All in One Scope
- Decreases working distance and field of view



Product ID **Description** 26700-104-2x Auxiliary Lens 2x for Macro View All in One Scope

#### Auxiliary Lens 4x for Macro All in One Scope

Increases on screen magnification for Macro View All in One Scope

Decreases working distance and field of view



Product ID	Description	
26700-104-4x	Auxiliary Lens 4x for Macro View All in One Scope	



#### Mighty Cam USB 5M CMOS Camera

The Mighty Cam USB 5M CMOS camera includes ezMeasure software which produces stunning images with exceptional clarity for measuring, analyzing and annotating your magnified images. The large 5M CMOS sensor provides excellent color fidelity offering true color out of the box with no need for adjustment. The versatile C/CS lense mount adapter ring attaches between camera and lens, and converts a CS-Mount lens to C-Mount camera to achieve a focused image.



26100-243

- Provides wide, dynamic range and crisp, natural color reproduction in any lighting
- USB 5M CMOS Camera with ezMeasure Software
- 5M CMOS Sensor (2592 x 1944)
- Easy Plug and Play USB 2.0 Interface
- Compact and Light Weight
- Versatile C/CS lenses mount
- ▶ Ideal for inspection, scientific image analysis, biomedical research

Product ID	Description	
26100-243	Mighty Cam USB 5M CMOS Camera	

#### Mighty Cam Connect

The Mighty Cam Connect is a new generation microscope camera, turning traditional microscopes into wireless inspection systems. The Mighty Cam Connect features a built-in Wi-Fi hotspot that wirelessly broadcasts high quality images in real time to a free app available for iOS and Android devices.



26100-256

Live streaming, capture and record video from the Free Wi-Viewer

- Hardware snapshot button for instantly saving image to all connected devices
- Wi-Fi signal broadcasts up to 10m
- Connect up to 3 iOS/Android devices, share real time image simultaneously
- Active pixel technology for sharp images and accurate color reproduction

Product ID	Description	
26100-256	Mighty Cam Connect	

### Aven VGA Color Camera 720p

Aven's color VGA camera allows connectivity directly to a PC monitor. A PC is not required for image processing thus saving you the cost of a PC and bench space. All features of the digital camera can be controlled via on screen menus such as RGB values, white balance, cross hair, auto exposure, etc.



► Compact 720p Color Camera with VGA output

- Live/Freeze Image Function; Cross Hair for quick gaging
- Produces crisp and clear color images in wide screen format
- Auto gain exposure setting to reduce glare
- On screen menu for quick access to camera settings

Product ID	Description	
26100-252	Aven VGA Color Camera 720p	

### Aven VGA Color Camera 1.3M w/SD Card

Aven's color VGA camera allows you to connect directly to a PC monitor. A PC not required for image processing, thus saving you bench space. In addition, a built in SD card allows you to save images. All features of this digital camera can be controlled via on screen menus, such as RGB values, white balance, cross hair grid, and auto exposure. 4 Vertical and 4 horizontal cross hair grids available with 6 color



26100-253

- Compact 1.3M Color Camera with VGA Output
- ▶ Built in SD card for saving images
- ▶ Live/Freeze Image Function
- ► Multiple cross hair for quick gaging
- ▶ Produces crisp and clear color images in wide screen format
- Auto gain exposure setting to reduce glare

Product ID	Description
26100-253	Aven VGA Color Camera 1.3M w/ SD Card

## Aven 1080P HDMI Color Camera 2M w/ USB Flash Drive

Aven's 1080P HD color camera allows you to connect the camera directly to a HD monitor with an HDMI input. A PC is not required for image processing, thus saving you bench space. In addition, a built in USB Flash Drive allows you to save images. All features of this digital camera can be controlled via on screen menus, such as RGB values, white balance, cross hair grid, and auto exposure.



26100-253HD

- ► Connects directly to an HD monitor with HDMI input
- Built in USB Flash Drive for saving images
- Live/Freeze image function
- Multiple cross hair for quick gaging
- Produces stunning life like images with exceptional clarity

Product ID	Description	
26100-253HD	Aven 1080P HDMI Color Camera 2M w/ USB Flash Drive	

### **Aven HDMI Color Camera** 2.0M w/USB Flash Drive & Built in Measurement Software

Aven's color HDMI camera with built in USB Flash Drive and measurement software, is a simple solution to those that need to inspect and measure with accuracy. A PC is not required for image processing and no software to install. Images with measurement data can be



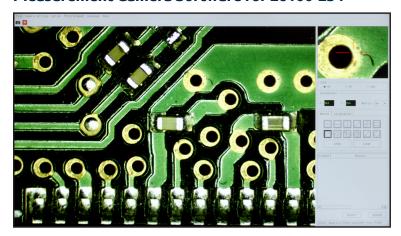
saved to the built in USB Flash Drive using the 26100-254 remote trigger (included). Built in software includes the following features: Edge Detection, Live/Freeze Image, Measure line, circle, radius, angle and parallel lines.

- Compact 720p Color Camera with VGA output
- Live/Freeze Image Function; Cross Hair for quick gaging
- Produces crisp and clear color images in wide screen format
- Auto gain exposure setting to reduce glare
- On screen menu for quick access to camera settings

Product ID	Description	
26100-254	Aven HDMI Color Camera 2.0M w/SD Card	

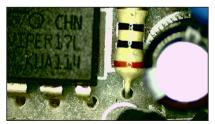


#### Measurement Camera Software for 26100-254



#### Measure and Analyze with Ease

The advanced measurement software is able to detect gray scale gradations and can measure a line, circle, radius, angle and parallel lines in millimeters or inches. Users can save five sets of measurement data on the USB Flash Drive, which simplifies comparisons and record-keeping. White balance and exposure can be automatic or one-click mouse functions.



#### Capture High Quality Images

Create enhanced still photos with or without measurement lines and save for further analysis.



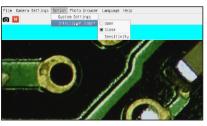
#### **Optional Capture Settings**

Software allows you to choose which image format to save files in (JPG or BMP) and also measurements you added to the image.



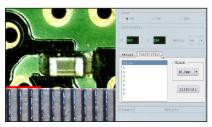
#### **Camera Settings**

The software also allows you to edit all camera settings. Options include luminance, contrast, RGB values, auto exposure and auto white balance.



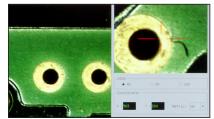
#### **Edge Detection Tool**

Software has an Intelligent Edge detection tool built in for finding boundaries of objects within images. It works by detecting the discontinuities in brightness.



#### **Easy Measurement Calibration**

Calibrating the software for measurement is as simple as placing a ruler or other scale under the lens, selecting the size, e.g. 16mm and pressing the Calibrate button.



#### **Magnifying Window**

Software digitally magnifies the area around the mouse pointer by 4x, 9x and 16x (selectable). This is particularly helpful when you need to see minute features.

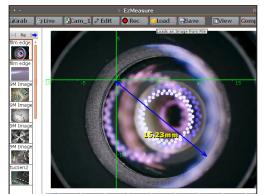
#### **Additional Features**

- ▶ Photo Browser displays images saved on USB Flash Drive and can be expanded to full screen for review
- ▶ Measurement results are displayed in the side panel and can be exported and saved on the USB Flash Drive
- ▶ Multiple measurement tools such as lines, parallel lines, circles and polygons (plotted with up to 10 points) are available in the Manual tab

<sup>\*</sup> Note: Aven recommends that you use a detented lens system or a microscope with click stops for accurate repeatable measurements.

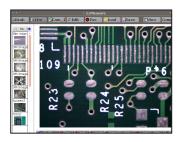


# ezMeasure<sup>®</sup> Software



#### Measure, Annotate and Analyze with Ease

ezMeasure® software allows you to measure, annotate, and analyze your images with just a few mouse clicks. Create written reports that include the raw data, plus the images involved. With ezMeasure® you can view realtime live images or screenshots from your saved folder which can be reviewed, replayed, and analyzed. Recent projects are easily accessible with thumbprint menu.



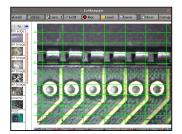
#### **Capture High Quality Images**

Create enhanced still photos or record a live video stream for play back.



#### **Simultaneous Live Views**

Use two cameras on same work station for side by side live views.



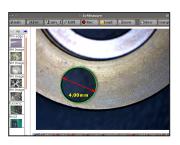
#### **Grid Feature**

Locate and compare with ease using multiple grid views.



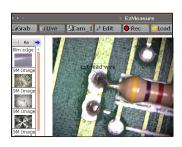
#### **Customize the Layout**

Set the layout to your personal preferences and save your unique settings for future use.



#### **Measurement Tools**

- ➤ Set the image pixels to real units eg. mm or inches.
- ▶ Record and save multiple calibration settings.
- ▶ Measure the distances between different points, or edges.



#### **Text Button**

Allows annotations directly onto the screen. The user has the ability to adjust the size and the appearance of the text.

#### **Additional Features**

- ▶ Fill Mode Tool determines the image size: Fit-to-Fill the entire viewing area, Zoomed in, or Preserve the Original aspect ratio.
- ▶ Location Button provides a cursor for the X,Y,Z-axis coordinates. Moving the Cursor with the mouse updates the coordinates.
- ▶ And many many more ...

Product ID	Description
26100-406	ezMeasure <sup>®</sup> Software



### **Model 21 AC Fiber Optic** Illuminator

- Compact low profile 150w halogen illuminator
- Quick lamp change
- Stackable

**Product ID** 

26200A-201

Rugged aluminum housing provides maximum durability

Description

Model 21 AC Fiber Optic Illuminator

Adjustable lamp intensity control



26200A-201

### Fiber Optic Ring Light

- High quality glass fiber
- Provides 360° shadow free illumination
- Large fiber bundle ensures maximum light transmission
- Accepts polarizers

▶ High quality fiber

illumination

(5/8") adapter

**Product ID** 

26200A-403

- Comes with standard 15.875mm (5/8") adapter
- Inner diameter 58.674mm (2.31")

**Ring Light - Video Lenses** 

Provides 360° shadow free

Large fiber bundle ensures

maximum light transmission

Comes with standard 15.875mm

Inner diameter 28.58mm (1.125")

Designed for use with Video Lenses

Description

Ring Light - Video Lenses

Product ID	Description
26200A-402	Fiber Optic Ring Light

### **ProLux LED Fiber Optic Illuminator**

- Accepts Virtually any Light Guide with Quick Change Adapters
- Advanced Heat Pipe Technology Using Metal Core PCB's
- Higher Brightness, Better Color, Longer Life, Half the Energy Consumption and Reduced **Ownership Costs**
- Linear Light Intensity Control with
- **Continuous Dimming**

Description

ProLux LED Fiber Optic Illuminator

Maintenance Free LEDs Have a Minimum Lifetime of 25,000 Hours

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Polarizer for Fiber	
Ontic Rina Liahts	

- Helps reduce glare
- Analyzer sits in Counterbore
- Low profile does not inhibit placement of lens or object viewed





26200A-403

26200A-402

26200A-402P

Product ID	Description
26200A-402P	Polarizer for Fiber Optic Ring Light

Dual	Pine I	iaht	Guide

Product ID

26200A-300

- Large fiber bundle assures
- accurate positioning
- individual light control



#### Product ID Description 26200A-523 **Dual Pipe Light Guide**

# Fiber Optic Area Backlight - 4 x 4 in

- Ideal for high contrast silhoutted images
- Highly diffuse even light distribution
- Sleek, slim design provides versitility for mounting in tight space



Product ID	Description
26200A-532	Fiber Optic Area Backlight - 4 x 4 in

# Illumination for Microscopy & Video Inspection

Aven offers a variety of lighting options. Ecofriendly white LED ring lights are designed to be used with standard microscopes and video lenses providing a stable bright light at a very low temperature. Fiber optic illuminators are often referred to as "cold light" illuminators because they provide high intensity focused light without the heat typically associated with high intensity lamps. Additional options include a ring light with polarizer for shiny surfaces as well as diffuse axial LED illuminator for specular & shiny surfaces.



www.aveninc.com



#### Diffuse Axial LED Illuminator

- Evenly illuminates flat and shiny surfaces
- Enhances scribed, indented or embossed features
- Creates contrast between specular, diffuse and/or absorptive surfaces
- Diminish visibility of clear overcoats or coverings





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26200B-207

26200B-214

Product ID	Description
26200B-220	Diffuse Axial LED Illuminator

### Ring Light LED with **Integrated Focus Mount**

- Integrated LED ring light with focus mount with coarse and fine focus
- Eliminates chance of LED ring becoming loose from the microscope
- Increases working distance
- May be used with standard stand, articulating arm stand or either single or double arm boom stands\*

Product ID	Description
26200B-207	Ring Light LED with Integrated Focus Mount

### Ring Light LED with **Polarizer**

- ► Polarizer with Analyzer is ideal for illuminating shiny or highly reflective parts
- LED lights are flicker free, energy efficient and ecofriendly
- Operates at a low temperature and does not change color over
- Inner diameter is 70mm (2.75") with three thumb screws for easy mounting

Product ID	Description
26200B-214	Ring Light LED with Polarizer

# Ring Light LED Triple Color

- 120 LEDs. 40 White. 40 Blue and 40 Red
- 7 Step Brightness Control
- Flicker Free
- No color change with temperature
- Energy efficient and eco friendly



26200B-213

Product ID	Description
26200B-213	Ring Light LED Triple Color

<sup>\*</sup> Note: When used with articulating stand, single arm boom stand, or double arm boom stand, an arbor (26800B-521) is required for mounting.

#### **Pro Series 40 LED Ring Light**

- ▶ 40 powerful high precision aligned LEDs (white daylight)
- 4 quadrant controller and auto voltage sensing power supply
- Machined aluminum alloy housing for
- Fully adjustable dimming control
- 360° shadow free illumination



26200B-217

Product ID	Description	
26200B-217	Pro Series 40 LED Ring Light	

#### **LED Ring Light w/Brightness** and Sector Control

- ▶ 60 High Intensity LED Lights
- 7 Step Brightness Control
- 4 sectors and each can be controlled independently
- Flicker Free
- No color change with temperature



26200B-211

Product ID	Description
26200B-211	LED Ring Light w/Brightness and Sector Control

### **LED Ring Light w/Brightness** and Sector Control

- 72 High Performance LED Lights
- **Continuous Brightness Control**
- 4 sectors and each can be controlled independently
- No color change with temperature



Product ID	Description
26200B-212	LED Ring Light w/Brightness and Sector Control

### Ring Light Adapater

- Allows for secure mounting of ring lights to DSZ, NSW and SPZ Series Microscopes
- Screws onto bottom of microscope body



**Product ID** Description 26800B-460 Ring Light Adapater

#### **Protective Lens Cover**

- Glass fitted inside metal ring with threaded screw
- Mounts to bottom of microscope body
- Useful when soldering under the microscope
- Protects fumes from damaging the microscope



Product ID	Description
26800B-465	Protective Lens Cover



### Single Arm Boom Stand w/Heavy Metal Base

- Base dimensions: 285 x 260 x 18mm (11.22" x 10.23" x 0.71")
- Vertical post length: 384mm (15.12")
- Heavy base provides excellent stability
- Allows positioning of microscopes over large area
- Posts are highly polished for smooth operation



26800B-525

Product ID	Description
26800B-519	Single Arm Boom Stand w/Heavy Metal Base

# Single Arm Boom Stand w/Heavy Duty Clamp

- Vertical post length: 384mm (15.12")
- Smooth movement of a ball bearing slide allows easy positioning of microscope over object being viewed
- Heavy duty C Clamp provides stability and saves bench space
- Allows positioning of microscopes over large

Product ID	Description
26800B-525	Single Arm Boom Stand w/Heavy Duty Clamp

### Double Arm Boom Stand w/Heavy Metal Base

- Base dimensions: 285 x 260 x 18mm (11.22" x 10.23" x 0.71")
- Vertical post length: 384mm (15.12")
- Heavy Base couples with ball bearing slide allows for easy positioning of the microscope
- 605mm height available with extension post



Product ID	Description
26800B-534	Double Arm Boom Stand w/Heavy Metal Base

# Double Arm Boom Stand w/Heavy Duty Clamp

- Vertical post length: 384mm (15.12")
- Smooth movement of a ball bearing slide allows easy positioning of microscope over object being viewed
- Heavy duty C Clamp provides stability and

<ul> <li>Allows positioning of microscopes over large area</li> </ul>		26800B-536
Product ID	Description	
26800B-536	Double Arm Boom Stand w/Heavy Duty Clamp	_

Note: Single & Double Arm Boom Stands require either a Focus Mount (26800B-517) with tiltable arbor (26800B-521) or E-Arm Focus Mount (26800B-518).

#### Pole Stand with Focus Mount

- Base dimensions: 210 x 278 x 25mm (8.26" x 10.94" x 0.98")
- Vertical post length: 255mm (10")
- Includes rack & pinion focus mount with fine focus adjustment
- Frosted, Black & White Stage Plates
- Safety clamp included



26800B-510

26800B-508

26800B-512

Product ID	Description
26800B-509	Pole Stand with Focus Mount

# Pole Stand with Focus Mount with LED Illumination Top and Bottom



- Vertical post length: 255mm (10")
- Includes rack & pinion focus mount with fine focus adjustment
- Top & Bottom LED illumination with dimmer control
- Frosted, Black & White Stage Plates
- Safety clamp included



### Track Stand with Focus Mount with **LED Illumination Top and Bottom**

- ▶ Base dimensions: 210 x 278 x 40mm (8.26" x 10.94" x 1.57")
- Tracking range: 245mm (9.65")
- Light weight compact track stand
- Comes with rack & pinion focus mount with fine focus adjustment
- Top & Bottom LED illumination with dimmer control
- Frosted, Black & White Stage Plates

Product ID	Description	
26800B-508	Track Stand with Focus Mount with LED Illumination Top and Bottom	

### Pole Stand with Focus Mount and LED Illumination

- Base dimensions: 220 x 284 x 15mm (8.6" x 11" x 0.6")
- Vertical post length: 255mm (10") Light weight compact stand
- Comes with rack & pinion focus mount with course and fine adjustment knobs
- Built in 60 LED ring light with dimmer control



Note: Pole stands are not suitable for SPZ Series microscopes with 0.5x lens as vertical post is not long enough to accommodate the working distance.





26800B-507

#### **Diffuser for Glare Reduction**

- Helps reduce glare from shiny objects
- Made from durable plastic material
- Ideal for observing solder joints, metallic parts or shiny surfaces
- Designed for use with 26800B-512 (Stand PLED) and 26200B-207 (Ring Light with Focus Mount)

Product ID	Description
26200B-209DF2	Diffuser for Glare Reduction

#### Pole Stand with Focus Mount

- Base dimensions: 220 x 284 x 15mm (8.66" x 11.18" x 0.59")
- Vertical post length: 250mm (10")
- ► Light weight compact stand
- ▶ Ideal for examining small parts
- Saves bench space
- Includes with rack & pinion focus mount with course and fine adjustment knobs



Product ID	Description
26800B-511	Pole Stand with Focus Mount

# Light Weight Articulating Arm Stand

- Allows great flexibility in positioning microscopes
- Light weight and compact design
- ► Easy height adjustment
- Aluminum and ABS Plastic construction

26800B-555

Product ID	Description
26800B-555	Light Weight Articulating Arm Stand

### Standard Articulating Arm Stand

- Allows great flexibility in positioning microscopes
- Can be moved out of way when not in use
- All metal construction



Product ID	Description
26800B-560	Standard Articulating Arm Stand

#### **LCD Monitor Mount**

- Improves productivity with expanded workspace and high ergonomic comfort
- Arms have 360 degree swivel and rotation and -15 to +15 degree tilt adjustment
- ▶ Made of high grade steel and aluminum
- ► Holds Widescreen Display up to 27"
- Heavy duty "C" clamp mounts to desktop providing excellent stability

  26700-410

Product ID	Description
26700-410	LCD Monitor Mount, 512 Series, Post Height 17-in
26700-411	LCD Monitor Mount, 542 Series, Post Height 12-in

# Gemology Stand with Fluorescent and Halogen Illumination

- Independently controllable fluorescent front light provides even shadow free illumination
- ► Dimmable halogen transmitted and pipe light with separate controls
- 2 post positioning, right and left for adjustable gem tweezers
- Adjustable iris in dark field attachment
- Stand can be inclined from 0 to 10 degree

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Product ID	Description
26800B-507	Gemology Stand with Fluorescent and Halogen Illumination

### **Heavy Duty Post Stand**

- Base dimension: 279 x 330 x 12.7mm (10.98" x 13" x 0.5")
- Vertical post length: 406mm (15.98")
- Aluminum powder coated base
- ▶ 10 tapped holes for mounting x-y stages
- ▶ UNC bolt and safety clamp included
- Vertical post will accept focus mount (26800B-517) to which bodies SPZH, SPZ series, DSZ series and NSW series can be mounted



Product ID	Description
26800B-570	Heavy Duty Post Stand

#### **Focus Mount**

- ► Coarse & Fine Focus Adjustments
- Precision Rack & Pinion Mechanism with Tension Control
- ▶ 74mm diameter ring
- Will accept our SPZH, SPZ, DSZ and NSW series microscopes



#### **E-Arm Focus Mount**

- Rack & Pinion Mechanism with Coarse Focus Adjustment
- ► 50mm focusing distance in vertical direction
- ▶ 74mm diameter ring
- Mounts to any of our boom stands or articulating arm stands



26800B-518

#### Tiltable Arbor

- Designed to extend the working range of boom stands and articulating arm stands
- Allows tilting of microscope bodies to increase operator comfort



Product ID	Description
26800B-521	Tiltable Arbor