









■ MICROSCOPE SPECIFICATION SUMMARY

Product Name	DIGITAL MEASURING MICROSCOPE	zoo	OM STEREO MICROSC	VARIABLE POWER STEREO MICROSCOPE	VARIABLE POWER TURRET STYLE STEREO MICROSCOPE	
Model No.	MMS-1498	XTS2021	XTS-SP2	XZ-45N	XT-2040	XTDB-SP2N
Page Referred	335	336	336	337	337	337
	12					
Туре	Turret Type		Zoom Type		Turre	t Type
Magnification	14x~98x		~45x ~90x	10x∼45x	20x 40x	10x 30x
Objective	0.7x, 1x, 1.5x, 2x, 2.5x, 3x, 4x, 5x	0.65x (Zoom R	~4.5x Patio 1:7)	1x~4.5x (Zoom Ratio 1:4.5)	2x 4x	1x 3x
Eyepiece	_	WF10x (F WF20x (F		WF10x (FOV 20mm)	WF10x (FOV 19mm)	WF10x (FOV 20mm)
Working Distance	100mm	951	mm	97mm	105mm	100mm
Eyepiece Angle	-	4	5°	60°	4	5°
Eyepiece Width adj• Range	-	55~7	75mm	_	55~7	75mm
Lighting	Built-in ●Epi-illumination ●White LED x 144pcs	Built-in ●Epi-illumination (halogen bulb:6V・ 15W) ●Transmitted illumination (5W fluorescent bulb)		Separat	ely Sold	
Applicable Lighting (separately sold)	Not attachable	Not attachable	LED RING ILLUMINATOR ⇒ P338~339 Model No. L-21D Number of LED: 21 Illuminance Adjustment Function LED RING ILLUMINATOR ⇒ P338~339 Model No. L-48D Number of LED: 48 (Switchable lighting sections) Illuminance Adjustment Function Model No. L-12 Number of LEE Equipped with a filter to reduce			
Mounting Size	-	_	M48 attachment included	φ53mm	M48 attachn	nent included
Base Dimensions	320 x 260 x 20mm	245 x 190 x 60mm	245 x 170 x 40mm	255 x 200 x 25mm	295 x 285 x 33mm	255 x 200 x 25mm
Diopter adj. Range	_			±5 diopter		
Stand	Rack & pinion	Rack & pinion	Pole stand (φ 25mm)			Pole stand (φ32mm)

MICROSCOPE

FIBER SCOPE

MAGNIFIER

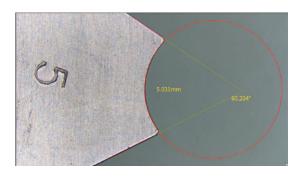
INSPECTION MIRROR

DIGITAL MEASURING MICROSCOPE NEW!

Standard Monitor Included.

A microscope capable of measurement and recording. Equipped with an automatic detection function to recognize the workpiece's contour, allowing for intuitive operation.







USE

- For inspecting cracks, surface degradation, etc., in mechanical parts made of metal, fiber, resin, etc.
- For measuring hard-to-reach areas on images that are difficult to measure with hand tools **MATERIAL**
 - Body: PVC
 - Column and Base: Aluminum

FEATURES

- A digital microscope with an integrated optical system and monitor
- Various measurements such as length, parallel/ vertical distance, circle dimensions, and angles can be performed on images
- By connecting a USB flash memory, image and measurement data can be exported
- Comes with standard dimmable white LED ring lighting
- The accuracy of the scale can be checked using a separately sold calibration slide **SPECIFICATIONS**
 - ■Total magnification: 14 to 98x
 - Objective lens: 0.7x, 1x, 1.5x, 2x, 2.5x, 3x, 4x, 5x
 - Field of view: Approx. 16 x 11 to 2.2 x 1.5mm (with menu display)
 - Guaranteed accuracy at shipment: 0.7x: ±0.05mm

4.0x, 5.0x: ± 0.03 mm

(For higher accuracy, calibration can be performed with an optional calibration slide)

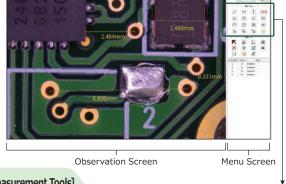
- Working distance: 100mm
- Maximum observable Height: Approx. 60mm
- Focus adjustment: Main body vert. position control
- Stand: Rack and pinion system
- Image sensor: 1/3 CMOS
- Pixel count: 1980 x 1080 pixels, approx. 2 million pixels
- Frame rate: 25, 30, 50, 60 frames per second (selectable)
- Interface: USB 2.0 x 2
- Illumination: White LED x 144
- Main functions: Image RGB, contrast adjustment, still image storage, measurement (length, parallel/vertical distance, circle dimensions, angle, etc.) and measurement data storage

POWER SUPPLY

Included AC Adapter

ACCESSORIES

AC Adapter (AC100-240V), Mouse, Protective cover



[Measurement Tools] Horizontal Length Perpendicular Distance from Line Length Length · Angle Length · Angle Angle Parallel Lines Width · Height · Perimeter · Area stance · Center Line Circle Concentric Circles
Radius 1-Radius 2Polygon
Perimeter Radius · Diameter · Perimeter · Angle · Center Coordinates Radius · Diameter · Distance from Circle Center to Circle Center Distance from Line to Circle Center to Circle Center Distance · X Difference · Y Difference

Order No.	Model No.	Body Size	Weight
NEW! 140153	MMS-1498	290 × 320 × 443mm	4.4kg

Also Available: CALIBRATION SLIDE for Accuracy Verification CS-MMS-10 (Sold separately) / 3D ATTACHMENT for stereoscopic observation from an angle 3D-MMS (Sold separately).

MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION MIRROR



ZOOM STEREO MICROSCOPE



Units: mm

Zoom type that is ideal for enlarging and inspecting precision parts



USE

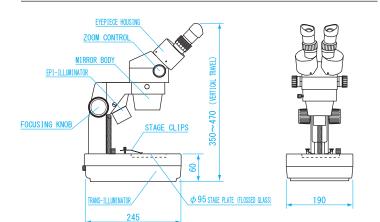
• Ideal for inspection of semiconductors, electronics, and precision parts

FEATURES

- Zoom type binocular stereoscopic microscope
- With epi-illumination (halogen) and transmitted illumination
- With two pcs of stage plates (flossed glass and reversible black & white plastic plate)

SPECIFICATIONS

Rated Voltage: AC100V



■ 5W FLUORESCENT BULB FOR TRANSMITTED ILLUMINATION

Order No.	Model No.	Rated Power
140014	2021-5W-OS	5W

■ 15W HALOGEN LAMP

DIMENSIONS

Order No.	Model No.	Rated Power
140005	6V-15W	15W

Order No.	Model No.	Magnification	Objective	Eye Piece	Working Distance	Focus Adjustment	Eye Width Adjustment	Eye Piece Inclination	Diopter Adjustment Range	Stand	Lighting System	Weight
140003	XTS2021	6.5~45x 13~90x	0.65~4.5x (Zoom Ratio 1:7)	WF10x (FOV 20mm) WF20x (FOV 10mm)	95mm	Main body vert. position control	55~ 75mm	45°	±5 diopter	Rack & pinion	Epifluorescence 6V·15W Transillumination 5W	5 7kg

ZOOM STEREO MICROSCOPE

P338

~339

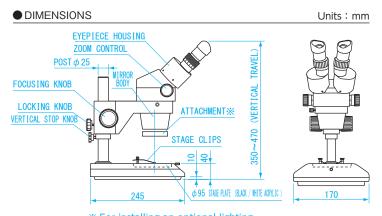
Zoom type that is ideal for enlarging and inspecting precision parts





USE

- Ideal for inspection of semiconductors, electronics, and precision parts
- **FEATURES**
 - Zoom type binocular stereoscopic microscope
 - Optional lighting unit attachable (separately sold)



* FOR	installing a	n optiona	t tignting

Order No.	Model No.	Magnification	Objective	Eye Piece	Working Distance	Focus Adjustment	Eye Width Adjustment	Eye Piece Inclination	Diopter Adjustment Range	Stand	Weight
140000	XTS-SP2	6.5~45x 13~90x	0.65~4.5x (Zoom Ratio 1:7)	WF10x (FOV 20mm) WF20x (FOV 10mm)	95mm	Main body vert. position control	55~ 75mm	45°	±5 diopter	Pole stand	5.4kg



ZOOM STEREO MICROSCOPE



P338 ∼339

Lighting for stereo microso

Ring Illuminator

Zoom type that is ideal for enlarging and inspecting precision parts



USE

 Ideal for inspection of semiconductors, electronics, and precision parts

FEATURES

- Zoom type binocular stereoscopic microscope
- Optional lighting unit attachable (separately sdd)

DIMENSIONS	Units: mm
FOCUS ING MIRROR MIRROR MNOB BODY LOCKING MNOB POST \$\phi 32\$ 138	200

Order No.	Model No.	Magnification	Objective	Eye Piece	Working Distance	Focus Distance	Eye Piece Inclination	Diopter Adjustment Range	Stand	Weight
140102	XZ-45N	10~45x	1~4.5x (Zoom Ratio 1:4.5)	WF10x (FOV 20mm)	97mm	Main body vert. position control	60°	±5 diopter	Pole stand	3.6kg

VARIABLE POWER STEREO MICROSCOPE TURRET TYPE



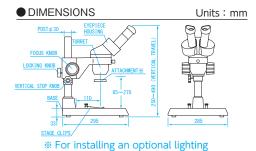
Two magnifications with switchable objective lens





USE

- Ideal for continuous inspection of components of similar size FEATURES
 - Binocular turret type stereo microscope with switchable objective lens
 - Optional lighting unit attachable (separately sold)



Order No.	Model No.	Magnification	Objective	Eye Piece	Working Distance	Focus Adjustment	Eye Width Adjustment	Eye Piece Inclination	Diopter Adjustment Range	Stand	Weight
140101	XT-2040	20x 40x	2x 4x	WF10x (FOV 19mm)	105mm	Main body vert. position control	55~ 75mm	45°	±5 diopter	Pole stand	3.7kg

VARIABLE POWER STEREO MICROSCOPE TURRET TYPE



MICROSCOPE

MAGNIFIER

INSPECTION

MIRROR

Two magnifications with switchable objective lens

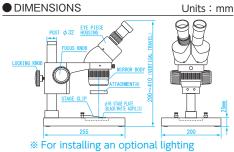




LOUPE
Units: mm

USE

- Ideal for continuous inspection of components of similar size FEATURES
 - Binocular turret type stereo microscope with switchable objective lens
 - Optional lighting unit attachable (separately sold)



Order No.	Model No.	Magnification	Objective	Eye Piece	Working Distance	Focus Adjustment	Eye Width Adjustment	Eye Piece Inclination	Diopter Adjustment Range	Stand	Weight
140007	XTDB-SP2N	10x 30x	1x 3x	WF10x (FOV 20mm)	100mm	Main body vert. position control	55~ 75mm	45°	±5 diopter	Pole stand	3.6kg

XY STAGE FOR MICROSCOPE NEW!



For fine adjustments of the sample position with separate vertical and horizontal dials







DIMENSIONS

Units: mm

USE

For adjusting sample position

FEATURES

- Body: Aluminum
- Stage: Glass
- Adjustment dial: Plastic

ACCESSORIES

- Movable stage allows easy adjustment of sample position
- With a non-slip mat
- Even microscopes with incompatible base hole diameters can be used by removing the guide on the back of the device

GLASS STAGE	
//~	143 \$ 7
	175
18	0

Order No.	Model No.	Maximum Load Capacity	Stage Movement Range (mm)	Compatible Microscope Base Hole Diameter (mm)	Weight
NEW! 140024	STD-8090	Up to 5.5kg	Vertical 80 x Horizontal 90	φ95	1.7kg

LED RING ILLUMINATOR FOR STEREO MICROSCOPE

P336

Stereo Microscope

High brightness and long life LED illuminator for STEREO MICROSCOPE

MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION

LOUPE

MIRROR

Compact and lightweight lighting for stereo microscope **MATERIAL**

Polycarbonate, steel

FEATURES

- For mounting on microscopes with bottom tube diameter 65mm and less
- High brightness and long life LED light
- Illuminance adjustment function
- Applicable product: XTS-SP2, XZ-45N, XT-2040, XTDB-SP2N

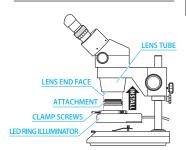
SPECIFICATIONS

- Power: AC100-240V 50/60Hz (with included AC adaptor)
- Power consumption: Approx. 3W (max. brightness)
- Illuminance: Approx. 280~3,400lx (100mm distance from lens to object)

ACCESSORIES

AC adaptor (code length: approx. 1.5m)

Example of mounting



How to mount

Tighten three clamp screws to fix illuminator on lens tube ** Attachment is required if lens tube is not cylindrical



Order No.	Model No	. Illuminant	Color Temperature	Operating Temperature	Mounting Part	Weight
140207	L-21D	White LED 21pcs	Approx. 5,000K (daylight white)	0 ~ 40℃	φ25~φ65mm	112g

LED RING ILLUMINATOR FOR STEREO MICROSCOPE

High brightness and long life LED illuminator for STEREO MICROSCOPE

Switchable lighting type





How to mount

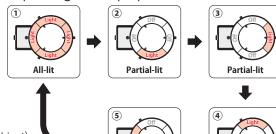
Tighten three clamp screws to fix illuminator on lens tube

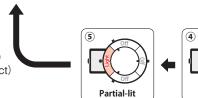
* Attachment is required if lens tube is not cvlindrical

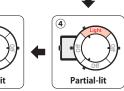


■ Lighting pattern

Switchable in five different patterns of lighting depending on the purpose







Applicable product: XTS-SP2, XZ-45N, XT-2040, XTDB-SP2N **SPECIFICATIONS**

Power: AC100-240V 50/60Hz (with included AC adaptor) Power consumption: Approx. 6W (max. brightness)

■ Illuminance (all-lit): Approx. 1,300~6,800lx (100mm distance from lens to object)

• For mounting on microscopes with bottom tube diameter 65mm and less

Switchable lighting pattern in all-lit and 4-split partial-lit, and with illuminance

■ Illuminance (partial-lit): Approx. 300~1,200lx (100mm distance from lens to object)

ACCESSORIES

USE

MATERIAL

FEATURES

Polycarbonate, steel

adjustment function

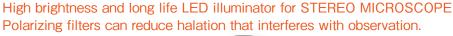
Separated controller

AC adaptor (code length: approx. 1.5m)

High brightness and long life LED light

Order No.	Model No.	Illuminant	Color Temperature	Operating Temperature	Mounting Part	Weight
140208	L-48D	White LED 48pcs	Approx. 5,000K (daylight white)	0 ~ 40℃	ϕ 65mm and less	320g

LED RING ILLUMINATOR WITH POLARIZING FILTER









MICROSCOPI

FIBER SCOPE

MAGNIFIER

INSPECTION

MIRROR

LOUPE

USE

 A compact and lightweight lighting system for stereo microscopes MATERIAL

Aluminum

FEATURES

• For mounting on microscopes with bottom tube diameter 60mm and less

High brightness and long life LED light

Equipped with a polarizing filter, allowing adjustment of the filter strength by rotating the memory section

Illuminance adjustment function

Applicable product: XTS-SP2, XZ-45N, XT-2040, XTDB-SP2N **SPECIFICATIONS**

Power: AC100-240V 50/60Hz (with included AC adapter)

Power consumption: Approx. 5W (max. brightness)

● Illuminance: Approx. 14,000lx (100mm distance from lens to object)

ACCESSORIES

AC adapter (cord length: approx. 1.4m), Polarizing filter

How to mount

Tighten three clamp screws to fix illuminator on lens tube

* Attachment is required if lens tube is not cylindrical



MOUNTING PART Approx. φ30~60mm
W 7.25 6.91

Order No.	Model No.	Light Source	Color Temperature	Microscope mounting part	Weight
NEW! 140026	L-120DF	White LED 120pcs	Approx. 6,500K (Daylight color)	φ30-60mm	240g

USB CAMERA FOR MICROSCOPE NEW!



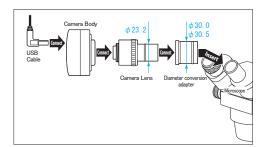
Easy to install. View images from your stereo microscope on your computer. Compatible with microscopes other than our own products.











USE

- Insert into the eyepiece of a stereo microscope and use it as a camera **FEATURES**
- Affordable USB camera for microscopes
- High-resolution type with 1.3 million pixels
- Supported OS: Windows 7, 8, 10, 11

ACCESSORIES

- Viewer software
- Diameter conversion adapter $(\phi 23.2 \text{ to } \phi 30.0 \text{mm... 1 piece}, \phi 23.2 \text{ to } \phi 30.5 \text{mm... 1 piece})$
- USB Cable (approx. 2m)



Viewer software included

Order No.	Model No.	Image Sensor	Pixel Count	Frame Rate	Interface	Power Supply	Weight
NEW! 140025	MU-130Plus	1/3 CMOS	1.3 million pixels	15fps (1280 x 1024) 26fps (640 x 512)	USB Type-B 2.0	via USB port	240g

NSK MINI MICROSCOPE WITH BASE

Resolution 1,300,000 pixels and high quality image can be captured and saved

MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION MIRROR

LOUPE

USE

- For inspection of machine parts, metal, fiber, paper, resin, biological tissue, crack, surface deterioration and corrosion
 - Resolution 1,300,000 pixels and high quality image can be captured and saved for making reports and documents
- For meeting and presentation by sharing image in real time with multiple people **FEATURES**
 - Simple measurement and calibration function
 - Stand base (included) for easy-focus
 - Shutter release button on camera body for easy-capture without using mouse
 - PL filter installed
 - Natural color image close to actual color
 - Improved processing speed for smooth image without flicker in screen
 - Improved sensor sensitivity captures dark subjects with fine image quality
 - Supported OS: Windows XP, Vista, 7, 8, 10, 11 Mac OS 10.14 or later

Order No.	Model No.	Туре	Imaging Sensor	Resolution	Magnification	Light
140184	MMS-130PLM3	With PL filter	1/4 inch CMOS sensor	1,280 x 1,024 pixels (SXGA) Approx. 1,300,000 pixels	Approx. 10~230x	Internal LED 8 pcs

Frame Rate	Exposure	Interface	Main Functions	Weight		
rraille hate	Exposure	interrace	Main Functions	Body	Base	
30 frames / sec	Auto-exposure	USB2.0	●Still image (bmp) capture and save ●Video (AVI) capture and save ●Simple measurement (line, continuous line, radius, diameter, three-point circle and angle)	102g	1.1kg	



360-DEG ROTATING DUAL CAMERA BORE SCOPE NEW!



Equipped with a 360-degree rotating dual camera, enabling simultaneous front and side view inspection. This industrial endoscope allows you to inspect and record inside curved pipes with its IP68-rated cable.







Features a dual camera for simultaneous front and side view inspection.

USE

- Industrial endoscope for inspecting inside of curved pipes
- Dual cameras allow simultaneous viewing of the front and side
- For recording still images and videos

MATERIAL

- Body: Plastic
- Cable: Plastic

FEATURES

- The dual cameras allow detailed inspection of the front and side simultaneously, with the ability to save both still images and videos
- The dual camera can rotate 360 degrees via body controls, eliminating the need for a side-view adapter
- Equipped with a large and easy-to-view 4.5-inch IPS display
- The camera is IP68-rated for dustproof and waterproof performance and is also oil-resistant, making it suitable for harsh environments
- Videos and still images in 1920 x 1080 resolution can be saved to a microSD card. With a 32GB microSD, you can store approximately 280,000 images or 180 minutes of video.
- Equipped with white LEDs that illuminate both the front and side of the camera, allowing for bright recording even in dark pipes **SPECIFICATIONS**
- Storage: microSD card (Class 10 or higher, up to 128GB)
- Interface: USB-Type C
- Display: 4.5-inch IPS display
- Protection rating: IP68
- Camera field of view: 70 degree
- Camera focal distance: 20mm to 50mm
- Camera illumination: Front: White LED x 8pcs, Side: White LED x 1pc, Body: White LED x 4pcs
- Operating temperature range: Camera lens: 0°C to 90°C, Body: 5°C to 40°C
- ■Body dimensions: 145 x 85 x 18mm

POWER SUPPLY

Built-in lithium-ion battery (Standard operating time when fully charged: 3 hours)

ACCESSORIES

- 32GB microSD card USB charging cable (approx. 50cm)
- Camera protection adapter
 Magnet adapter
 Hook adapter

Order No.	Model No.	Cable Size	Camera Diameter	Recording File Format	Weight
NEW! 140220	E902-RD	Approx. φ4.5mm x L2m			310g
NEW! 140221	E905-RD	Approx. φ4.5mm x L5m	φ9.0mm	Still images: JPEG format (Resolution: 1920 x 1080) Videos: AVI format (Resolution: 1920 x 1080)	310g
NEW! 140222	E910-RD	Approx. φ4.5mm x L10m			310g

MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION MIRROR



BORESCOPE WITH MONITOR



Borescope can shoot still images and movies.

You can view images directly, or connect to your computer via USB.

USE

 Industrial borescope can inspect inside holes and around corners

MATERIAL

Body: Plastic

FEATURES

- Integrated monitor allows real time viewing and capture to memory
- Can view images directly, or connect to PC with USB
- Video output
- Cable is compliant to IP66

SPECIFICATIONS

Continuous use: Approx. 3 hrs. (without recording)

ACCESSORIES

- View adapter 45°
- AC adapter
- Two lithium-ion batteries included





Order No.		wouel ivo.	Cable	Size	Wioriitor Size	Number of pixers	view Aligie	Det	oui oi rocus	Power	Av Output	
140210	N	NS-5510G	φ 5.5r (L)		3.5 inch	300,000 pixels	Approx. 67°		Approx. 0-50mm	DC5V	NTSC/ PA	\L
Lighting		Still Image Reco	ording Pixels	Video R	lecording Pixels	File Format	Recording Med	ia	Dimensi (mm)		Weight	
White LED (Dimming)		640 x 480) pixels	640 >	x 480 pixels	JPEG (still image Recording pixels) AVI (video)	SD card (less than 4 G	SB)	Approx. L210 × H4) × W100 5	410g	

OPTIONAL ACCESSORIES FOR MIS SERIES



■ Camera for MIS

USF

MICROSCOPE

FIBER

SCOPE

MAGNIFIER

INSPECTION MIRROR

LOUPE

 Optional camera for MIS series bore scope (IP66 equivalent)

MATERIAL

Φ5.5 model: Stainless cable

FEATURES

 $\bullet \phi 5.5$ model: High rigidity stainless cable is ideal for inspection of harsh places



Order No.	Model No.	Cable size	Cable type	Number of Pixels	Resolution	Focal Length (mm)	LED Pcs
140219	C-MIS-5510G	φ5.5mm x 1m	Semi-hard tube	300,000 pixels	640 x 480	Approx. 20~50	4
140214	C-MIS-5520G	φ5.5mm x 2m	Semi-hard tube	300,000 pixels	640 x 480	Approx. 20~50	4
140215	C-MIS-5530G	φ5.5mm x 3m	Semi-hard tube	300,000 pixels	640 x 480	Approx. 20~50	4

■ Side view adapter for MIS series

USE

Side view adapter for monitor type industrial borescope MATERIAL

Copper plated (excluding mirror), brass

FEATURES

Install on tip of borescope to change viewing angle



SV-MIS-35G



Order No.	Model No.	Mirror Angle	View Direction	Weight
140217	SV-MIS-35G	Approx. 35°	Approx. 70°	2g
140218	SV-MIS-60G	Approx. 60°	Approx. 120°	2g

■ LITHIUM-ION BATTERY FOR MIS

USE Lithium-ion battery for monitor type industrial bore scope

Order No.	Model No.	Rated Voltage	Rated Capacity	Weight
140216	B-MIS-37G	DC 3.7V	1,880mAh	42g

MAGNIFIER WITH LED LIGHT ARM TYPE ()

With durable, long-life LED light







For inspection and precise work



Anti-reflective cover to soften the light for less reflection



- For assembly and inspection of precision parts MATERIAL
 - Lens: Hard glass Body: Steel, plastic
- **FEATURES**
 - Durable and long-life LED light
 - Large lens for clear view with both eyes
 - With protective lens cover

LS2-175A

Clear glass lens does not affect color or items viewed

SPECIFICATIONS

- Rated voltage: AC100-240V Rated frequency: 50/60Hz Rated power consumption: 15W
- ●Illuminance: 5,500lx (with 250mm distance from lens to object)
- Color temperature: Approx. 5,000K <daylight white>
- Number of LED: 84 pcs
- Clamping range: Approx. 10~60mm
- Power cable length: Approx. 1.8m

ACCESSORIES

■ Lens cleaning cloth
■ Clamp

Order No.	Model No.	Arm Length	Visible Lens DIA (mm)	Magnification	Weight
140121	LS2-175A	Lower: 435 Upper: 425	φ170	2x	3.4kg
140124	LS4-150A	Max: 870	φ140	4x	3.6kg

INTERCHANGEABLE LENS FOR MAGNIFIER WITH LED LIGHT

Magnifier with Led Light Desk Stand Type (1)

With durable, long-life LED light





- For assembly and inspection of precision parts
- **MATERIAL**
- Lens: Hard glass
- Body: Steel, plastic

FEATURES

- Durable and long-life LED light
- Large lens for clear view with both eyes
- With protective lens cover
- Clear glass lens does not affect color of items viewed

SPECIFICATIONS

- Rated voltage: AC100-240V
- Rated frequency: 50/60Hz
- Rated power consumption: 15W
- Illuminance: 5,500lx (with 250mm distance from lens to object)
- Color temperature: Approx. 5,000K <daylight white>
- Number of LED: 84 pcs
- Power cable length: Approx. 1.8m

ACCESSORIES

■Lens cleaning cloth
■Hexagonal bar wrench

Order No.	Model No.	Product Dimensions (mm)	Visible Lens DIA (mm)	Magnification	Weight
140122	LS2-175S	Total height 430	φ170	2x	5.1kg
140125	LS4-150S		φ140	4x	5.3kg

MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION MIRROR

LOUPE

USE

- Interchangeable lens for MAGNIFIER WITH LED LIGHT **MATERIAL**
 - Hard glass

FEATURES

- Optional lens for MAGNIFIER WITH LED LIGHT **SPECIFICATIONS**
 - Applicable product: Swing arm type LS2-175A, LS4-150A Deskstand type LS2-175S, LS4-150S







Order No.	Model No.	Lens Diameter (mm)	Magnification	Weight
140126	SL-2	φ178	2x	0.9kg
140123	SL-4	φ150	4x	1.1kg

Base unit▶ Magnifier with LED light

MAGNIFIER WITH DIMMABLE LED LIGHT ARM TYPE



With dimmable LED light.

Brightness is dimmable depending on environment and objects.

For assembly and inspection of precision parts

MATERIAL

- Lens: Glass
- ■Body: Steel, ABS

FEATURES

- Durable and long-life LED light
- Brightness is dimmable by dimmer control function steplessly
- Large lens for better view by both eyes
- With protective lens cover
- Clear glass lens does not affect color of view

SPECIFICATIONS

- ■Power: AC100-240V 50/60Hz (Using included AC adaptor)
- Power consumption: Approx. 10W (Max. brightness)
- •Illuminance: Approx. 3100lx (Max. brightness and 250mm distance from lens to object)
- Color temperature: Approx. 5000K (daylight white)
- Number of LED: 60pcs
- ■Room temperature: 0~40°C
- ■Clamping range: Approx. 10~60mm
- AC adapter (cable length: Approx. 1.5m) Clamp



Brightnes	s is	dim	mable	b
dimmer	cor	ntrol	function	on

Order No.	Model No.	Arm length (mm)	Visible Lens DIA (mm)	Magnification	Weight
140127	LS2-125AD	Lower: 480 Upper: 490 Max.: 700	φ116	2x	2.3kg

MAGNIFIER WITH DIMMABLE LED LIGHT ARM TYPE



With dimmable LED light.

Touch switch and rectangular-like lense.

MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION

MIRROR

LOUPE



USE

For assembly and inspection of precision parts

MATERIAL

- Lens: Glass
- Body: Steel, ABS

FEATURES

- Durable and long-life LED light
- Brightness is dimmable by dimmer control function steplessly
- Large lens for better view by both eyes
- With protective lens cover
- Clear glass lens does not affect color of view

SPECIFICATIONS

- Power: AC100-240V 50/60Hz (Using included AC adaptor)
- Power consumption: Approx. 11W (Max. brightness)
- Illuminance: Approx. 3,200lx (Max. brightness) (250mm distance from lens to object)
- Color temperature: Approx. 5,000K (daylight white)
- Number of LED: 72 pcs
- Operating temperature: 0~40°C
- Clamping range: Approx. 10~60mm

ACCESSORIES

- AC adaptor (cable length: approx. 1.5m)
- Clamp



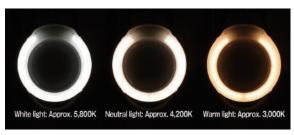
Order No.	Model No.	Arm Length (mm)	Visible Lens DIA (mm)	Magnification	Weight
140130	LS2-S170AD	Lower : 480 Upper : 490	170 x 105	2x	2.8kg

MAGNIFIER WITH DIMMABLE LED LIGHT ARM TYPE NEW!





Brightness and light color can be adjusted. Adaptable to various workpieces and measurement environments. Equipped with a large lens for excellent visibility.





USE

For assembly and inspection of precision parts

MATERIAL

- Lens: Hard glass
- Body: Steel, Plastic

FEATURES

- Equipped with a color adjustment function that allows the light color to be changed to match the workpiece and work environment (3-color modes)
- Brightness is dimmable by dimmer control function steplessly
- Touch switch type
- Durable and long-life LED light
- Large lens for better view by both eyes
- With protective lens cover
- Clear glass lens does not affect color of view

SPECIFICATIONS

- Rated voltage: AC100-240V Rated frequency: 50/60Hz
- Rated power Consumption: 15W
- Illuminance: 3,100lx (With 250mm distance from lens to object)
- Color temperature: Approx. 5,800K <White> / Approx. 4,200K <Neutral> / Approx. 3,000K <Warm>
- Number of LED: 84pcs (White) / 84pcs (Warm)
- Clamping range: Approx. 10-60mm Power cable length: Approx. 1.8m

ACCESSORIES

AC Adapter (Approx. 1.8m)	Lens Cleaning Cloth	Clamp	

Order No.	Model No.	Arm Length (mm)	Lens Visible Range (mm)	Magnification	Weight
NEW! 140131	LS2-175ADT	Lower: 490 Upper: 490	φ172	2x	2.9kg

CLAMP FOR ARM TYPE MAGNIFIER





LOUPE

MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION MIRROR



Replacement clamp for MAGNIFIER WITH LED LIGHT ARM TYPE **MATERIAL**

Steel

SPECIFICATIONS

- Applicable product: LS2-175A, LS4-150A, LS2-125AD, LS2-S170AD, LS2-175ADT
- Clamp Range: Approx. 10-60mm

Order No.	Model No.	Weight
140129	LSC-125-175	310g





TELESCOPING INSPECTION MIRROR

Suitable for inspection of hard-to-see locations



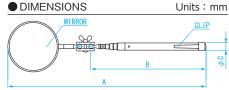
USE

For inspection of hard-to-see locations

Mirror: Glass

FEATURES

- Extendable reach and easy to carry
- Replacement mirror also sold separately
- With mirror protective film



Units: mm

Order No.	Model No.	Mirror Shape (mm)	A: Maximum Length (mm)	B: Telescope Length (mm)	C (mm)	Dimensions	Weight
011140	IMT-20R	Round ϕ 20	Approx. 525	Approx. 130~475	9	Brass	40g
011150	IMT-30R	Round ϕ 30	Approx. 535	Арргох. 130-9473			40g
011160	IMT-60R	Round ϕ 60	Approx. 560	Approx. 145~475			63g
011170	IMT-50K	Oval 50 x 25	Approx. 555	Approx. 130~475			45g
011180	IMT-80K	Oval 80 x 50	Approx. 575	Approx. 145~475			66g
011185	IMT-85S	Square 100 x 85	Approx. 745			Stainless steel	150g
011186	IMT-100S	Square 100 x 100	Approx. 745	Approx. 245~610	13		150g
011187	IMT-100R	Round ϕ 100	Approx. 745				135g

MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION MIRROR

LOUPE



INSPECTION MIRROR

Suitable for inspection of hard-to-see locations



USE

Body: Free cutting steel Mirror: Grass

FEATURES

For inspection of hard-to-see locations

Enables secure inspection through the mirror With mirror protective film

Order No.	Model No.	Mirror shape (mm)	A (mm)	B (mm)	Weight
011120	IM-20R	Round <i></i>	Approx. 200	Approx. 145	30g
011130	IM-30R	Round ϕ 30	Approx. 210		35g
011110	IM-50K	Oval 50 x 25	Approx. 230		35g

DIMENSIONS

MIRROR

MAGNIFYING INSPECTION MIRROR WITH TELESCOPING

Suitable for inspection of hard-to-see locations





USE

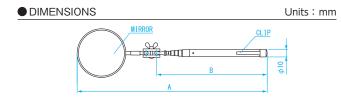
For inspection of hard-to-see locations

MATERIAL

●Body: Brass ●Mirror: Glass

FEATURES

- Extendable reach and easy to carry
- Magnifying mirror provides an enlarged view
- With mirror protective film



Order No.	Model No.	Mirror shape (mm)	A: Max Length (mm)	B: Telescope Length (mm)	Magnification	Weight
011195	IMTR-20R	Round <i></i>	Approx. 525	Approx. 130~475	2x	40g
011196	IMTR-30R	Round ϕ 30	Approx. 535	Approx. 130~475	ZX	40g
011197	IMTR-60R	Round <i></i>	Approx. 560	Approx. 145~475	1.5x	60g
011198	IMTR-50K	Oval 50 x 25	Approx. 555	Approx. 130~475	2x	45g
011199	IMTR-80K	Oval 80 x 50	Approx. 575	Approx. 145~475	1.5x	60g

MAGNIFYING INSPECTION MIRROR

Suitable for inspection of hard-to-see locations.



DIMENSIONS

Units: mm

USE

For inspection of hard-to-see locations

MATERIAL

- Body: Free-cutting steel
- Mirror: Glass

FEATURES

- Magnifying mirror provides an enlarged view
- With mirror protective film



Order No.	Model No.	Mirror Shape (mm)	A (mm)	B (mm)	Magnification	Weight
011193	IMR-20R	Round ϕ 20	200			30g
011194	IMR-30R	Round ϕ 30	210	145	2	35g
011192	011192 IMR-50K	Oval 50 x 25	230			35g



MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION MIRROR

INSPECTION MIRROR WITH LIGHT NEW!





Inspection mirror that is convenient for use in dim and hard-to-see areas



USE

- For inspecting the back side of machines or areas that are narrow and dark **MATERIAL**
- Shaft: Stainless steel Grip: Aluminum Mirror: Glass
- **FEATURES** ● With two mirror sizes ■ Uses bright, energy-efficient LED bulbs
 - With mirror protective film
 With a storage case

POWER SUPPLY

2x AA batteries (sold separately)

Order No.	Model No.	Mirror Shape (mm)	Weight
NEW! 011111	IMLED-2030R	Round ϕ 20, Round ϕ 30	70g*

%With round mirror ϕ 30mm attached. Batteries not included.

INSPECTION MIRROR WITH LIGHT NEW!





Inspection mirror convenient for use in dimly lit and hard-to-see areas. Equipped with a flexible shaft for adjustable angles.

MICROSCOPE

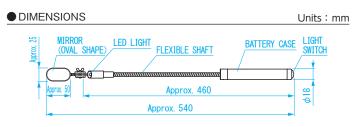
SCOPE MAGNIFIER

FIBER

INSPECTION MIRROR

LOUPE





- For inspecting the back side of machines or areas that are narrow and dark MATERIAL
- Flexible Section: Carbon steel Grip: Aluminum Mirror: Glass **FEATURES**
- Flexible shaft allows free bending and angle adjustments
- With 3 mirror sizes
 Uses bright, energy-efficient LED bulbs
- With mirror protective film
 With a storage case

POWER SUPPLY

2x AA batteries (sold separately)

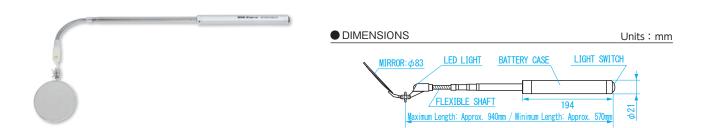
Order No.	Model No.	Mirror Shape (mm)	Weight
NEW! 011112	IMLED-50K	Oval 50 x 25, Round ϕ 57, ϕ 83	130g*

*With oval mirror 50×25mm attached. Batteries not included.

INSPECTION MIRROR WITH LIGHT NEW!



Inspection mirror convenient for use in dimly lit and hard-to-see areas. Shaft can be extended and retracted



USE

For inspecting the back side of machines or areas that are narrow and dark

MATERIAL

- Extension Section: Stainless steelFlexible Section: Carbon steel
- Grip: AluminumMirror: Glass

for adjustable length.

FEATURES

- Flexible shaft allows for free bending and angle adjustments
- Telescopic antenna-style shaft for adjustable length Uses bright, energy-efficient LED bulbs
- With mirror protective film
 With a storage case

POWER SUPPLY

Three AA batteries (sold separately)

Order No.	Model No.	Mirror Shape (mm)	Weight
NEW! 011113	IMLED-83R	Round ϕ 83	190g*

%With round mirror ϕ 83mm attached. Batteries not included.

MAGNETIC STAND LED WORK LIGHT



MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION MIRROR

LOUPE

As spot light where dim and hard-to-see. Power saving LED light.







For second lighting for better view

MATERIAL

Ferrite magnet

FEATURES

Strong magnet with ON/OFF lever for easy removal

Flexible shaft directs light where needed

LED light, long life and power saving

SPECIFICATIONS

● LED color temperature: 5,500~6,000K Luminous flux: Approx. 326 Im

Magnetice adsorption: Approx. 600N Power cable length: Approx. 1m

Product dimensions: Approx. W70 x H475 x D80mm

Order No.	Model No.	Base Dimensions (mm)	Rated Voltage	Rated Frequency	Weight
011096	SB-60LED	50 x 60 x 55	AC100V	50/60Hz	1.6kg

HEAD LOUPE WITH ADJUSTABLE LED LIGHT AND INTERCHANGEABLE LENS



For hands-free.

Head loupe with LED light for best work efficiency.

●For assembly and inspection of precision parts

MATERIAL

Lens: Acrylic resin

FEATURES

Adjustable belt to stay still on head to free both hands for detailed work

LED light, long life and power saving. Angle adjustable to up, down, left and right to light up

With four interchangeable lenses to adjust magnification

SPECIFICATIONS

Battery life: Approx. 20hrs. with alkaline battery

■LED life: Approx. 40,000hrs. (not replaceable)

POWER

Three AAA batteries included for testing

ACCESSORIES

●Lens 4 pcs ●Storage case

Order No.	Model No.	Magnification	Weight
111241	HL-LED	1.2x, 1.8x, 2.5x, 3.5x	140g





LED ILLUMINATED POCKET SIZE MAGNIFIER

A loupe equipped with a power-saving LED light. Ideal for observation in dark environments.

USE

Magnifier with LED light

MATERIAL

■M-100II···External lens: Glass, Internal lens: Acrylic

●M-320II···Lens: Glass

FEATURES

Magnifier with LED light for inspection in a dimly-lit place

POWER

Two C batteries (not included)





Order No.	Model No.	Lens Diameter (mm)	Magnification	Length (mm)	Weight
111238	M-100 II	30	10x	180	90g
111239	M-320II	80	2x	235	200g

MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION MIRROR

LOUPE



LED ILLUMINATED POCKET SIZE MAGNIFIER

Durable 10x & 15x high magnification lens with LED light.

High performance magnifier.

USE

Magnifier with LED light

MATERIAL

Lens: Glass Body: ABS resin

FEATURES

Magnifier with LED light for inspection in a dimly-lit place

With protective storage case

SPECIFICATIONS

Battery life: Approx. 40 hrs. with alkaline battery

[LED PART SPECIFICATIONS]

Diameter: Approx. 5mm Voltage: 3V Luminosity: 8,000~10,000mcd

● LED Life: Approx. 40,000 hrs.

Directional angle: Approx. 30°

POWER

Three AAA batteries (not included)



Order No.	Model No.	Lens Diameter (mm)	Magnification	Length (mm)	Weight
111236	LL-10	30	10x	105	41g
111237	LL-15	20	15x		49g

LED ILLUMINATED POCKET SIZE MAGNIFIER ()



Loupe with power-saving LED light. Three different

magnifications in one loupe.



USE

- Magnifier with LED light **MATERIAL**
- Lens: Acrylic resin
- ●Body: ABS ●Case: PVC
- **FEATURES**
 - ●Long-life LED light can light in the dark
 - Choosable from three different magnifications depending on purpose
 - Provided with storage case

SPECIFICATIONS

Battery life: Approx. 10hrs.

POWER

●Two CR2032 (lithium) batteries included for testing

Order No.	Model No.	Lens size (mm)	Magnification	Total Length (mm)	Weight
111240	LL-357	70 x 54	3x, 5x, 7x	107	38g

FOLDING POCKET MAGNIFIER



For general use as inspecting knife edge and various small parts



MATERIAL

Lens: Acrylic resin

FEATURES

- Slide-in-storage for easy-to-carry
- With protective case
- Bifocal lens

ı	Order No.	Model No.	Lens Dimensions (mm)	Magnification	Weight
	011268	No.3150	50 x 40	3.5x•5x	20g
	011269	No.3122-P	φ65	2.5x•4x	35g

MAGNIFIER WITH WOODEN HANDLE

For general use as inspecting knife edge and various small parts



Order No.	Model No.	Lens Diameter (mm)	Magnification	Length (mm)	Weight
011264	No.1430	75	2.5x	185	120g

Scratch-resistant glass lens

MAGNIFIER WITH PLASTIC HANDLE 🕕



For general use as inspecting knife edge and various small parts



●Lens: Acrylic resin ●Handle: Plastic **FEATURES**

One lens for two magnifications

Lightweight acrylic lens

Plastic handle and frame

Order No.	Model No.	Lens Diameter (mm)	Magnification	Length (mm)	Weight
011266	No.7507	75	2x•4x	185	55g
011267	No.7515	90	2x•4x	210	86g

MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION MIRROR



LED LIGHT SCALE LOUPE

Suitable in dimly-lit place by LED light





LSL-26

LSL-35

USE

For precision work

MATERIAL

Lens: Glass

FEATURES

- Reticle with full width scale, can be used to measure dimensions and diameter of objects
- With LED light to improve visibility for reading scale

ACCESSORIES

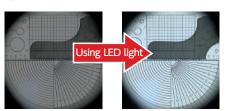
- Two reticles (One installed)
- One eyepiece cap
- One cleaning cloth

POWER

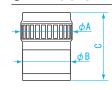
● Three LR41 (alkaline button cell) (not included)

Scale plate

Standard (graduation: 0.1mm)



DIMENSIONS







Units: mm

Model No.	φΑ	φВ	C (Adjustable)	φD	Е	F
LSL-26	37.2	30.6	46.5~55.5	30	30.5	51.5
LSL-35	45	40	45 ~54	39.5	30.5	60

Order No.	Model No.	Magnification	Weight
140141	LSL-26	10x	45g
140142	LSL-35	IUX	73g

LED LIGHT FOR LED LIGHT SCALE LOUPE (1)



SCALE PLATE FOR LED LIGHT SCALE LOUPE



MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION MIRROR

LOUPE



●Single light for LED LIGHT SCALE LOUPE

FEATURES

LED light that is included in LED LIGHT SCALE LOUPE (LSL-26, LSL-35)

POWER

●Three LR41 (alkaline button cell) (not included)

Order No.	Model No.	Weight
140143	L-26	10g
140144	L-35	11g

No.4

Standard (graduation: 0.1mm)

USE

Reticle scale plate for LED LIGHT SCALE LOUPE **FEATURES**

Reticle scale plate that is included in LED LIGHT SCALE LOUPE (LSL-26, LSL-35)

Order No.	Model No.	Pattern	Applicable Model	Weight
140146	S-26-4	No.4	LSL-26	3g
140147	S-26-S	STANDARD	LSL-20	3g
140148	S-35-4	No.4	LSL-35	4g
140149	S-35-S	STANDARD		4g

SCALE LOUPE

For precision work.

Use to examine various small parts.



■ Image visible through lens

USE

For precision work

MATERIAL

Lens: Glass

Case: ABS

FEATURES

- Reticle with full width scale, can be used to measure dimensions and diameter of objects
- Reticle can be removed to use as standard loupe
- The cup-shaped allows the lens to maintain the proper distance by simply placing it over the object to be viewed

Scale

Order No.	Model No.	Lens Diameter (mm)	Magnifications	Scale Graduation	Measurement Range (mm)	Weight
011274	SL-10	28	10x	0.2mm	±5	20g
011275	SL-15	20	15x	0.1mm	±3	15g

HIGH MAGNIFICATION LOUPE

For precision work.

Use to examine various small parts.



USE

For appraising microfilms and gemstorns

MATERIAL

Lens: Glass Case: PVC

FEATURES

High magnification for precision work

Order No.	Model No.	Lens Diameter (mm)	Magnification	Weight
011276	HL-10	28	10x	38g
011277	HL-15	21	15x	30g

LOUPE

For precision work.

Use to examine various small parts.





L-15

USE

For precision work

MATERIAL

Lens: Glass

Case: ABS

FEATURES

- Object is to be directly placed on and be in focus automatically
- Acrylic cover for brighter view

Order No.	Model No.	Lens Diameter (mm)	Magnification	Weight
011284	L-10	30	10x	25g
011285	L-15	21	15x	20g

METAL MAGNIFIER

(No.7020-W)

For precision work.

Use to examine various small parts.



USE

●For observating minerals, plant, insects, etc.

MATERIAL

Lens: Glass

Case: Brass, aluminum (No.7070) Copper, zinc (No.7020-W)

FEATURES

Useful tool in factories and offices

Slide-in-storage for easy-to-carry

Order No.	Model No.	Lens Diameter (mm)	Magnification	Weight
011279	No.7070	20	3x•4x•5x	40g
011280	No.7020-W	8•13	10x•20x	35g



LOUPE

MICROSCOPE

FIBER



MAGNIFIER WITH MAGNETIC STAND ()



STAND MAGNIFIER



For precision work.

Use to examine various small parts.



USE

For detailed work and inspection at factory

MATERIAL

Lens: Glass

Magnet: Ferrite magnet

FEATURES

•Flexible arm can be positioned as required

Magnetice adsorption: 800N

Order No.	Model No.	Lens Diameter (mm)	Magnification	Base Dimensions (mm)	Weight
012876	SB-80K	100	2x	50 x 60 x 55	1.4kg

For precision work.

Use to examine various small parts.



USE

For detailed work and inspection at factory

Lens: Glass

Base: Cast iron

FEATURES

Convenient use by both hands-free

•Flexible arm can be positioned as required

Order No.	Model No.	Lens Diameter (mm)	Magnification	Weight
011281	No.1650	90	2.5x	820g

STAND MAGNIFIER WITH CLIPS



For precision work. Use to examine various small parts.

MICROSCOPE

FIBER SCOPE

MAGNIFIER

INSPECTION MIRROR

LOUPE





For detailed work and inspection at factory

MATERIAL

Lens: Glass

■Base: Cast iron

FEATURES

For soldering work

Order No.	Model No.	Lens Diameter (mm)	Magnification	Weight
011286	CS-65	65	2.5x	460g