



Industrial Use

NEW

HANDY VIDEO ENDOSCOPE

MV-R SERIES

# ALL-IN-ONE

Compact / High-functional



# Handy Video Endoscope MV-R series



\* Video screen is an image.

## Easy inspection of hard-to-see places

Convenient inspection of the inside of engine parts or mechanical devices where direct view is not possible.



Inspection of engine parts

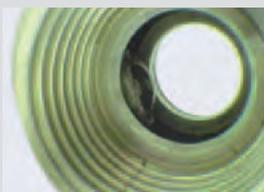


Inspection of the inside of metal parts



Mold inspection on the press machine

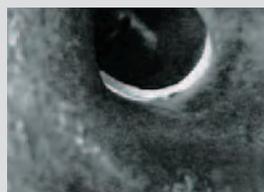
### Sample images



Inside a mechanical device



A substrate after being processed



Inside a tube



Casting pipe joint

# ALL-IN-ONE

Introducing the all-in-one type **MV-R** series: Handy Video Endoscope for industrial use with a built-in LCD monitor . Simply by carrying it to perform a variety of inspections while being able to confirm live images at hand. Compact and high-functional, the **MV-R** series has introduced a new concept to the endoscope field.



## Portability

At just 350 g in weight, the compact body fits right in the palm of your hand. Image recording function (SD memory card) is equipped to eliminate unnecessary external devices. Commercially available batteries are ready to be used to further enhance its portability.

## High-quality image

The outer tip of the scope with a diameter of 6 mm **0.236 in** has a 1.1 mega pixel CCD and a high-illumination white LED to create exceptional pictures with enhanced color and imaging clarity.

## Durability

The camera head has been safely designed to be waterproof. There is no harmful effect on the controller due to water splashes from any direction, allowing movements even in the outdoors.





## Small diameter camera head achieves high-quality image

### Advanced environment resistance

Even objects with water droplets can be inspected at ease.



### Two types of scope to suit your needs

#### Flexible cable

The soft and bendable cable can fit right in the shapes of the interior of the inspected objects.



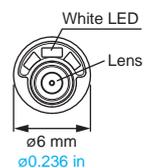
#### Fixed cable

Camera head's direction can be freely adjusted, and the shape can be kept.



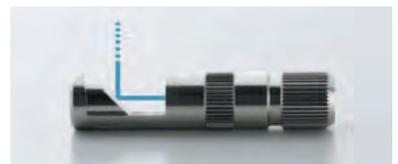
### High-illumination white LED

The built-in high-illumination white LED on the camera head produces bright and clear live images.



### Side view mirror adapter Optional

By affixing to the camera head, side view of constricted spaces can be inspected.



# Handy Video Endoscope MV-R series



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## Portable compact body equipped with high-functionality

### Built-in color LCD monitor features high-quality imagery

The body contains a 2-inch color LCD monitor (TFT).

### Functionally allocated operation buttons

Operation buttons and live image screen are functionally designed to be operable together without keeping your eyes away — all-in-one design for a total control.



### Mobile and convenient battery operation

A two-way power supply of AC adapter or dry batteries is available. AAA dry batteries offer great convenience in inspection at places where power supply is restricted.



### Still image capture function

Live images can be easily saved as still images on the SD memory card. Through the SD memory card, still images can then be saved onto the PC for visual documentation purposes.

\* One memory card (32 MB) is capable of recording approximately 1,800 still images (JPEG format).



### Connectable to TV monitor

External video output as part of the standard features enables live imagery during inspection to be projected on the TV monitor for multi-viewers. Video recording or video capturing data can also be stored into the PC. (Video signal output: NTSC composite)

## Controller

Model No.	<b>MV-RC10</b>
Power supply	AAA dry battery × 4 or 5 V DC input (using exclusive AC adapter)
Display	2 inch QVGA TFT color LCD
Video signal output	NTSC composite
Image recording function	Still image capture
Recording media	SD memory card
Recording capacity	1,800 images approx. (using 32 MB SD memory card)
Recording format	JPEG 352 (H) × 288 (V)
Ambient temperature	-10 to +50 °C <b>+14 to +22 °F</b> (No dew condensation or icing allowed), Storage: -20 to +60 °C <b>-4 to +140 °F</b> (-10 to +40 °C <b>+14 to +104 °F</b> when using exclusive AC adapter)
Battery lifetime	Three hours approx. (when LED lights up) (Note)
Protection	IPX4 (IEC)
Material	Case: PC and ABS, Operation panel: Polyester, Water resistant cap: NBR, Connector case: Brass (chrome plating)
Net weight	350 g (with one battery pack, without battery)
Accessory	Battery magazine × 2, SD memory card (32 MB), Exclusive AC adapter (standard output 5 V DC 1A, Standard input 100 to 240 V AC), TV connector cable, AAA alkaline battery × 4, Carrying case, Connector protection cap

Note: Fully charged NiMH batteries under normal temperature and normal humidity (reference values)

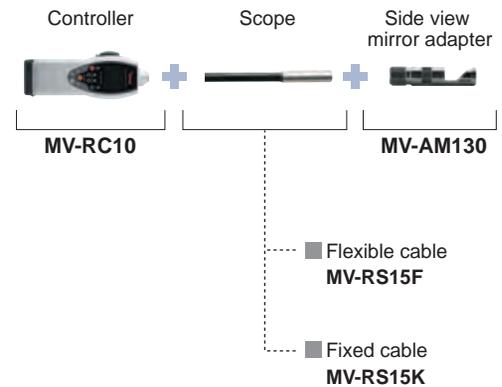
## Scope (Camera)

Model No.	MV-RS15F	MV-RS15K
Scope cable	Flexible cable	Fixed cable
Cable length	1,500 mm <b>59.055 in</b>	1,500 mm <b>59.055 in</b>
Outer tip	ø6 mm <b>ø0.236 in</b> (length 25 mm <b>0.984 in</b> )	
Focus position	27 mm ~ <b>1.063 in</b> ~	
Minimum bend radius	20 mm <b>0.787 in</b>	
Image sensing element	1.1 Mega Pixel CCD	
Effective pixels	368 (H) × 296 (V)	
Lens angle of view	90 degree (screen diagonal)	
Illumination	High-illumination white LED	
Ambient temperature	-10 to +50 °C <b>+14 to +122 °F</b> (No dew condensation or icing allowed), Storage: -20 to +60 °C <b>-4 to +140 °F</b>	
Protection	IPX8 (IEC), waterproof from camera cable to camera head (at normal temperature and normal pressure)	
Material	Camera case: Stainless steel, Lens light part: Glass, Acryl, Plug case: Brass (chrome plating)	
Cable coating	Polyethylene	Polyolefin
Net weight	350 g	

## Side view mirror adapter

Model No.	<b>MV-AM130</b>
Outer diameter	ø8.7 mm <b>ø0.343 in</b> (length 41 mm <b>1.614 in</b> )
Direction of view	90° (based on scope alignment)
Mirror angle of view	50 degree ±5 degree
Material	Exterior, Mirror: Stainless steel
Net weight	8 g
Ambient temperature	-10 to +50 °C <b>+14 to +122 °F</b> (No dew condensation or icing allowed), Storage: -20 to +60 °C <b>-4 to +140 °F</b>

## Composition chart



## Dimensions (Unit: mm in)

