JF Series



JF Series | Video Broescope

For Fast and Accurate Inspection









Feature Function

- 3.5" TFT LCD
- LED brightness adjustment
- 2X Zoom in and Mirror image
- AV out
- Snap shot and Video recording
- · Long duty hour up to 4 hrs

FC CE 🖌 🗵

Application

- Architecture Mechanical equipment Generators Electricity
- Automobiles Aircrafts Ships Railways Welding
- Manufacture General equipment
- · Gas petroleum, and chemicals
- Defense, security, and surveilliance
- Exploration, education, and research and experiments.



Video Output

Recorded video & images can be displayed directly to a 'TV screen for large sereen viewing. Support " PAL " / " NTSC " video system.





Standard Accessories

8G SD Card





Charger

Series Accessories

70°

(Standard Accy.)

Φ 6 mm VGA Mirror

Only for Φ 6.0 mm 2 way articulation

1109







(Standard Accy.)



Φ 5.5 mm Mirror

1109

USB Connection

JF Series is capable to transfer captured images and view from PC. Support Windows 2000™ or later version. No specific software is required to palyback the JPG and ASF files.





Telephone: +84 845 969 336 Email: info@gmga.vn Website: https://gmga.vn/ Feature Introduction JF series video broescope

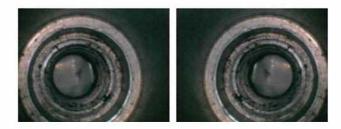
3.5" TFT LCD Display

Embedded with a 3.5" TFT LCD Monitor provides superior image quality photos for inspector to see.



Mirror Image

Support mirror image function on display.



2.0X Zoom - In

Support up to 2X Digital Zoom.





# JFR = Semi-Rigid, JFS = Soft-N	<pre>detal, JFVS = VGA probe, JFVS-5501= Φ5.5mm,</pre>	, JFVS-5501 = 1M, JFS-4901S = Dual-Cameras,
JFS-60012 = 2 way articulation,	JFVS-60014 = 360° articulation, JFVS-5501N = 1	Near Focus, JGS2222M = Meter

Item Model	Probe Category	Tip Diameter	Tube Length	Tube Material	Page
JFR-3901	General	Ф 3.9mm	1 M	Semi-Rigid	P. 27 - 28
JFR-3902	General	Φ 3.9mm	2 M	Semi-Rigid	P. 27 - 28
JFR-3903	General	Φ 3.9mm	3 M	Semi-Rigid	P. 27 - 28
JFR-5501	General	Φ 5.5mm	1 M	Semi-Rigid	P. 27 - 28
JFR-5502	General	Φ 5.5mm	2 M	Semi-Rigid	P. 27 - 28
JFR-5503	General	Φ 5.5mm	3 M	Semi-Rigid	P. 27 - 28
JFR-8501	General	Φ 8.5mm	1 M	Semi-Rigid	P. 27 - 28
JFR-8502	General	Ф 8.5mm	2 M	Semi-Rigid	P. 27 - 28
JFR-8503	General	Φ 8.5mm	3 M	Semi-Rigid	P. 27 - 28
JFS-5501	General	Φ 5.5mm	1 M	Soft-Metal	P. 27 - 28
JFS-5502	General	Φ 5.5mm	2 M	Soft-Metal	P. 27 - 28
JFS-5503	General	Φ 5.5mm	3 M	Soft-Metal	P. 27 - 28
JFS-5505	General	Φ 5.5mm	5 M	Soft-Metal	P. 27 - 28
JFS-5510	General	Φ 5.5mm	10 M	Soft-Metal	P. 27 - 28
JFS-5520	General	Φ 5.5mm	20 M	Soft-Metal	P. 27 - 28
JFS-5530	General	Φ 5.5mm	30 M	Soft-Metal	P. 27 - 28
JFR-4901S	Dual-Camera	Φ 4.9mm	1 M	Semi-Rigid	P. 29
JFR-4902S	Dual-Camera	Φ 4.9mm	2 M	Semi-Rigid	P. 29
JFR-4903S	Dual-Camera	Φ 4.9mm	3 M	Semi-Rigid	P. 29
JFS-60012	2 Way Articulation	Ф 6.0mm	1 M	Soft-Metal	P. 30
JFS-60022	2 Way Articulation	Φ 6.0mm	2 M	Soft-Metal	P. 30
JFS-60032	2 Way Articulation	Φ 6.0mm	3 M	Soft-Metal	P. 30
JFVS-60012	VGA, 2 Way Articulation	Φ 6.0mm	1 M	Soft-Metal	P. 31 - 34
JFVS-60022	VGA, 2 Way Articulation	Φ 6.0mm	2 M	Soft-Metal	P. 31 - 34
JFVS-60032	VGA, 2 Way Articulation	Φ 6.0mm	3 M	Soft-Metal	P. 31 - 34
JFVS-5501	VGA General	Φ 5.5mm	1 M	Soft-Metal	P. 31 - 34
JFVS-5502	VGA General	Φ 5.5mm	2 M	Soft-Metal	P. 31 - 34
JFVS-5503	VGA General	Φ 5.5mm	3 M	Soft-Metal	P. 31 - 34
JFVS-5505	VGA, General	Φ 5.5mm	5 M	Soft-Metal	P. 31 - 34
JFVR-5501	VGA, General	Φ 5.5mm	1 M	Semi-Rigid	P. 31 - 34
JFVR-5503	VGA, General	Φ 5.5mm	3 M	Semi-Rigid	P. 31 - 34
JFVR-5501N	VGA, Near Focus	Φ 5.5mm	1 M	Semi-Rigid	P. 31 - 34
JFVS-5501N	VGA, Near Focus	Φ 5.5mm	2 M	Soft-Metal	P. 31 - 34
JFVS-5503N	VGA, Near Focus	Φ 5.5mm	3 M	Soft-Metal	P. 31 - 34
JFVS-60014	VGA, 360° Articulation	Φ 6.0mm	1 M	Soft Stainless steel	P. 35 - 3
JFVS-60034	VGA, 360° Articulation	Ф 6.0mm	3 M	Soft Stainless steel	P. 35 - 30
JFVS-60011	VGA, 1 Way Short Tip	Ф 6.0mm	1 M	Soft Stainless steel	P. 37 - 3
JFVS-45022	VGA, 2 Way Short Tip	Ф 4.5mm	1.5 M	Soft Stainless steel	P. 37 - 3
JFVS-45032	VGA, 2 Way Short Tip	Φ 4.5mm	3 M	Soft Stainless steel	P. 37 - 3
JGS-2222M	Pipe Inspection, Meter	Ф 22.0mm	22 M	Hard Soft-Metal	P. 39 - 4
JGS-2805	Pipe Inspection	Φ 28.0mm	5 M	Hard Soft-Metal	P. 39 - 42
JGS-2810	Pipe Inspection	Φ 28.0mm	10 M	Hard Soft-Metal	P. 39 - 42
JGS-2830M	Pipe Inspection, Meter	Φ 28.0mm	30 M	Hard Soft-Metal	P. 39 - 4

Display	3.5" TFT LCD QGVA
Power	Battery rechargeable Li-Polymer battery 3
	Power supply AC100-240V 50-60Hz
	Power consumption DC5.5 1.8A
Interface	USB.20 / AVOut
Video out Format	NTSC & PAL
Storage	8 GB SD card
Compression Format	MPEG4
Image Storage Format	JPEG (640 * 480)
Video Recording Format	AVI (320 * 240)
Frame Rate	~30 fps
S/N Rate	42dB or more
Exposure	Automatic
White Balance	Fix
Working temperature	0°C ~ 60 ℃
Storage temperature	0°C ~ 60 °C
Languages	27 Languages: English / French / German / Italian /
	Spanish / Portuguese / Japanese / Traditional Chinese
	Simplified Chinese / Danish / Dutch / Polish / Russian /
	Bulgarian / Turkish / Swedish / Finnish / Norwegian /
	Estonian / Lithuanian / Latvian / Hungarian / Czech /
	Słovak / Slovenian / Romanian / Greek
Dimension	117.5*207*37mm
Weight	0.395kg (0.87 lb)



Insertion Probe Options

Probe	Probe Diameter	Material	Detail
General Probe	Φ 3.9 mm / Φ 5.5 mm / Φ 8.5 mm	Soft-Metal / Semi-Rigid	P. 27-28
Dual-Camera Probe	Φ 4.9 mm	Semi-Rigid	P. 29
2 Way Articulation	Φ 6.0 mm	Soft-Metal	P. 30
VGA 2 Way Articulation	Φ 6.0 mm	Soft-Metal	P. 31 - 34
VGA Probe	Φ 5.5 mm	Soft-Metal / Semi-Rigid	P. 31 - 34
VGA Near Focus Probe	Φ 5.5 mm	Soft-Metal / Semi-Rigid	P. 31 - 34
VGA 360° Articulation	Φ 6.0 mm	Stainless steel (soft-metal)	P. 35 - 36
VGA Short Tip Articulation	Φ 4.5 mm / Φ 6.0 mm	Stainless steel (soft-metal)	P. 37 - 38
Pipe Inspection Probe	Φ 6.0 mm, Φ 22 / Φ 28 mm (camera head)	Hard Soft-Metal	P. 39 - 42

Specification Introduction JF series video broescope

General Probe



Ø 3.9 mm Probe Front view / Side view (Semi - rigid) 1m / 2m / 3m



3.9 mm Extremely Small

It's the smallest diameter Insert Probe on the market, only Ø3.9mm.

Other diameter



3.9 mm

Front / Side View optional

You can select the corresponding camera in accordance with the circumstances you need. Only for Ø3.9mm, Ø5.5mm



90° Side View



Front View





JM Series



JL Series

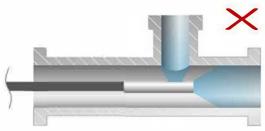
Diameter	Φ 3.9 mm Extremely small	Φ 5.5 mm	Φ 8.5 mm
Material	Semi-Rigid (SR)	Soft-Metal (SM) Semi-Rigid (SR)	Semi-Rigid (SR)
Type of Camera	Front / Side view	SM : Front / Side view SR : Side view	Front view
Length	1m / 2m / 3m	SM: 1m/2m/3m/5m 10m/20m/30m SR: 1m/2m/3m	1m / 2m / 3m
Light Source	Front view: White LED * 3 Side view: White LED * 2	Front / Side view White LED * 4	White LED * 6
F.O.V		57 °	
D.O.F		1 ~ 6 cm	
Frame Rate		~ 30 fps	
Exposure		Automatic	
White Balance	Fixed		
Resolution Pixels (Dynamic / Static)	QVGA (320 * 240)		
Image Sensor	CMOS Image Sensor		
Main Console	JF Se	ries, JK Series, JM Series, JL Se	eries

Specification Introduction

Dual - Camera

One Click Switch





Forward View / Side View One-click Swich



0° Frontward view



JK Series

90° Side view





JM Series



JF Series

JL Series



(Semi - Rigid) 1m/2m/3m

Insertion tube & Ca	amera System
Diameter	Φ 4.9 mm
Type of Camera	Daul Cameras (Front & Side view)
Camera Resolution	320 * 240
Head Length	28 mm
Head Material	Stainless steel
Connector	Metal
Light Indicate	Green light (forward view), Red light (side view)
Light Source	Forward: 140-224 mcd*2 LED Side: 210-330 mcd*1
Length	1m / 2m / 3m
Material	Semi-Rigid
F.O.V	Horizontal field angle 45.2° Vertical field angle 34° Diagonal field angle 56°
D.O.F	1 ~ 6cm
Working Temperature	0°C ~ 55°C
Waterproof	IP67
Main Console	JF Series, JK Series, JM Series, JL Series

2 Way Articulation



2 Way Articulation Wireless Probe (Front View / Side View) 1m/2m/3m

2 WAY ARTICULATION

2 way articulation probe helping to check angles that hardly to be checked (over 300° of view). Front view and Side view optional.





Left / Right 155°

Side view

















JF Series





2 Way Articulation (Front View / Side View) 1m/2m/3m

Insertion tube & Camera System

insertion tabe a c		
	2 Way Articulation Wireless Probe	2 Way Articulation Probe
Type of Probe	Wireless	Wired
Type of Camera	Front view	/ Side view
Diameter	Φ6	mm
Resolution	325(H)*	* 250(V)
Head Material	Stainles	ss steel
Light Source	White	LED
Length	1m / 2r	m / 3m
F.O.V	Horizontal field	d angle 45.2°
	Vertical field angle 34°	
	Diagonal field angle 56°	
D.O.F	1~6	cm
Material	Soft-Metal	
Working Temperature	0°C ~ 60°C	
Articulation Angle	Left: 155° / Right: 155°	
Articulation Radius	Front View: 48 +/-1mm / Side View: 60 +/-1mm	
Waterproof	IP67	
Dimension	139.3 * 34.9 * 31.8mm	
Weight	1m-260g / 2m-340g / 3m-420g	1m-370g / 2m-450g / 3m-530g
Battery	Rechargeable Li-Polymer battery 3.7V	None
Lightness Control	Variable	None
Main Console	JM Series	JF Series, JK Series, JM Series, JL Series

VGA Series

2 Way Articulation Probe





2 Way Articulation Wireless Probe (VGA)

1m/2m/3m

2 WAY ARTICULATION

2 way articulation probe helping to check angles that hardly to be checked (over 300° of view).

155°	N N
	Front view
N.	
155°	

Left / Right 155°





JM Series



2 Way Articulation Probe (VGA) 1m/2m/3m

	2 Way Articulation Wireless Probe(VGA)	2 Way Articulation Probe(VGA)
Type of Probe	Wireless	Wired
Type of Camera	Front	view
Diameter	Φ6	mm
Resolution	VGA (64	0 * 480)
Head Material	Stainles	ss steel
Light Source	White LED. 22	4mcd * 3 LED
Length	1m / 2m / 3m	
F.O.V	87.1 degree (Diagonal)	
D.O.F	1 ~ 10 cm	
Material	Soft-Metal	
Working Temperature	-20 ~ 65 °C	
Articulation Angle	Left: 155° / Right: 155°	
Articulation Radius	50mm+ / -5mm	
Waterproof	IP67	
Dimension	139.3 * 34.9 * 31.8mm	
Weight	220g	
Battery	Rechargeable Li-Polymer battery 3.7V	None
Lightness Control	Variable	None
Main Console	JM Series	JF Series, JK Series JM Series

Basic / Near Focus



Φ 5.5 mm VGA Probe (Soft-Metal / Semi-Rigid)

SM: 1m/2m/3m/5m SR: 1m/3m

MATERIAL OF PROBE

Soft-Metal: Soft bendable and resilient. Semi-Rigid: Bendable and can be in fixed position.

Soft-Metal

Semi-Rigid



Specification Introduction

nsertion tube & Ca	mera System
Diameter	Φ 5.5 mm
Camera Head Length	20mm
Material	Soft-Metal (SM) / Semi-Rigid (SR)
Length	SM : 1m / 2m / 3m / 5m SR : 1m / 3m
Head Material	Stainless steel
Resolution	VGA (640 x 480)
Light Source	White LED. 224mcd * 4 LED
D.O.F.	1 ~ 6cm
F.O.V.	60.7 degree (Diagonal)
Working Temperature	-20°C ~ 65°C
Waterproof	IP67
Video Out Format	NTSC
Main Console	JF Series, JK Series, JM Series



Φ 5.5 mm VGA Near Focus Probe (Soft-Metal / Semi-Rigid)

SM: 1m/3m SR: 1m

Near Focus

Near Foucs / Short Focus Probe is suitable for a narrow working environment (e.g., gun barrel, tiny tube) or inspectors who would like to scrutinize a specific part in a short distance. You can obtain more detail image by this probe than observe by a normal focus probe.







10 - 60 mm

General Probe

Near Focus Probe

General Probe

Near Focus Probe

General Probe



Near Focus Probe

Insertion tube & Car	nera System
Diameter	Φ 5.5 mm
Camera Head Length	20 mm
Material	Soft-Metal (SM) / Semi-Rigid (SR)
Length	SM : 1m / 3m SR : 1m
Head Material	Stainless steel
Resolution	VGA (640 x 480)
Light Source	White LED. 224mcd * 4 LED
D.O.F.	6 ~ 16mm (0.6cm ~ 1.6 cm)
F.O.V.	60.7 degree (Diagonal)
Working Temperature	-20°C ~ 65°C
Waterproof	IP67
Video Out Format	NTSC
Main Console	JF Series, JK Series, JM Series



Hyperion[®] Function

Hyperion, can further enhance the articulation probe with:

- Clearer images on monitor (640 x 480 resolution)
- Brighter images in low-light conditions
- Anti-reflection and particle-free view on meatl or mirror surface
- 90° view rotations during inspection



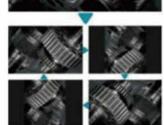
BRIGHTER IMAGE Light enhancement under low - light condition.

ROTATION IMAGE Four 90° view rotation to identify codes.









VGA Series Probe



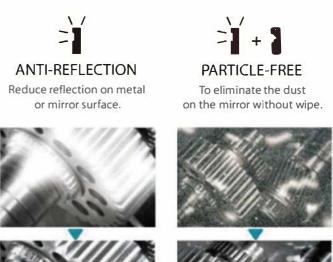


0 6.0 mm 2 Way Articulation Wireless Probe (VGA)

Φ 6.0 mm 2 Way Articulation Probe (VGA)



Specification Introduction









0 5.5 mm VGA Probe



Φ 5.5 mm VGA Probe (Near Focus)

360° Articulation





360° Articulation Probe (VGA)

1m/3m (Standard) 5m / 7m (Customized)

Outer braided stainless steel

New stainless steel insertion probe is more durable and antifriction than previous design.



JF Series **JK Series**

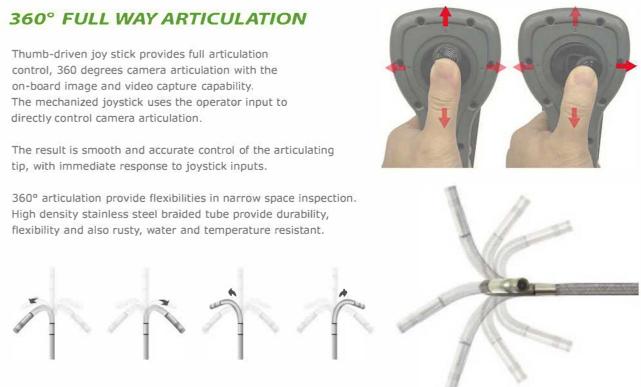


360° FULL WAY ARTICULATION

control, 360 degrees camera articulation with the on-board image and video capture capability. The mechanized joystick uses the operator input to

tip, with immediate response to joystick inputs.

flexibility and also rusty, water and temperature resistant.



ype of Probe	360° Articulation	
Diameter	Ø 6.0 mm	
Head Length	24 mm	
Resolution	VGA 640(H) x 480(V)	
Head Material	Stainless steel	
Light Source	Front (White LED * 3) / Side (White LED * 2)	
Length	1 m / 3m	5 m / 7m (Customized)
F.O.V	87°	
D.O.F	1 cm ~ 10 cm	
Material	Outer braided Stainless steel	
Working Temperature	-10°C ~ 60°C	
Articulation Angle	Full ways ≥ 110°	Full ways ≧ 80°
Angle Mirror	Available	
Available Main Console	JK Series. JF Series	

Specification Introduction

Short Tip Articulation





JF Series

1 Way Short Articulation Probe (VGA) 1m only

JK Series



2 Way Short Articulation Probe (VGA) 1.5m/3m

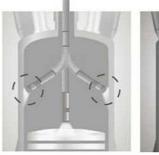
NEW MATERIAL OF PROBE

New stainless steel insertion probe is more durable and antifriction than previous design.



SHORT TIP ARTICULATION

Shorter tip and articulation can easily swing in the narrow enviornment. Easy and handy inspection by new super wide tip swing angle (180 degree).



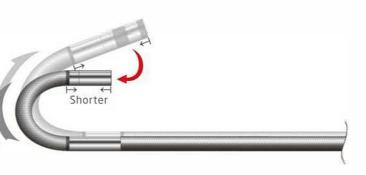


Articulation Sh

Short Tip Articulation

Type of Probe	1 way short articulation	2 way short articulation
Diameter	Ø 6.0 mm	Ø 4.5 mm
Head Length	10.0 mm	13.0 mm
Resolution	VGA 640(H) x 480(V)	
Head Material	Stainless steel	
Light Source	5 x white LEDs	
Length	1 m	1.5 m / 3 m
F.QV	87°	90°
D.O.F	1 cm ~ 6 cm	1 cm ~ 10 cm
Material	Outer braided Stainless steel	
Working Temperature	-10°C ~ 60°C	
Articulation Angle	Right 180º	Right / Left 180º
Waterproof		
Available Main Console	JK Series, JF Series	

Specification Introduction



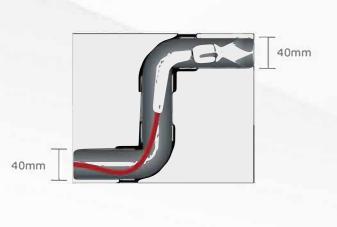
Pipe Inspection Probe



Φ 22 mm / Φ 28 mm 22 m / 30 m

Rock solid reel stand not only improves the image quality, but also provides the convenience and flexibility for your pipe inspection.

Pass through two 90° elbow bends



Recommended Combinations

JKS - 2822M

JGS - 2222M

JK Series

JF Series



IP 65 (REEL)



PASS THROUGH TWO 90° ELBOW BENDS

5 m / 10 m (JF only)

Camera Head

- Interchangeable Camera Head IP 68 Waterproof
- Bright & Clear Image 640*480 Resolution Stainless Steel
- 8 High Brightness LED (3000 lux)



Optional Accessories





Centering Metal Ring @50mm

Centering Brush Φ150mm (standard:@100mm)





Locator & Transmitter (Only for @28mm Length 30m)





Features Introduction PIPE INSPECTION PROBE series video broescope

Wireless Detection

Locator & transmitter can detect camera position to know where the camera is.



Locater	
Diameter	L: 293.5mm
	W: 144mm
	H: 486.5mm
Weight	2kg
Power Source	3.7V/200mA Li battery
Power Consumption	282mA
Battery Charge	3 ~ 4 hours
Power Cycle	6 ~ 7 hours
Power Adaptor	5.5V,1.8A
Working Temperature	-10° ~ 60°
Storage Temperature	-20° ~ 80°
Drop Resistance	60cm
Waterproof	IP55
Alailable	Φ 28mm Length 22m Only

Optional Accessories

Extension Pole

No climbing and no ladder. Ideal for easy accessing ceiling, air-condition duct, bridge, tunnel, sewwe...facilities.





· Highly convenient for operation in heavy duty

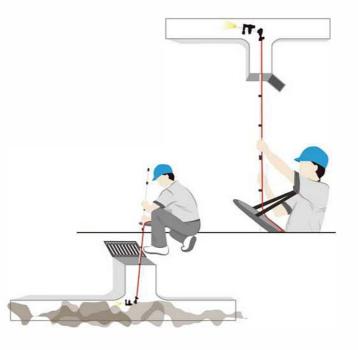
· Up to 5m inspection

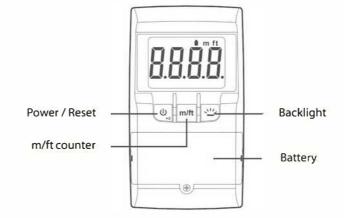
Extension Pole		
Length	120 ~ 503 cm (main pole only)	
Weight	1275g (w/o flashlight)	
Probe Holding Pole	Angle adjustable	
Flashlight	IP 55	





Usage scenarios





Camera Diameter	Φ 22 mm	Φ 28 mm
Pipe Diameter	Φ 6 mm	
Camera Length	25mm	24.3mm
Applicable Pipe	Φ40mm-70mm	Φ50mm-100mm
Goose neck	27cm	
Pipe Length	22m	5m / 10m / 30m optional
Interchangeable Head	NO	YES ,(non 5m / 10m)
Meter	YES	YES ,(non 5m / 10m)
Resolution	640 * 480	
Camera Material	Stainless Steel	
D.O.F	30mm - 100mm	10mm -∞
F.O.V	62.5° (Diagonal)	150.8°(Diagonal)
Illumination	High Brightness 8 White Led (3000 lux)	
Waterproof	Probe-IP68 , Reel-IP65	
Working Temperature	-10°C~60°C	
Operating Hour	3 Hours	
Material	Fiber Glass	
Flexibility	Continuously 90° sharp turn in Ф40mm / Ф50mm Water Pipe	
Whole Reel Diameter	30cm	
Main Console	JF Series, JK Series, JM Series JL Series	JF Series, JK Series, JM Series JL Series Length: 5m/10m JF Series Only

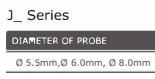
Specification Introduction PIPE INSPECTION PROBE series video broescope

Meter		
Screen display	LCD	
Switches	Power / Reset m/ft m/ft counter Backlight	
Dimension	62 x 110 x 24mm	
Meter counts	Forward / Rewind	
Display digits	3 (1 decimal place)	
Meter display	m/ft	
Deviation	± 0.4m(±1.3ft)	
Waterproof	IP 55	
Power source	2 x AAA (DC 3V)	
Power capacity	\geq 90hrs	

Accessories

Side Mirror

The cap mirror allows lateral side view during inspection.







Ø 5.5mm / Ø 6.0mm







P_Series

DIAMETER OF PROBE

35° view (= 70° viewing angle) 45° view (= 90° viewing angle) 55° view (= 110° viewing angle)

Rotating Mirror

[For 3.9mm probe front view only] The roat mirror allows 360° side-view rotation durning inspection.



Magnet & Hook

Patented retriever that helps remove small items in narrow space.



Carrier Bag

Sunshade, Protection and Easy Carry.





JF Series

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Main Console System JF Series, JM Series

Measure Software

Inspection Management Software is designed for image viewing, distance measuring, and image comparison. It helps inspectors to verifty measurement after leaving the inspection site.





areas lower or higher than eye level. (Ideal for 2way articulation probe)

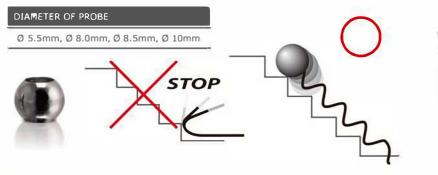
Extender



An extender helps straighten the probe to inspect

Guide / Climbing Balls

Guide ball helps the probe to turn smoothly in the edge or angle. It also helps to climb up if facing multiple edges.



Protection Corn

Available in 25mm, 28mm OD probe. (non Pipe Inspection Probe).



Ø 25mm, Ø 28mm



DIAMETER OF PROBE

Lens Cover

Available in 25mm, 28mm OD probe. (non Pipe Inspection Probe).



Ø 25mm, Ø 28mm

Ø 25mm, Ø 28mm

Storage Roller

Easy use, easy storage (Designed for Long probe).

