ARTICULATING NINJA+SCOPE		NINJA-SCOPE			NINJA-SCOPE S
		φ2.8mm	φ3.9mm	φ6.9mm	φ6.9mm
Insertion Tube	Length(meter/inch)	1.0m(39")	1.5m(59")/3.0m(118")	1.5(59")/3.0m(118")/ 5.0m(197")/8.0m(315")	1.5m(59")/3.0m(118")
	Exterior	Polyethylene resin	Stainless Steel Braid		Polyethylene resin
	Waterproof	Insertion Drip Proof	Insertion Tube and Tip		
	Bending Radius	Over R25mm	Over R35mm	Over R45mm	
	Chemical Compatibility	Machine Oil, Heating Oil, Engine	Oil, 3.5% Concentrated Saltwater,	Diesel Fuel	
Options	Field of View (H/V)	70°/ 70°	72°/ 54°		
	F No.	F 5.3		F 6.0	
	Depth of Field	10mm ~ 40mm	15mm ~ ∞	20mm ~ ∞	
	IIIumination Method	Optical Fiber	6 Super High-Intensity White LEDs	4 Super High-Intensity White LEDs	
	Articulation Angle	360° (over 90° in every direction) *\$\phi\$6.9mm-8.0m has over 70° in every direction.			
Articu l ation	Articulation Control	Joystick with "Direct Control" Mechanism			
	Rigid Distal End Length	14mm	13mm	15mm	
LCD Monitor		3.5inch Color Digital TFT			2.4inch Color Digital TFT
Observation Functions		-		2X Digital Zoom	-
		-		Internal-Camera-Module Temperature Display	-
		- Temperature Alarm Display			
Gain Adjustment		Smart Gain Function at 5 Levels			
Still Capture / Record Function		Still Image Capturing			
		-		LED Flash Capturing (Still image)	-
		Time-Lapse Recording and Video Recording			Video Recording
Input / Video Output		φ2.5mm Stereo Mini Jack for RCA Video Output (NTSC / PAL)			
Output Terminal	USB Output	Mini B Terminal Ver.2.0 Video Capture Output (Includes Driver / Viewer Software)			
Storage	Storage Media	MicroSD Card (Max. 2GB)			
	Still Image(JPEG)	400×400pixel 640×480pixel			
	Video Motion JPEG (AVI file extension)	400×400pixel 15 ~ 30fps		640×480pixel 15~30fps	
	Storage Capacity (with 1GB MicroSD Card)	Still Image: Max. 500 pictures / Movie Recording: Approx. 60 minutes (Normal Mode)/ Approx. 9 hours (Time-Lapse Mode)			Still Image : Max. 500 pictures / Movie Recording : Approx. 60 min.
Playback Function		Still Image : Thumbnail 9-image Display / Full Screen Display / Video : Play, Pause			
Menu Operation		Image Adjustment (Brightness, Contrast, Hue, Sharpness)			
		Delete Stored Image			
		Time and Date Setting			
		Language : English / Japanese			-
		USB Mass Storage			-
		Time Stamp -			
Operating Temperature(Insertion Tube)		In Air: -30°C~60°C (-22°F~140°F) (Without condensation)	0°F) In Air : -30°C~60°C (-22°F~140°F) (Without condensation) / In Liquid : 10°C~30°C (50°F~86°F)		
Power Supply	DC	DC 6V (Four AA alkaline batteries)			
	AC	AC Adapter (IN 100V~240V, OUT 6V / 2.5A)	AC Adapter (IN 100V~240V, OUT 6V/0.85A)		
Operating Time		Max. 1 hour (with four AA alkaline batteries)			Max. 2 hours (with four AA alkaline batteries)
Weight		470g / 16.5oz (without batteries)	480g / 17oz (without batteries at 1.5m length)	570g / 20oz (without batteries at 1.5m length)	480g / 17oz (without batteries at 1.5m length)

^{*}Specifications and design may be changed without a prior notice





Carrying Case

90 Degree Side Viewer

The 90 Degree Side Viewer enables to see the 90-degree angle. It can be attached on the tip of the insertion like a cap adapter. For ϕ 6.9 mm : ϕ 8.0 x 25 mm For ϕ 3.9 mm : ϕ 4.6 x 18 mm



Protective Caps (3 pcs/set)

For \$\phi 6.9 \text{ mm} : \$\phi 7.0 \times 13 \text{ mm}\$ For \$\phi 3.9 \text{ mm} : \$\phi 4.5 \times 8 \text{ mm}\$



THE NEXT GENERATION CAPSULE ENDOSCOPE

Protective Tubes (3 pcs/set)

For ϕ 6.9 mm : 80 mm For ϕ 3.9 mm : 80 mm



Manufacturer: RF Co., Ltd.

TEL:1-800-383-3005 / FAX:1-800-799-9895 [URL] www.rfsystemlab.com/en [Email] os@rfsystemlab.com

480 x 390 x 160 (mm) Weight: 3.6kg / 7.9lbs

Description of Business
Medical Field: Digital Radiography Imaging Sensors, Medical Video Scopes
Dental Field: Digital Radiography Sensor, Intraoral Cameras
Industrial Field: Digital Radiography NDT Systems, Industrial Video Borescopes
Development of Capsule Endoscope and Disposable Video Endoscopes





The first battery-free endoscopic capsule. 9mm in diameter, 23mm in length. Swallowed like a pill.

Osi_170417_R_MI_VJ3





ARTICULATING NINJA+SCOPE

ϕ 2.8mm/ ϕ 3.9mm/ ϕ 6.9mm











Highly Durable ad Flexible Insertion Tube

The NINJA-SCOPE comes with a 2.8mm/3.9mm/6.9mm diameter steel-braided insertion tube and ultra-short, rigid tip section. The highly flexible and durable insertion tube can be easily navigated through narrow, curved paths. The steel-braided covering protects the insertion tube from rough or abrasive surfaces without compromising flexibility.







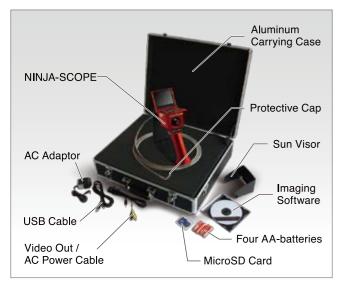


Joystick-Controlled, **360 Degree Articulation**

The mechanized joystick uses the operator input to directly control camera articulation. The result is smooth and accurate control of the articulating tip, with immediate response to joystick inputs. This allows the camera tip to be steered through narrow bores, channels and complex curves. Additionally, the camera will hold its position even when joystick pressure is released. No







Higher Operability and Durability

New steel-braided insertion tube delivers greater flexibility and durability. This all-in-one system combines the joystick-controlled, 360 degrees camera articulation with the on-board image and video capture capability.



Synchronized Strobe LEDs

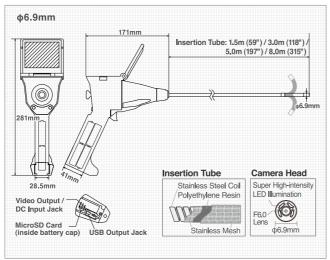
φ2.8mm/φ3.9mm NINJA-SCOPE utilizes the synchronized strobe LEDs. The strobe is synchronized with the frame rate of the micro-camera and brings high-intensity light



Outstanding Ease of Use

The NINJA-SCOPE is an all-in-one system that combines an articulating video borescope with an on-board imaging system. As you conduct an inspection, images and videos can be captured and saved directly to the built-in micro SD card with the click of your index finger. The intuitive control panel allows you to review stored images and videos on the built-in 3.5" LCD monitor.





*φ2.8mm/φ3.9mm drawings are available on our website.

ARTICULATING NINJA + SCOPE 13

Smart & Simple Model with "Viewing / Capturing / Recording"

ϕ 6.9mm







Easy "Viewing / Capturing / Easy "View Recording"

The ergonomic handle design and location of key function controls facilitates one-handed operation. Use a trigger button to capture images, while your thumb controls LED brightness, video recording and camera articulation via the joystick. All images and video are stored on a MicroSD card in the base of the unit.







Temperature Sensor

A temperature sensor located on the tip of the insertion tube measures and displays the internal temperature of the camera module, and delivers a two-stage visual warning to the user when the temperature approaches a dangerously high level*. This warning system helps preventing damage to





The sensor is not designed to measure the ambient temperature of the area being inspected.

Integrated Design, **Essential Features**

As the world's lightest and most compact video borescope, the NINJA-SCOPE S brings unrivaled portability and ease of use to engineers, technicians and inspection professionals. Weighting just 480g (17oz), and designed for one-handed operation, the NINJA-SCOPE S is the ideal tool for field inspections and working in confined spaces.





