

Light Scope

Built-in light source for ease of portability!

Main Features

- Diameter of 8mm at tip of insertion end, and 10mm with side view adapter allow you to get into tight locations.
- Effective length of 1,000~3,000mm allows visual inspection of far-back locations.
- Water-resistant cable removes worries about getting cable wet.
- Adjust focus distance from infinity to 10mm.



19,000 Lux
(6 times brighter than standard Moritex model)
Viewing angle: 27°

Main Applications

- | | | | |
|-----------------------------|--|----------------------------|--|
| Automobiles | Engines, transmissions, differentials, air conditioners | Sewers | Inside pipes, toilet clogs, other plumbing problems |
| Industrial Machinery | Engines, transmissions, inside hydraulic pipes | Hydrothermal Plants | Process plumbing, water supply pipes, pressure storage tanks |
| Gas | Inside pipes and exhaust openings | Vessels | Boiler interiors, turbine interiors, diesel engines |
| Air & Spacecraft | Turbine blades, combustion chamber interiors, rocket engines | | |

Sample Uses

Visual inspection of automobile engine interior
Scope used: MSGI-1350 II



▲Piston



▲AC evaporator

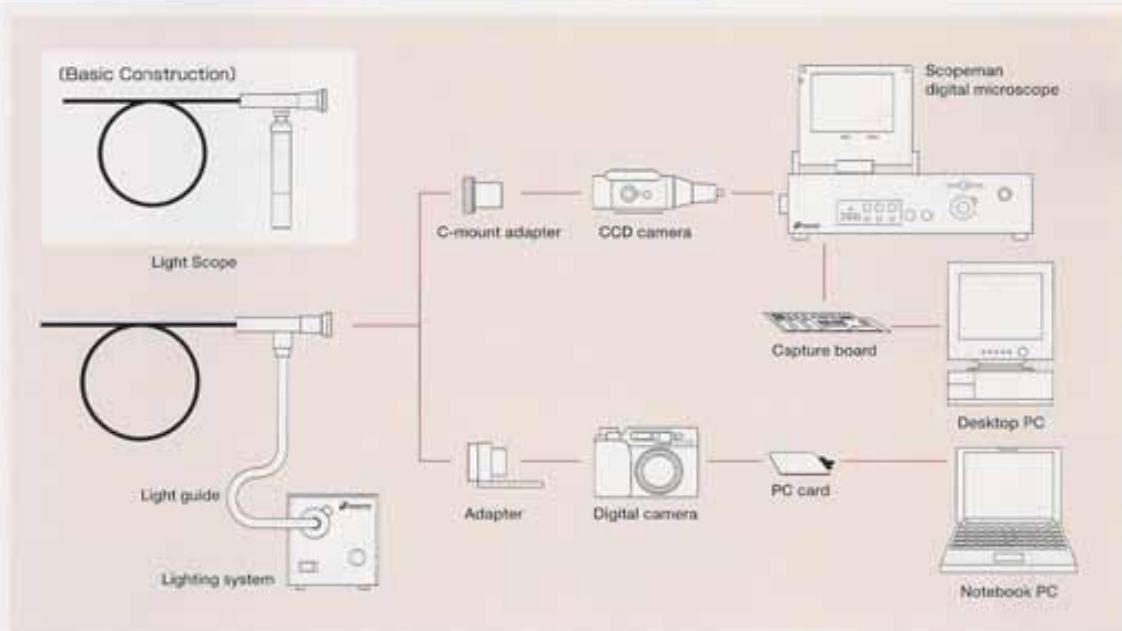


ALLWAN – 148, rue Larévellière – 49100 ANGERS
RCS 442 975 777 00016 - N° Intracommunautaire : FR 864 429 75 777
Tel: 0 825 600 625 - Fax : 0 825 600 623 – E-mail: info@allwan.fr

All digital – view, capture, and record crisp images

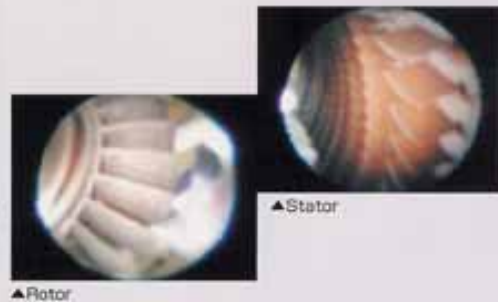
Interlock Type		Flexible Type	
MSP1-1000 III MSP1-2000 III MSP1-3000 III MSG1-1350 III (Glass Fiber)		MSPS-1000 III MSPS-2000 III MSPS-3000 III MSGS-1350 III (Glass Fiber)	
	Maintains any curve state		Flexibility for insertion in pipes and other locations

System Flow



Inspection of helicopter engine interior

Light and portable, easy to reach tight locations.
Scope used: MSP1-1000 III



Light Scope


Industrial Endoscopes : Lightscopes

Wide selection for wide range of applications

Specifications

Scope	Type	Interlock Type (Maintains any curve state)				Flexible Type (Flexibility for insertion down pipe shapes)			
	Fiber Material	Plastic			Glass	Plastic			Glass
	Model	MSPI-1000 III	MSPI-2000 III	MSPI-3000 III	MSGI-1350 III	MSPS-1000 III	MSPS-2000 III	MSPS-3000 III	MSGS-1350 III
Image Fiber	Pixels	3,500			10,000	3,500			10,000
	Line Bore	35 μm			—	35 μm			—
Light Source	Lamp	3.5V 0.7A 2.55W							
	Power	Two AA dry-cell batteries (sold separately) [Provides continuous light for 3 hours (when alkaline batteries used)]							
Optical System	View	Direct (side view optional)							
	View Angle	27°							
	Focal Distance	10mm~infinity							
	Waterproofing	Cable waterproofed to 1~1.3 atmospheres (1013~1317hPa)							
	Working Temperature	-20C~+60C							
Cable	Material	SUS interlock + PVC cover				SUS flexible + PVC cover			
	Minimum Bend Radius	100mm				40mm			
	Effective Length (Water-resistant case supplied)	1000mm	2000mm	3000mm	1350mm	1000mm	2000mm	3000mm	1350mm

*Note: Specifications and appearance may be modified without notice in order to implement improvements.

 Not for medical applications

Standard Package



Scope & Hard Case
For scope protection & portability.



Battery Handle Lighting

Optional Accessories



Light Guide
Effectively send light from lighting system to scope (flexible type)



Digital Camera Adapter
Adapter for attaching digital camera



Side View Adapter (90°)
View pipe inner walls & other surfaces



Lighting System
Bright, stable light source in compact design



C-mount Adapter
Adapter for attaching CCD camera. Connect camera and lightscope to view images



Valve
3.5V 0.7A 2.55W



ALLWAN - 148, rue Larévellière - 49100 ANGERS
RCS 442 975 777 00016 - N° Intracommunautaire : FR 864 429 75 777
Tel: 0 825 600 625 - Fax : 0 825 600 623 - E-mail: info@allwan.fr

Bore Scope

Industrial Endoscopes : Borescope

Non-destructive Inspection Scope for Easy Visual Inspections

A borescope has an extremely simple construction. Light is shined on an object from a thin stainless steel tube, via optical fiber; a relay lens system then sends clear images to the eyepiece. The borescope offers ease of use and unrivaled cost performance for visual inspection of cavities and hollow spaces.



Main Features

- Use of multiple glass rods rather than high-priced miniature lens lowers cost
- No distortions, blurring, or other lens aberrations because of special construction
- Possible to focus on objects from arbitrary distance to scope tip.
- Attach a digital camera or digital video camera using special digital conversion adapter
- Comes with battery handle with adjustable light intensity and side-view adapter
- Attach side-view adapter and rotate to get 360° side viewing angle.



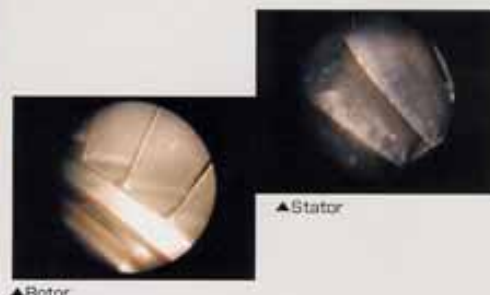
Main Applications

- Manufacturing Industry:** Quality control (internal/external), non-destructive inspections, close-up visual inspections of die holes
- Firearms:** Inspection of small arms, illuminate bullets and barrel, inspect chamber and bullets
- Transportation:** Inspection of engines, pistons, door lock mechanisms, and aircraft turbine blades
- Construction:** Inspection of security systems, building maintenance
- Observation of insects and other organisms**

Sample Uses

Inspection of aircraft interior

Perfect for inspecting cavities and hollows
Scope used:
Bore Scope ϕ 4.2-180

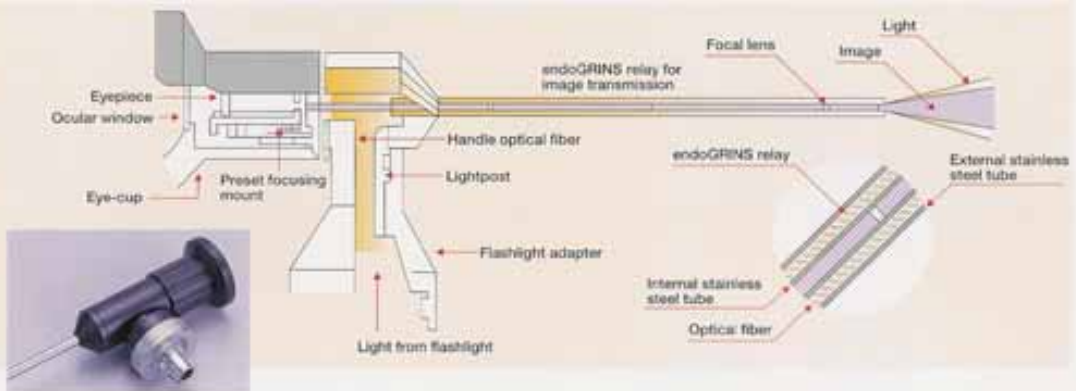


ALLWAN – 148, rue Larévellière – 49100 ANGERS
RCS 442 975 777 00016 - N° Intracommunautaire : FR 864 429 75 777
Tel: 0 825 600 625 - Fax : 0 825 600 623 – E-mail: info@allwan.fr

Bore Scope

Clear images sent using unique endoGRINS relay

Construction



Relaying the Image

The job of forming an image at one end of the borescope on the other end via the focal lens isn't easy.



Borescopes with Hopkins design also available



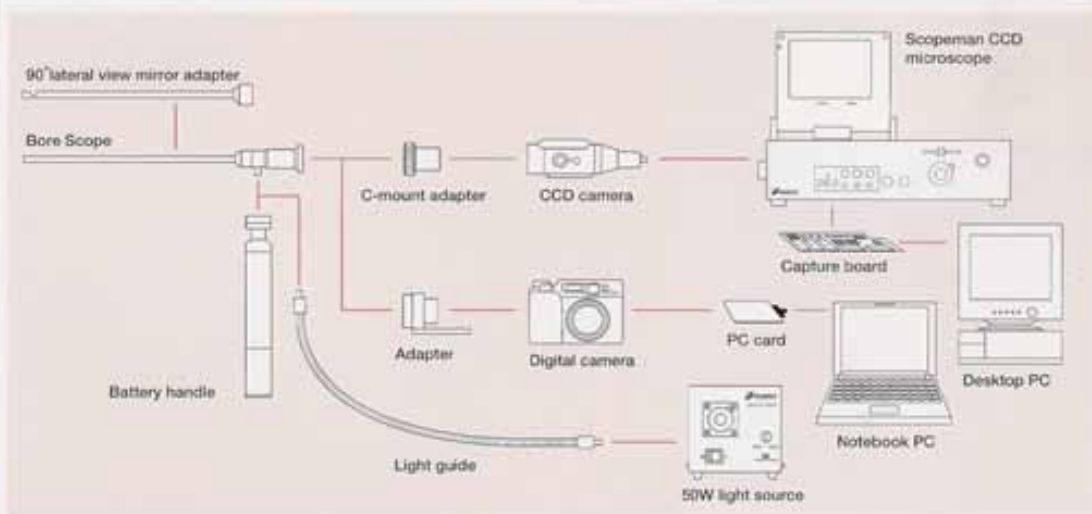
Note: While these designs are good at relaying images, they require the use of a large number of expensive miniature lenses.

Instead of this type of lens, Moritex borescopes only use multiple glass rods.

All endoGRINS lenses are manufactured using a proprietary ion exchange process. Almost all deterioration of image quality is due to lens aberrations, but we have resolved these issues through manufacturing technologies and patented color aberration balancing research.



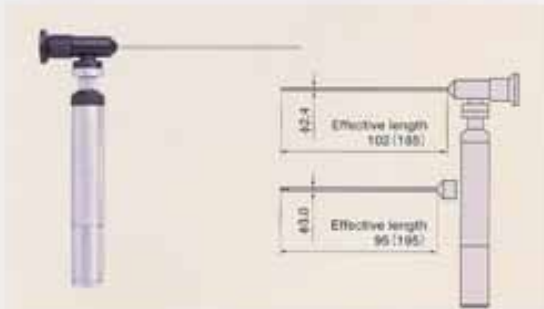
System Flow



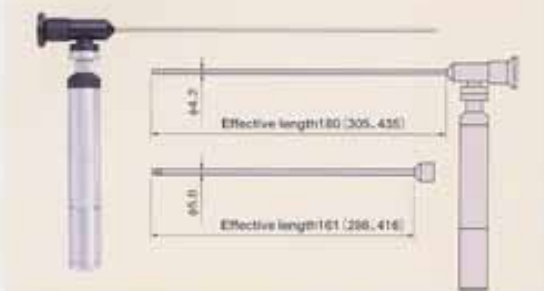
Extensive lineup to meet all your scoping needs

Specifications

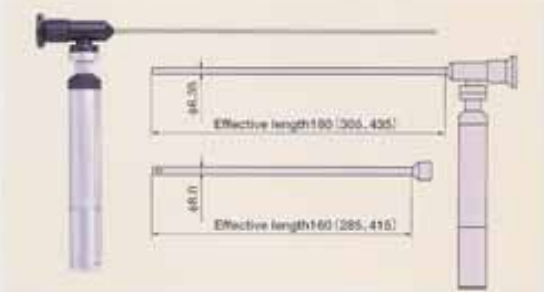
External diameters available from 2.4 to 6.35 mm. Effective insertion lengths available from 95 to 435 mm. Insertion section cannot be selected.



	Diameter	Effective Length Viewing Direction	View	Angle
(Scope)	2.4mm	102mm	Direct	32°
(90° Adapter)	3.0mm	95mm	90° side view	32°
(Scope)	2.4mm	185mm	Direct	32°
(90° Adapter)	3.0mm	195mm	90° side view	32°



	Diameter	Effective Length Viewing Direction	View	Angle
(Scope)	4.2mm	180mm	Direct	37°
(90° Adapter)	5.0mm	161mm	90° side view	37°
(Scope)	4.2mm	305mm	Direct	37°
(90° Adapter)	5.0mm	288mm	90° side view	37°
(Scope)	4.2mm	435mm	Direct	37°
(90° Adapter)	5.0mm	418mm	90° side view	37°



	Diameter	Effective Length Viewing Direction	View	Angle
(Scope)	6.35mm	180mm	Direct	42°
(90° Adapter)	8.0mm	160mm	90° side view	42°
(Scope)	6.35mm	305mm	Direct	42°
(90° Adapter)	8.0mm	285mm	90° side view	42°
(Scope)	6.35mm	435mm	Direct	42°
(90° Adapter)	8.0mm	415mm	90° side view	42°

 Not for medical applications

Standard Package



Carrying Case
With side-view adapter

Optional Accessories



Light Guide
Effectively send light from
lighting system to scope
(flexible type)



Digital Camera Adapter
Adapter for attaching digital camera



Lighting System
Bright, stable light source
in light, compact design



**TZB
C-mount
Adapter**

