

EVIS EUS Ultrasound Gastrointestinal Videoscope

## GF-UE190

The Next Level in Ultrasound Endoscopy



# Making A Difference in Radial EUS Scopes

## Improved Maneuverability and Insertability with Enhanced Ultrasound Image Quality

As the inventor of the first 360° electronic radial scanning EUS scope, Olympus has developed the new GF-UE190. With advanced features, GF-UE190 scope is a versatile instrument that offers improved image quality, greater safety and enhanced ease of use. Olympus continues to support more efficient EUS observation and diagnosis by improving maneuverability, insertability and usability.

### Realizes shorter distal end and slimmer scope outer diameter

#### Improved Maneuverability

Shorter rigid section

+

Smaller bending radius

→

Pursuit of improved maneuverability in duodenum

#### Improved Insertability

Slimmer distal end

+

Thinner insertion tube

→

Support for inserting into throat or P-ring

GF-UE160-AL5

GF-UE190

Shorter rigid section

Smaller bending radius

Short and Slim Distal End  
13.4 mm

## Improved Ultrasound Image Quality to Support EUS Observation

With its increased penetration depth and higher resolution, the GF-UE190 scope provides improved ultrasound images. The oblique endoscopic view supports pancreaticobiliary exploration and allows close examinations of small lesions.

GF-UE160-AL5

GF-UE190

THE-P mode, phantom image comparison

Clinical image (THE-P mode)

Slim Insertion Tube  
10.9 mm

## Easy Handling and Reprocessing

### Distal End Design

D-Cut design allows easy removal of the balloon band, helping to prevent damage to the distal end. Straight balloon suction channel allows better access for reprocessing accessories.

### Detachable Cable

Detachable ultrasound cable (MAJ-2056) for easier handling, reprocessing and storage.

D-Cut

Protruding cleaning brush for improved distal end visibility



EVIS EUS Endoscopic  
Ultrasound Center  
**OLYMPUS EU-ME2  
PREMIER PLUS**



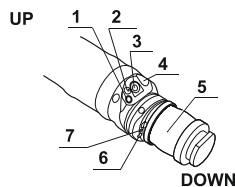
**Detachable Cable MAJ-2056**  
Cable 1,500 mm

## Specifications

### Endoscope Function

<b>Optical System</b>	Field of view	100°
	Direction of view	Forward oblique viewing 50°
	Depth of field	3-100 mm

<b>Insertion Section</b>	Distal end outer diameter	ø 13.4 mm
	Distal end enlarged	1 Light guide lens 2 Air/water nozzle 3 Objective lens 4 Instrument channel outlet 5 Ultrasound transducer 6 Balloon aspiration port 7 Balloon water feeding port



Insertion tube outer diameter	ø 10.9 mm
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Insertion section working length	1,250 mm
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<b>Instrument Channel</b>	Channel inner diameter	ø 2.2 mm
	Minimum visible distance <sup>1</sup>	5 mm
	Direction from which EndoTherapy accessories enter and exit the endoscopic image	

<b>Airflow Rate<sup>2</sup></b>	20 cm <sup>3</sup> /s
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<b>Bending Section</b>	UP	130°
	DOWN	90°
Angulation range	RIGHT	90°
	LEFT	90°

<b>Total Length</b>	1,563 mm
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<sup>1</sup> Distance from the distal end of the endoscope.  
<sup>2</sup> Standard when CLV-190 (high air pressure) is used.  
<sup>3</sup> This mode may not be available in some areas.

### Ultrasound Function

<b>Transducer Surface</b>	<43°C
<b>Maximum Temperature</b>	
<b>Ultrasound Method</b>	Electronic radial array
<b>Ultrasound Direction</b>	Perpendicular to the insertion direction
<b>Frequency</b>	5/6/7.5/10/12 MHz
<b>Scanning Range</b>	360°
<b>Contact Method</b>	Balloon method, sterile deaerated water immersion method

### Ultrasound Function with EU-ME1

<b>Operation Mode</b>	B mode, FLOW mode (COLOR, POWER)
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### Ultrasound Function with EU-ME2 Premier Plus, EU-ME2 Premier

<b>Operation Mode</b>	B mode, FLOW mode (COLOR, POWER, H-FLOW), PW mode, THE mode, CH-EUS mode <sup>3</sup> , ELST mode
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### Ultrasound Function with EU-ME2

<b>Operation Mode</b>	B mode, FLOW mode (COLOR, POWER, H-FLOW), PW mode
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### Ultrasound Function with ProSound F75

<b>Operation Mode</b>	B mode, M mode, D mode, FLOW mode (COLOR, POWER, eFlow), THE mode, PW mode, CH-EUS mode <sup>3</sup> , ELST mode
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EVIS EUS ULTRASOUND  
GASTROINTESTINAL  
VIDEOSCOPE  
OLYMPUS GF-UE190

As medical knowledge is constantly growing, technical modifications or changes of the product design, product specifications and accessories may be required.