

Endoscopic Ultrasonography System

■SU-1 ■EG-580UT ■EG-580UR



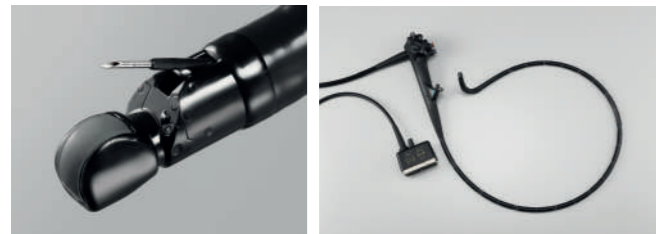
Endoscopic Ultrasonic Processor SU-1 -H-

Specifications		
Power supply	Power rating	AC 100-240 V
	Frequency rating	50 Hz / 60 Hz
	Current consumption(rated)	2.0-1.2 A
Size	Dimensions	390 × 135 × 485 mm
	Weight	13 kg
Ultrasonography image display	Scanning method	Electronic scanning
	Probe types	Convex, Radial
	Scanning modes	B, M, CD, PD, F-Flow, PW, THI, CH
	Special modes*	Elastography, CHI
Received signal processing	Received gain correction	0-100, 2 step
	STC	6-step gain settings per depth
	Sound speed correction	Full screen / ROI settings
	Dynamic Range	40-100, 5 step
Display	PinP	Endoscopic/Ultrasound Imaging
	Observation screen	Hospital, Date, Time, Patient
Applicable endoscopes	Convex	EG-580UT, EG-530UT2, EB-530US
	Radial	EG-580UR, EG-530UR2
Frequency		5, 7.5, 10, 12 MHz
Image input terminal	DVI image input terminal	1

*CHI and Elastography modes are available only in SU-1(Identifier -H-).

Specifications		
Image output terminals	Video terminal	1
	S-video terminal	1
	RGB TV terminal	1
	DVI terminal (digital)	1
	DVI terminal (digital / analog)	1
Sound output	HD-SDI terminal	2
	RCA terminal	1
Control terminal	Remote terminal	2
	Remote terminal (input)	1
	RS-232C terminal	1
	Keyboard terminal	1
	Footswitch terminal	1
Measurement function	Network terminal	1
	Measurement items	Distance, Circumference, Area, Volume, Velocity
Storage	Data formats	JPEG, TIFF, DICOM
	Storage device	Internal / External memory (USB)
	Cine memory	Record, Replay
Accessories		Keyboard, Footswitch

Product name: Ultrasonic Processor
GMDN: 40761
Generic Name: General ultrasound imaging system, line-powered



Ultrasonic Endoscope (Curved Linear Array) EG-580UT

Specifications		
Endoscopic functions	Viewing direction	40° (Forward Oblique)
	Observation range	3-100 mm
	Field of view	140°
	Distal end diameter	13.9 mm
	Flexible portion diameter	12.4 mm
	Bending capability	Up 150° / Down 150° Right 120° / Left 120°
	Working length	1,250 mm
	Overall length	1,550 mm
Ultrasonic functions	Forceps channel diameter	3.8 mm
	Scanning mode	Color Doppler, Power Doppler, Pulse Doppler, B mode, M mode
	Scanning method	Electronic convex scanning method
	Scan angle	150° (in combination with SU-1)
Frequency		5, 7.5, 10, 12 MHz

Product name: Ultrasonic Endoscope
GMDN: 36951
Generic Name: Flexible ultrasound gastroduodenoscope



Ultrasonic Endoscope (Radial Scan) EG-580UR

Specifications		
Endoscopic functions	Viewing direction	0°
	Observation range	3-100 mm
	Field of view	140°
	Distal end diameter	11.4 mm
	Flexible portion diameter	11.5 mm
	Bending capability	Up 190° / Down 90° Right 100° / Left 100°
	Working length	1,250 mm
	Overall length	1,550 mm
Ultrasonic functions	Forceps channel diameter	2.8 mm
	Scanning mode	Color Doppler, Power Doppler, Pulse Doppler, B mode, M mode
	Scanning method	Electronic radial scanning method
	Scan angle	360° (in combination with SU-1)
Frequency		5, 7.5, 10, 12 MHz

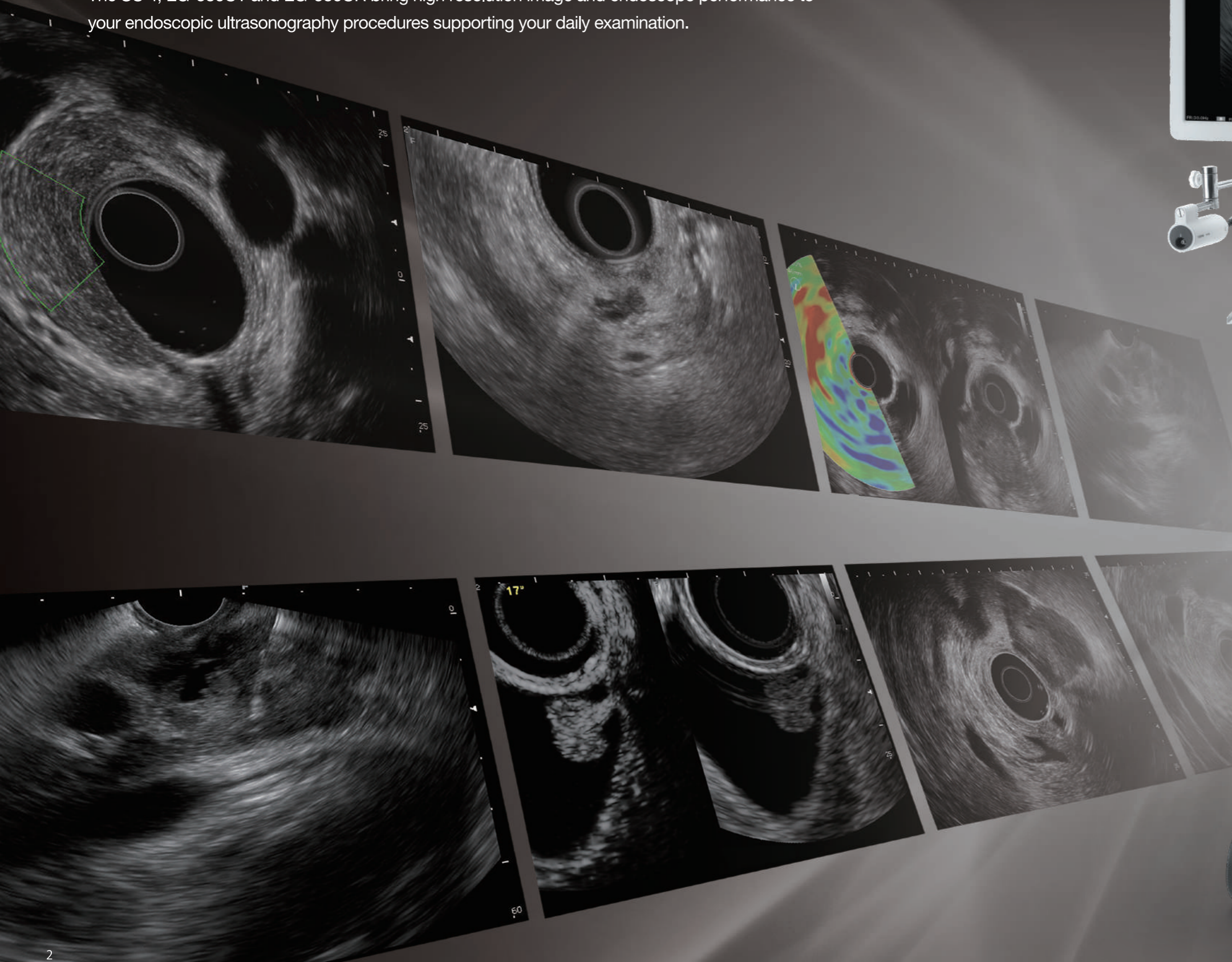
Product name: Ultrasonic Endoscope
GMDN: 36951
Generic Name: Flexible ultrasound gastroduodenoscope



Specifications are subject to change without notice.

Next-generation Endoscopic Ultrasonography system supports high-precision ultrasonography diagnostic and therapeutic procedures

In order to achieve various requirements, from daily diagnostic examinations to advanced therapeutic procedures, Fujifilm has developed Endoscopic Ultrasonography system: SU-1, EG-580UT and EG-580UR. The SU-1, EG-580UT and EG-580UR bring high resolution image and endoscope performance to your endoscopic ultrasonography procedures supporting your daily examination.



SU-1

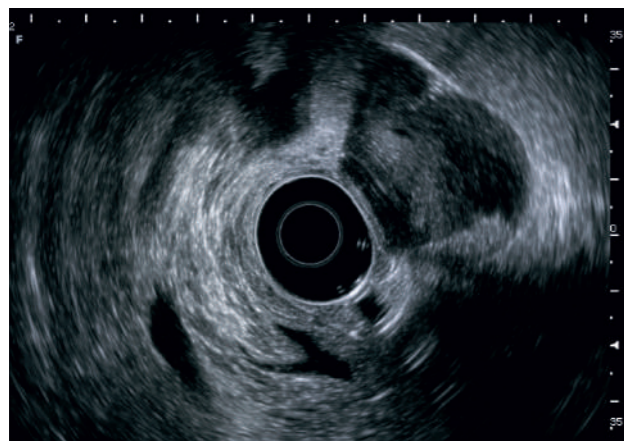
Advanced image processing technology integrated in a compact body.



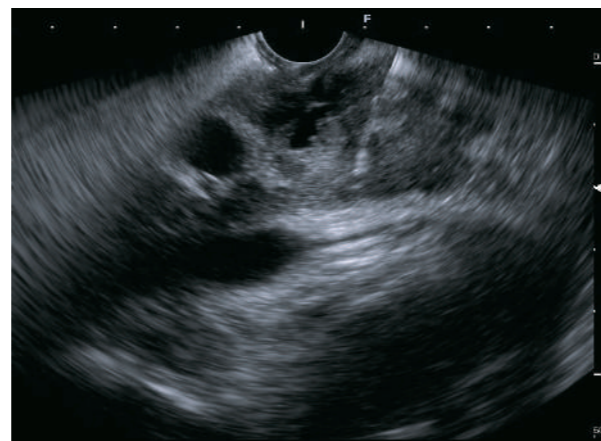
Point 1

High-resolution B-mode images

With ultrasonic wave transmission and reception design resulting from the development of a proprietary image processing technology and a high-sensitivity transducer, the SU-1 achieved a significant improvement in high-resolution B-mode images. The location of the affected area, minute vessels or pancreatic duct can be viewed clearly thus supporting high-precision endoscopic ultrasonographic diagnosis.



EG-580UR



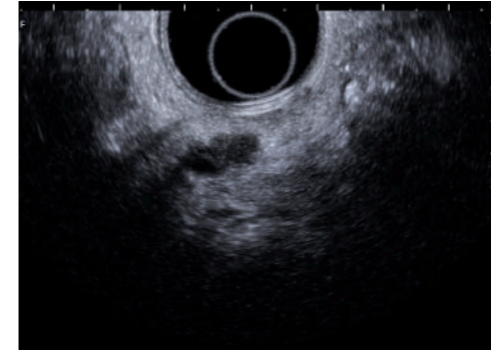
EG-580UT

Point 2

Various imaging modes

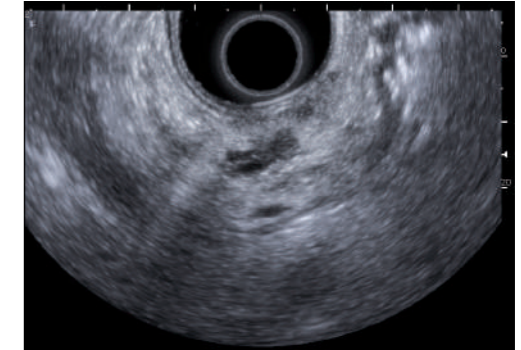
THI (Tissue Harmonic Imaging) Mode [-H-] [-S-]

Images are configured using higher harmonic components that are generated when ultrasound waves are reflected by the body tissue. By increased resolution and reduced artifacts, this mode enables ultrasound image observation with reduced noise.



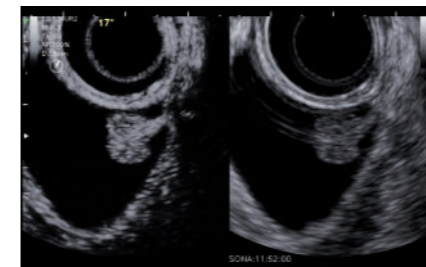
CH (Compound Harmonic) Mode [-H-] [-S-]

This mode visualizes clear images in deep-lying areas while maintaining high-resolution images in shallow-lying areas to support accurate diagnoses.



CHI (Contrast Harmonic Imaging) Mode [-H-]

Images are created by extracting and emphasizing higher harmonic signals reflected by injected contrast agents, assisting in the detection of tumors and abnormal growths.

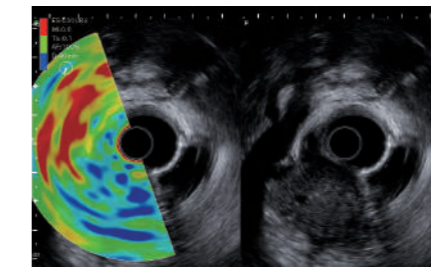


CHI Mode

B-Mode

Elastography Mode [-H-]

Relative stiffness of the tissue is visualized as a color distribution map by way of calculating the distortion of the tissue caused by external compression or inner vibration, and displaying disparities in stiffness levels as different colors.

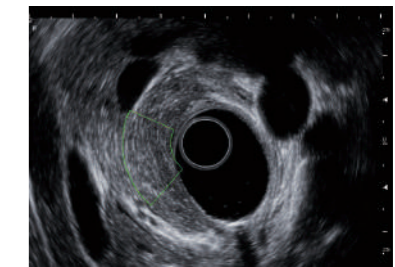


Elastography Mode

B-Mode

Sound Speed Correction Mode [-H-] [-S-]

Images are recomposed using the estimated optimal sound speed inside the body. With the SU-1, it is possible to set the ROI (Region of Interest) and display a clearer image of the targeted area.



F-Flow Mode [-H-] [-S-]

The strength of the bloodstream is displayed to indicate where the blood vessels are located in the B-mode image. Compared to the Power Doppler-mode, blood vessels are indicated more precisely, and are color-coded according to the bloodstream directions.

Point 3

User-friendly keyboard

The flat keyboard design is realized by using a touch panel and touch pad. The layout of the buttons facilitates the use of frequently used functions. Cleaning after the examination is easier with this flat design.



Touch panel

Touch pad

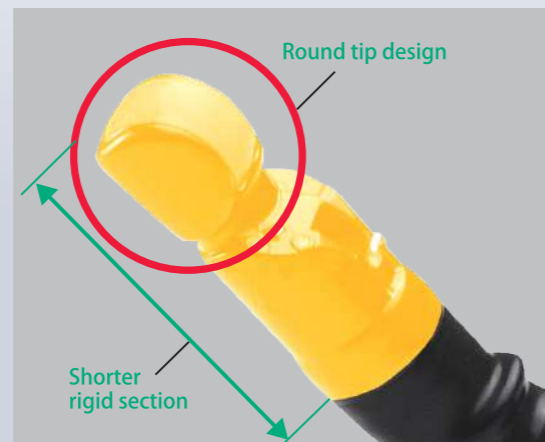
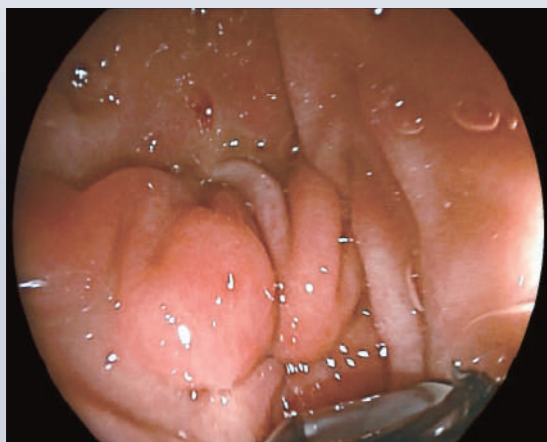
EG-580UT

The endoscope has improved insertion and observation performance as well as therapeutic performance such as FNA (Fine Needle Aspiration) thanks to its excellent maneuverability and wide puncture range.



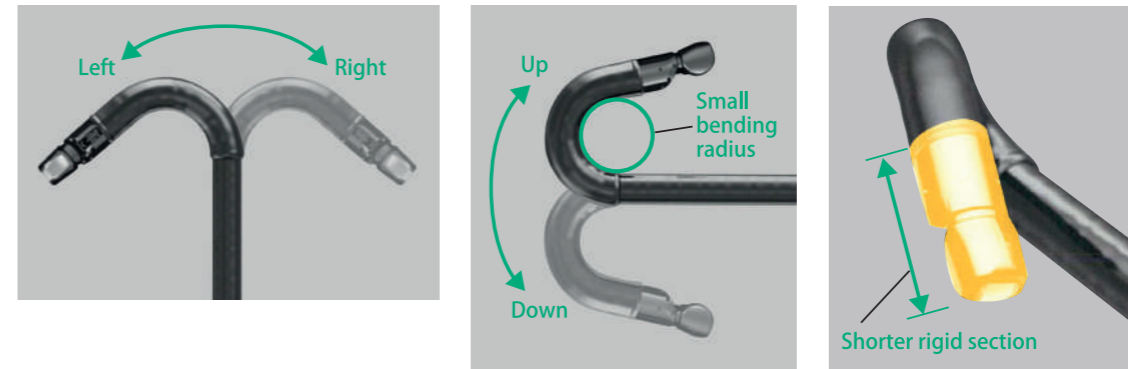
Point 1 Improved insertion performance

The rounded tip section facilitates passage through narrow lumens and the shorter rigid section helps the endoscope pass through tight angles in the larynx. The 40° forward oblique-view and 140° wide angle reduce the difficulty of managing the endoscope's insertion route.



Point 2 Improved observation performance

A wide area can be covered with minimal work using powerful bending functions (UP150°/DOWN150°/LEFT120°/RIGHT120°). Furthermore, access to target positions has improved due to the shorter rigid section and smaller bending radius.



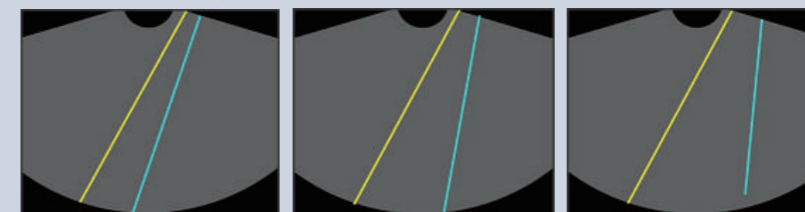
EG-580UT

Point 3 Wide-angle puncture direction supporting wider FNA accessibility

Wide puncture range enables FNA of target lesions from a variety of positions. Combined with the improved bending performance, small bending radius and the optimized location of the transducer, broader FNA accessibility is achieved.



Wide puncture range



— Forceps stand UP
— Forceps stand DOWN

Point 4 Forceps elevator hold mechanism

Forceps elevator lever on the control portion clicks in place to maintain the forceps position. This function reduces strain on thumb caused by repeatedly operating the lever during procedures, facilitates flexible and subtle endoscopic operations during therapeutic procedures and supports stable puncture trajectory.



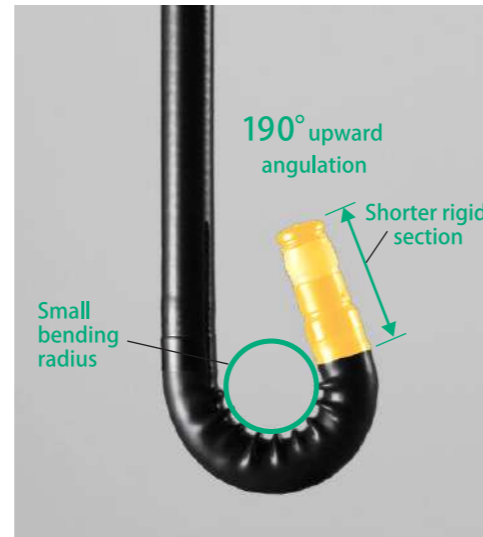
EG-580UR

With improved insertability and maneuverability, the endoscope can be operated as with a routine gastroscope.

Point 1

190° upward bending capability supports enhanced maneuverability

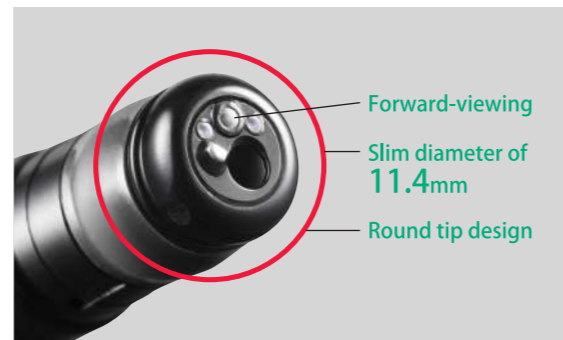
Together with the shorter rigid section, the distal end is highly maneuverable. The enhanced maneuverability makes retroflexion easier for observation of the fundus and cardia.



Point 2

Slim distal end diameter of 11.4mm supports improved insertion performance

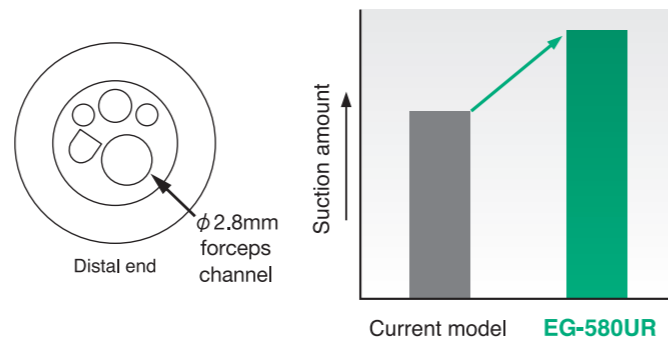
Equipped with a slim distal end diameter of 11.4mm, round tip design and a direct forward-view, the EG-580UR can be inserted into narrow lumens as with routine gastroscopic procedures.



Point 3

φ 2.8mm forceps channel supporting improved suction power

Suction performance is increased by adopting a larger forceps channel of φ 2.8mm. By quickly suctioning blood and other body fluids, a clear view can be obtained during endoscopic observation.



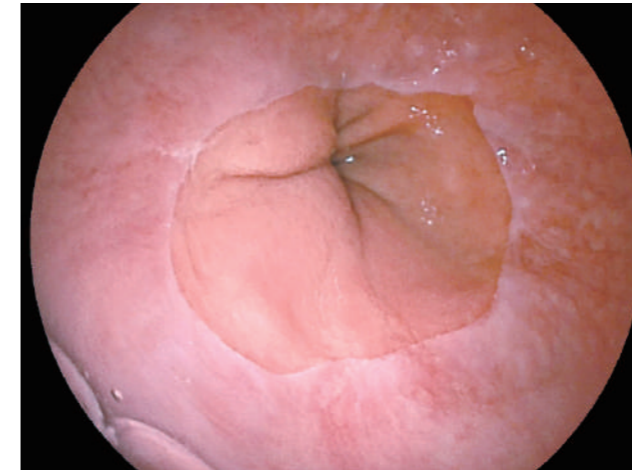
EG-580UT and EG-580UR

Ultrasonic endoscopes with high-resolution endoscopic images, improved insertability and operability.

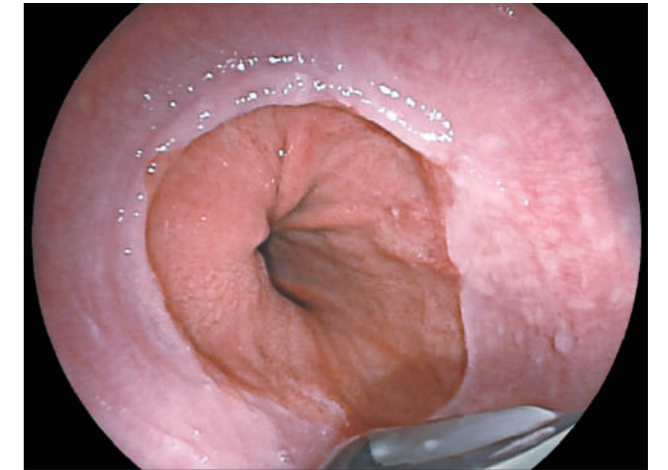
Point 1

High-resolution endoscopic images

Both EG-580UR and EG-580UT are equipped with a Fujifilm high resolution image sensor, the High Resolution Super CCD, which provides vivid and high quality images. Together with a highly efficient optical lens, a wide range of data necessary for diagnosis can be obtained to support accurate endoscope examinations.



EG-580UR

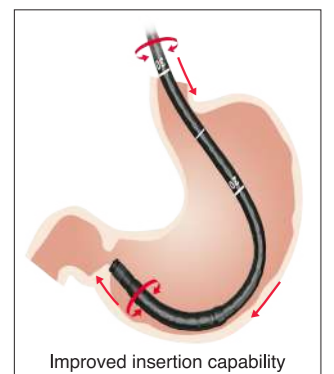
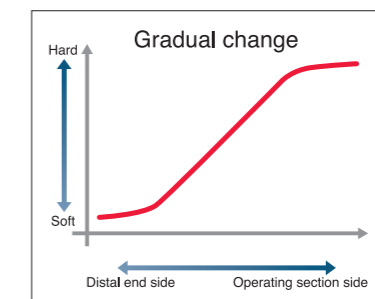


EG-580UT

Point 2

Highly maneuverable flexible portion

Materials for the flexible portion were thoroughly reviewed, particularly with attention to elasticity, to attain enhanced maneuverability, torquability and insertion capabilities. Using the unique material, the flexible portion is designed to be stiffer at the control portion side and becomes gradually flexible towards the distal end side for better pushability.



Point 3

Easy-to-grip and operation-friendly control portion

We have renewed the layout and size of the components of the control portion and repositioned the angulation knobs to improve accessibility. The grip is designed to have an easy and comfortable feel to optimize the performance and minimize stress during clinical procedures.



EB-530US

Ultrasonic Bronchoscope offering full support for observation, diagnosis, and treatment of lesions and tissue collection in the bronchial region.

Point 1

Equipped with the Super CCD Honeycom

Equipped with the Super CCD Honeycom at the tip of endoscope, this ultrasonic bronchoscope offers high-resolution endoscopic images.

Point 2

Distal end outer diameter of 6.7 mm

The slim endoscope with a distal end outer diameter of 6.7 mm reduces patient discomfort and improves maneuverability and insertion capability.

Point 3

Multilateral approaches to improving maneuverability

Full support for observation, diagnosis, and treatment of lesions and tissue collection in the bronchial region. Multilateral efforts improve maneuverability for safer diagnoses.

● Paracentesis while constantly monitoring the position of the needle with 10° forward oblique view

The use of the 10° forward oblique view and optimal positioning of the ultrasonic transducer improve maneuverability and safety during paracentesis. The opening of the forceps channel is constantly displayed in an endoscopic image to help locate the puncture needle.



● Two lights to support paracentesis

Two lights on opposite sides illuminate the front and eliminate shadows during paracentesis. An appropriate needle angle facilitates smooth paracentesis at the target site.



● Appropriate bending angle for easy paracentesis

A large bending angle facilitates paracentesis at the target site.



Ultrasonic Bronchoscope EB-530US

Specifications		
Endoscopic functions	Viewing direction	10° (Forward Oblique)
	Observation range	3 to 100 mm
	Field of view	120°
	Distal end diameter	6.7 mm
	Flexible portion diameter	6.3 mm
	Bending capability	Up 130° / Down 90°
	Forceps channel diameter	2.0 mm
Ultrasonic functions	Working length	610 mm
	Overall length	880 mm
	Scanning mode	Color Doppler, Power Doppler, Pulse wave, B mode, M mode
	Scanning method	Electronic convex scanning method
	Scanning angle	65° (Combination with SU-1)
Frequency	5 MHz / 7.5 MHz / 10 MHz / 12 MHz	

Product name: Ultrasonic Endoscope
GMDN: 44921
Generic Name: Flexible ultrasound bronchoscope

SP-900 / Probes

A compact ultrasonic probe system with enhanced operability, designed for a more efficient examination.

Point 1

User-friendly system

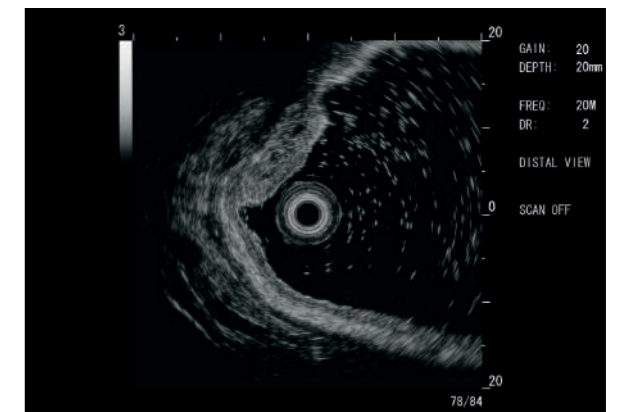
This small and lightweight system can be used stand-alone as well as part of an endoscopy system.



Point 2

Clear images

High-resolution ultrasonic images can be obtained through the digital video signal output and digital correction of the imaging artifacts.



Point 3

Wide range of probes

Various models with different lengths/diameters/frequencies are available. The slim type PB2020-M with a shorter rigid section is suitable for examination of the bronchus.



Ultrasonic Processor for Probes SP-900

Specifications		
Power supply	Power rating	AC100-240V
	Frequency rating	50 / 60Hz
	Current consumption(rated)	0.7-0.5A
Size	Dimensions	377×80×480mm
	Weight	8.0kg
	Scanning system	Mechanical scanning
Ultrasound image display	Probe type	Radial
	Scanning mode	B mode

Product name: Ultrasonic processor
GMDN: 40761
Generic name: General ultrasound imaging system, line-powered

Ultrasonic Probe for Bronchus / Digestive tract

Specifications			
Model Name	Working Length	Outer Diameter*	Frequency
PB2020-M	2150mm	1.4-1.9mm	20MHz

*Outer Diameter of Insertion portion
Product name: Endoscopic Ultrasonic Probe
GMDN: 40770
Generic Name: Surgical ultrasound imaging system transducer

Ultrasonic Probe for Digestive tract

Specifications			
Model Name	Working Length	Outer Diameter	Frequency
P2620-M	M Type	2.6 mm	20MHz
P2615-M	2120mm		15MHz

Product name: Probe
GMDN: 40770
Generic Name: Surgical ultrasound imaging system transducer

Above models can be connected to SP-900.
Certain models may not be available in some countries.
(* Not available in Europe.)