The new Endoscopic Ultrasonography System

SU-1, EG-580UR, EG-580UT

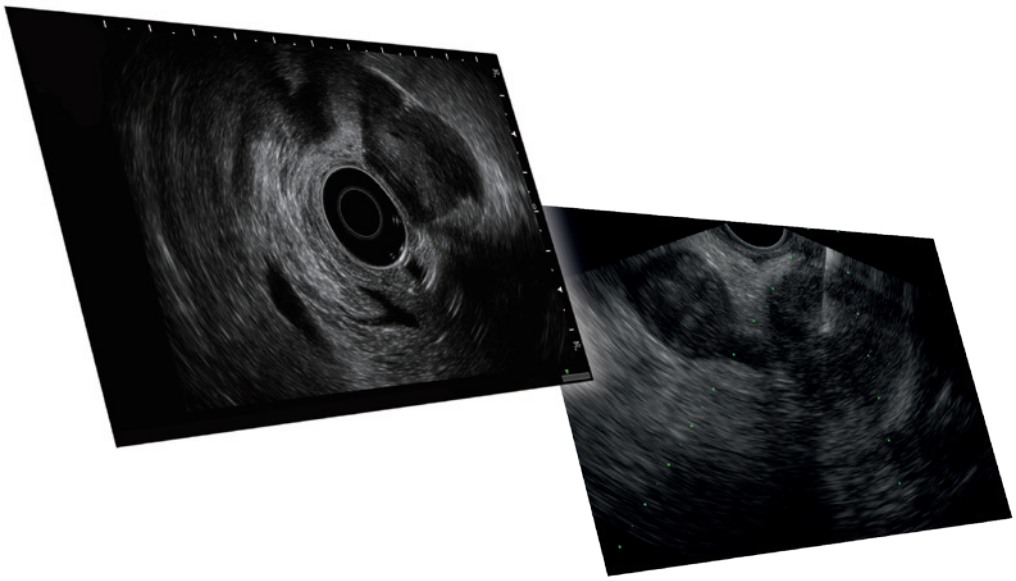
New horizons in Endosonography

FUJIFILM

Value from Innovation

Next-generation Endoscopic Ultrasonograp

to support high-precision ultrasonography diagnosis and treat



Ultrasonography revolutionized the clinical approach to patients with digestive and respiratory diseases. Nowadays ultrasonography is being used widely to examine and visualize internal body structures for possible lesions, supporting definitive diagnosis and helping doctors to decide on suitable treatment methods.

The new Fujifilm ultrasonography processor SU-1 is equipped with proprietary image processing technology in a compact device with the aim of supporting accurate diagnoses with a variety of imaging modes including the high-resolution B mode.

Used in combination with the new ultrasonic video endoscopes EG-580UR (radial scan) and EG-580UT (curved linear array scan), the new Fujifilm Endoscopic Ultrasonography System supports a wide range of ultrasonography procedures.

▶ SU-1
Endoscopic Ultrasonic Processor

The high-resolution B mode and various imaging modes are incorporated in this compact system to support precise diagnosis.

hy System

ment procedures

▶ EG-580UR

Ultrasonic Endoscope (Radial Scan)

With a direct forward view, slim distal end diameter of 11.4 mm, and an upward bending capability of 190°, the endoscope can be operated almost in the same way as a standard gastroscope.

▶ EG-580UT

Ultrasonic Endoscope (Curved Linear Array Scan)

Small bending radius, powerful 150° UP angulation and wide puncture range to support high level of therapeutic procedure.

SU-1 NEW

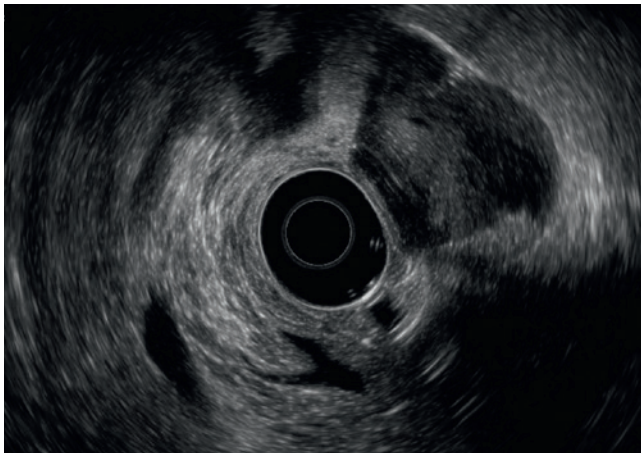
Endoscopic Ultrasonic Processor

Advanced image processing technology integrated in a compact device

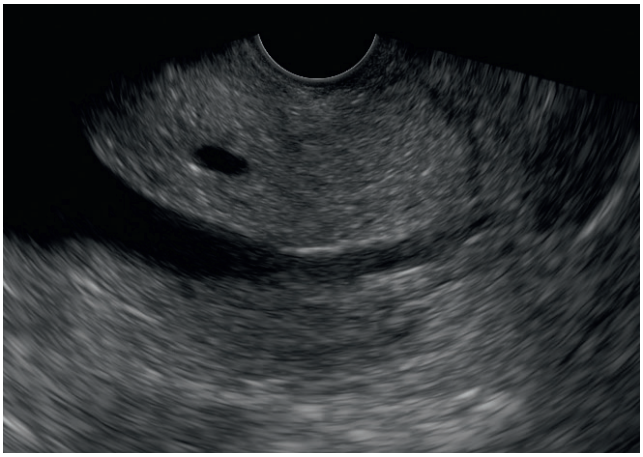
High-resolution B-mode images

-H- -S-

With a new ultrasonic wave transmission and reception design, 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. Pinpointing of the affected area, minute vessels or pancreatic ducts can be viewed clearly, thus supporting accurate reproduction of the affected area and high-precision ultrasonographic diagnosis.



EG-580UR



EG-580UT

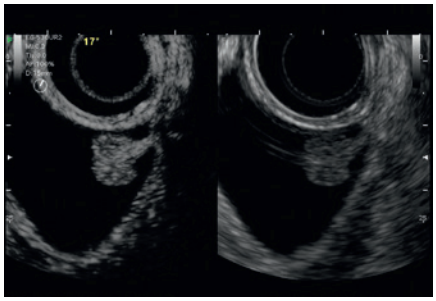
Various imaging modes

CHI (Contrast Harmonic Imaging) Mode* -H-

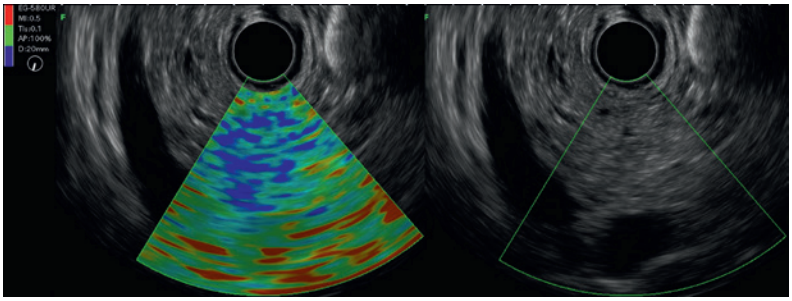
Images are created by extracting and emphasizing higher harmonic signals reflected from the injected contrast agents, assisting in the detection of tumors and abnormal growths.

Elastography Mode* -H-

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



CHI Mode B Mode

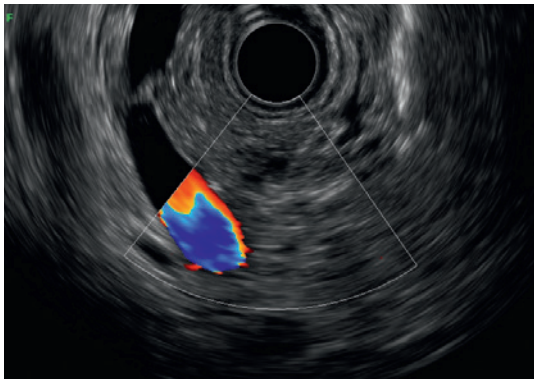


Elastography Mode B Mode

-H- SU-1 -H- -S- SU-1 -S-

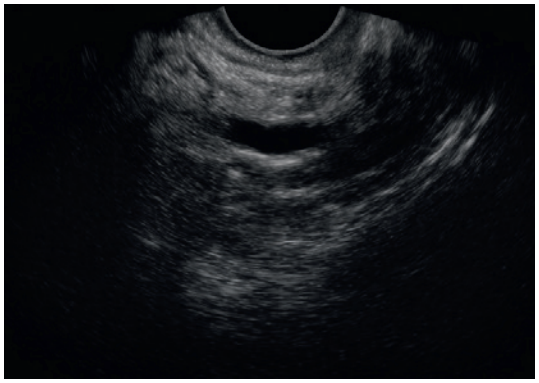
Color Doppler Mode -H- -S-

Color Doppler obtains hemodynamic information. It helps to locate an observation site and blood flow. Improved sensitivity of Color Doppler can depict blood flow more precisely and reduce artifact.



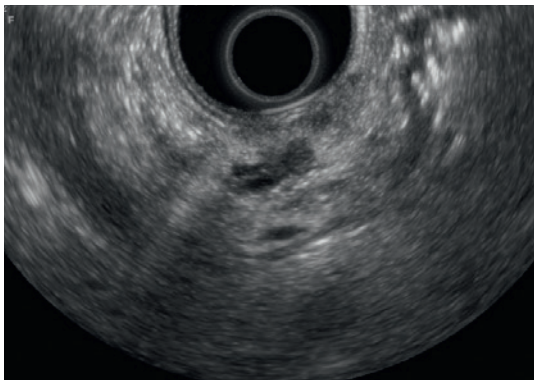
THI (Tissue Harmonic Imaging) Mode -H- -S-

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



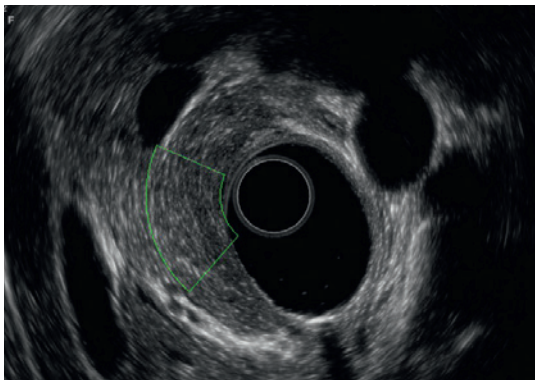
CH (Compound Harmonic) Mode -H- -S-

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



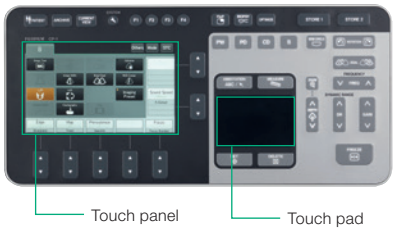
Sound Speed Correction Mode -H- -S-

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.



User-friendly keyboard

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



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

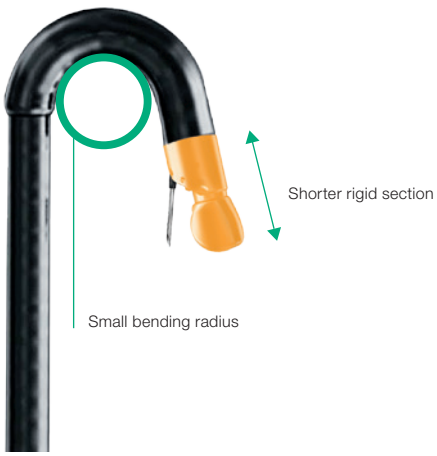
EG-580UT

Ultrasonic Endoscope (Curved Linear Array Scan)

Advanced therapeutic performance supports more precise puncture and interventional procedures

Smaller bending radius and shorter rigid section for great approach ability

The endoscope with a smaller bending radius and a shorter rigid section enables easier access to the targeted areas. With a powerful 150° up angulation, the scope is suitable for both observation and therapeutic procedures.



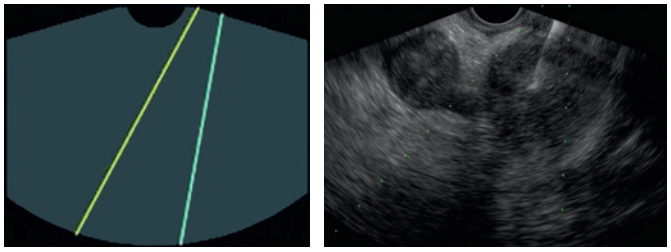
Forceps Elevator Assist

The Forceps Elevator Assist function ensures a steady maximum UP forceps elevation when the lever on the control portion is pulled down completely and clicks into place. This function reduces strain on thumb caused by repeatedly operating the lever during procedures. It also enables flexible and subtle endoscopic operations during therapeutic procedures and supports stable puncture trajectory.

Hold maximum UP forceps elevator

Wide puncture range

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, a broader FNA accessibility is achieved.



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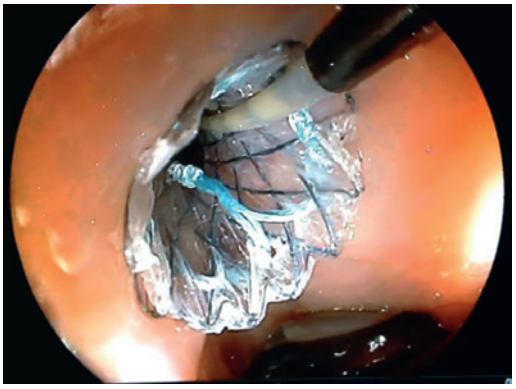
Forceps Elevator DOWN

Forceps Elevator UP

The 40°oblique view for a safer procedure

The 40° front oblique view and 140° endoscopic field of view reduce stress during the insertion process. And it also makes for better stent releasing because of stent visibility when doctors perform interventional procedures.



EG-580UR

Ultrasonic Endoscope (Radial Scan)

With improved maneuverability and 2.8 mm working channel, the endoscope can be operated just like a standard gastroscope

▶ Smaller bending radius and shorter rigid section for great approach ability

Together with the shorter rigid section, the distal end is highly maneuverable. The enhanced maneuverability makes it easier to approach in retroflex observation of fundus and cardia.

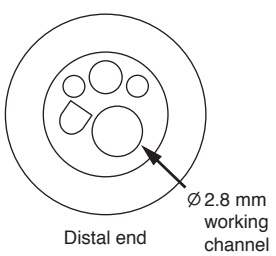
190° upward angulation

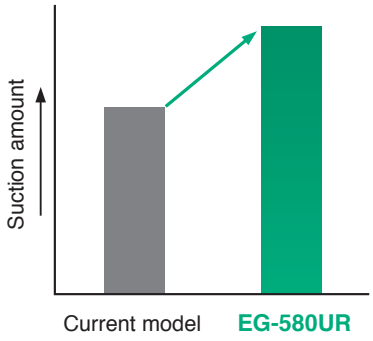
▶ Slim distal end diameter of 11.4 mm for improved insertion

Equipped with a slim distal end diameter of 11.4 mm, round tip design and a direct forward view, the EG-580UR can be inserted into narrow lumen just like in a standard gastroscopic procedure usage.

▶ Ø2.8 mm working channel supporting improved suction power

Suction performance is increased by adopting a larger working channel of Ø2.8 mm. By quickly suctioning blood and bodily fluids, clear view can be obtained during endoscopic observation.



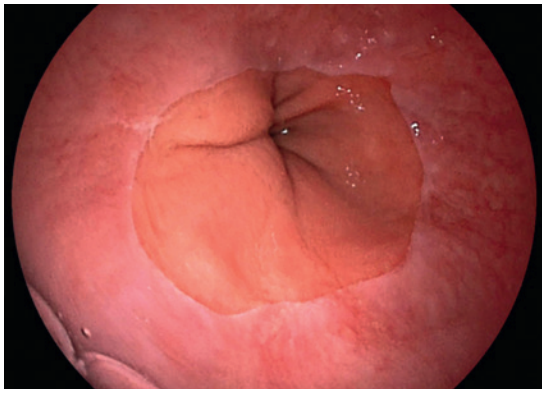


EG-580UR and EG-580UT

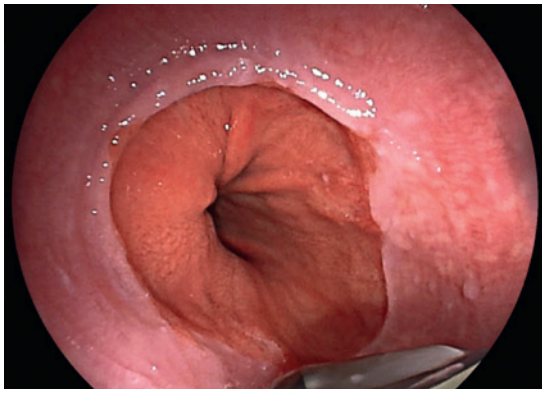
Ultrasonic Endoscope

High-resolution endoscopic images

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



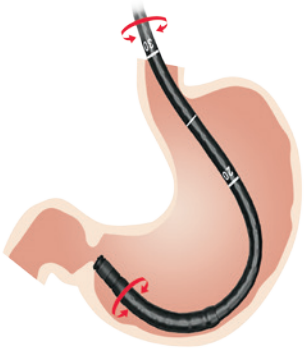
EG-580UR



EG-580UT

New highly maneuverable flexible portion

Materials for the flexible portion were completely reviewed, especially in terms of their elasticity, in order to enable enhanced maneuverability and insertion capabilities as well as torquability. Using the exclusive new material, the flexible portion is designed to be harder at the control portion side and becomes gradually flexible towards the distal end side for better pushability.



Improved insertion capability

G7 grip – New operation-friendly control portion

We have renewed the layout and size of the components of the control portion and repositioned the angulation knobs to increase accessibility from the grip. The new G7 grip is designed to have an easy and comfortable feel to optimize the performance and to minimize the stress during clinical procedures.

EB-530US

Ultrasonic Bronchoscope

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

Equipped with the Super CCD

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

Distal end outer diameter of 6.7 mm

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

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	3–100 mm
	Field of view	120°
	Distal end diameter	6.7 mm
	Flexible portion diameter	6.3 mm
	Bending capability	Up 130° / Down 90°
	Working channel diameter	2.0 mm
	Working length	610 mm
	Overall length	880 mm
Ultrasonic functions	Scanning mode	Color Doppler, Power Doppler, Pulse wave, B mode, M mode
	Scanning method	Electronic curved linear array scan
	Scanning angle	65°(Combination with SU-1 and SU-8000)
	Frequency	5 MHz / 7.5 MHz / 10 MHz / 12 MHz

Generic Name: Bronchoscope, flexible, ultrasound

SP702

Ultrasonic Probe

A small high-performance user-friendly system to improve examination efficiency and diagnostic capability during ultrasonographic diagnosis.

Ultrasonography performed anytime during routine endoscopy

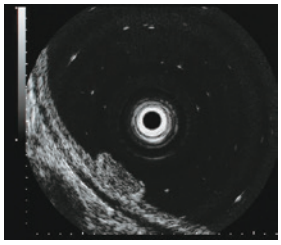
Ultrasonographic examination of the region of interest is easily and quickly performed during endoscope examination in a way similar to that of a biopsy.

Small, lightweight system with improved installation performance

This small, lightweight system can be a stand-alone system or set in an existing endoscopy system.

Clear images without rotation irregularities

Shortening of the distal rigid portion and optimization of the inner structure ensure clear images without rotation irregularities even when the endoscope is bent.



The small control pad can easily display a specific image

The Cine Memory function allows retrieval of any image within 2.5 seconds before freezing, eliminating concerns about the timing of freezing.

Ultrasonic Probe SP702

Specifications	
Video system	NTSC / PAL
Power requirements	120 V or 230 V
Consumption	0.8A (120 V) 0.5A (230 V)
Display mode	B mode
Scanning mode	Mechanical radial
Scanning range	20-120mm 360°
Usable frequencies	7.5 MHz, 12 MHz, 15 MHz, 20 MHz, 25 MHz
Dimensions W×H×D	188 mm × 102 mm × 443 mm
Weight	6.5 kg

Generic Name: Ultrasound system, imaging, general-purpose

Model name	Working length	Outer diameter	Frequency
P2625-M	M Type 2120mm	2.6 mm	25 MHz
P2620-M			20 MHz
P2615-M			15 MHz
P2612-M			12 MHz
P2020-M		2.0 mm	20 MHz
P2015-M			15 MHz
P2012-M			12 MHz
P2620-L	L Type 2620mm	2.6 mm	20 MHz
P2615-L			15 MHz
P2612-L			12 MHz

Generic Name: Transducer assembly, ultrasound, diagnostic, intracorporeal, surgical

Endoscopic Ultrasonic Processor SU-1 -H- SU-1 -S-

Specifications		
Power supply	Power rating	AC 100–240 V
	Frequency rating	50 Hz / 60 Hz
	Power consumption	2.0–1.2 A
Size	Dimensions	390 × 135 × 485 mm
	Weight	13 kg
Ultrasonography image display	Scanning method	Electronic scanning
	Probe types	Curved linear array / Radial
	Scanning modes	B, M, CD, PD, PW, THI, and 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	Curved linear array	EG-580UT, EG-530UT2, and EB-530US
	Radial	EG-580UR and EG-530UR2
Frequency		5 MHz, 7.5 MHz, 10 MHz, and 12 MHz
Image input terminal	DVI image input terminal	1

* CHI and Elastgraphy 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
	HD-SDI terminal	2
Sound output	RCA terminal	1
Control terminal	Remote terminal	2
	Remote terminal (input)	1
	RS-232C terminal	1
	Keyboard terminal	1
	Foot switch terminal	1
	Network terminal	1
Measurement function	Measurement items	Distance, perimeter, area, volume, and flow speed
Storage	Data formats	JPEG, TIFF, and DICOM
	Storage device	Internal / External memory (USB)
	Cine memory	Storage / Playback
Accessories		Keyboard and foot switch

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
	Working channel diameter	2.8 mm
Ultrasonic functions	Scanning mode	Color Doppler, Power Doppler, Pulse Doppler, B mode, M mode
	Scanning method	Electronic radial scan
	Scanning angle	360° (in combination with SU-1)
	Frequency	5 MHz / 7.5 MHz / 10 MHz / 12 MHz

Generic Name: Gastroduodenoscope, flexible, ultrasonic

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
	Working channel diameter	3.8 mm
Ultrasonic functions	Scanning mode	Color Doppler, Power Doppler, Pulse Doppler, B mode, M mode
	Scanning method	Electronic curved linear array scan
	Scanning angle	150° (in combination with SU-1)
	Frequency	5 MHz / 7.5 MHz / 10 MHz / 12 MHz

Generic Name: Gastroduodenoscope, flexible, ultrasonic

Specifications are subject to change without notice. 08/15

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