

ENDOSCOPIC ULTRASOUND SYSTEMS

FUJIFILM
Value from Innovation

DISCOVER HIGH-PRECISION DIAGNOSES AND PROCEDURES

ENDOSCOPIC ULTRASOUND SYSTEMS

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.



EG-580UR

Ultrasonic Endoscope (Radial Scan)

- Smaller bending radius and shorter rigid section for great approach ability
- Slim distal end diameter of 11.4 mm for improved insertion
- 2.8 mm working channel diameter for enhanced suction power



SU-1

Endoscopic Ultrasonic Processor

- High-resolution B-Mode images
- Various imaging modes
- User-friendly compact device with easy to clean flat keyboard with touch pad or trackball



EG-580UT

Ultrasonic Endoscope (Curved Linear Array Scan)

- Smaller bending radius and shorter rigid section
- Forceps Elevator Assist ensures a steady maximum UP forceps elevation
- Wide puncture range enables FNA of target lesions from a variety of positions
- 40° front oblique view and 140° endoscopic field of view

ENDOSCOPIC ULTRASONIC PROCESSOR

SU-1 PROVIDES ADVANCED IMAGE IN A COMPACT DEVICE

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



Used in combination with the ultrasonic video endoscopes EG-580UR (radial scan) and EG-580UT (curved linear array scan), the compact SU-1 system supports a wide range of ultrasonography procedures.

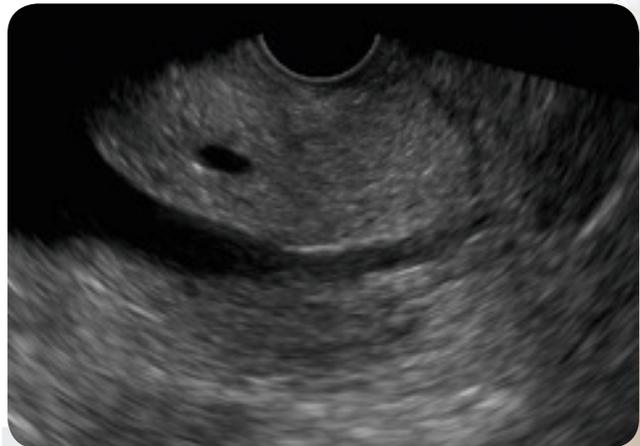
PROCESSING TECHNOLOGY

HIGH RESOLUTION B-MODE -H- -S-

With a new ultrasonic wave transmission and reception design, the development of a proprietary image processing technology and high-sensitivity transducers, the SU-1 achieved a significant improvement in high-resolution B-mode images. Pinpointing of the affected area, small vessels or pancreatic ducts can be viewed clearly, thus supporting accurate evaluation of the affected area and high-precision ultrasonographic results.



EG-580UR

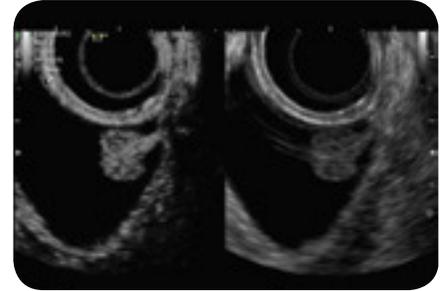


EG-580UT

VARIOUS IMAGING MODES

-H- CHI (CONTRAST HARMONIC IMAGING)*

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

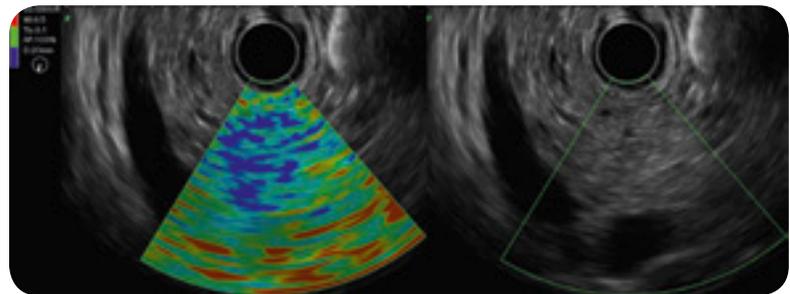


CHI Mode

B Mode

-H- ELASTOGRAPHY*

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.

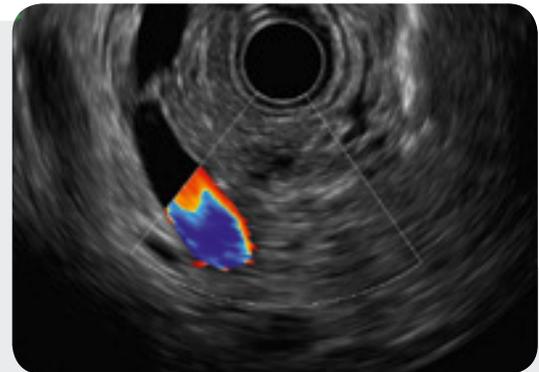


Elastography Mode

B Mode

-H- **-S-** COLOR DOPPLER

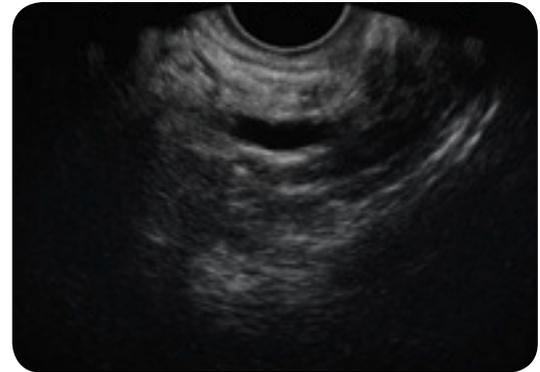
Color Doppler obtains hemodynamic information. It helps to locate an observation site and blood flow. Improved sensitivity of Color Doppler can show blood flow more precisely and reduce artifact.



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

-H- -S- THI (TISSUE HARMONIC IMAGING)

Images are calculated using higher harmonic components that are generated when ultrasound waves are traveling through the body tissue. By increasing resolution and reducing artifacts, this mode enables ultrasound image observation with reduced noise.



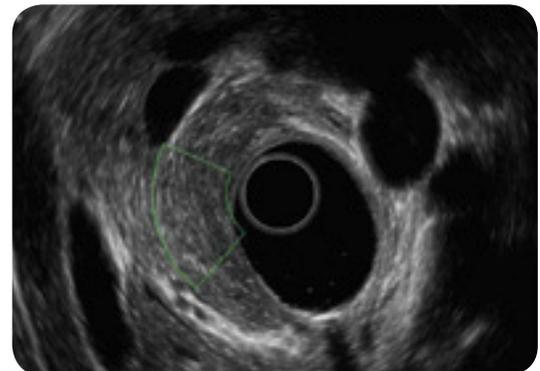
-H- -S- CH (COMPOUND HARMONIC IMAGING)

This mode visualizes clear images in deep-lying areas while maintaining high-resolution images in shallow-lying areas to support accurate diagnoses by compounding Native and THI Ultrasound Mode.



-H- -S- SOUND SPEED CORRECTION

Images are recomposed using the estimated optimal sound speed inside the body. With the SU-1, it is possible to calculate the differences in the speed of sound inside a ROI and use the parameter to display a clearer image of the targeted area.



EG-580UT / EG-580UR PERFECT

Experience advanced therapeutic performance that allows more precise puncture and interventional procedures. Both the EG-580UR and EG-580UT are equipped with a Fujifilm high-resolution image sensor, High Resolution Super CCD, which ensures sensitive and high-quality images. Together with a highly efficient optical lens, a wide range of brilliant picture necessary for diagnosis can be obtained.

A circular callout with a green and yellow border and a dotted inner ring, highlighting the G7 GRIP feature on the endoscope handle.

G7 GRIP

A circular callout with a green and yellow border and a dotted inner ring, highlighting the SUPER CCD feature on the endoscope handle.

**SUPER
CCD**

SOLUTIONS

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.



HIGH-RESOLUTION ENDOSCOPIC IMAGES



EG-580UR

NEW OPERATION-FRIENDLY CONTROL PORTION: G7 GRIP

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.



EG-580UT

ULTRASONIC ENDOSCOPE (CURVED LINEAR ARRAY SCAN)

EG-580UT PRECISE THERAPEUTIC

The endoscope with a smaller bending radius and a shorter rigid section enables easier access to the targeted areas. A wide puncture range enables FNA from a variety of positions to achieve a broader accessibility. The 40° front oblique view and 140° endoscopic field of view reduce stress during the insertion process. Combined with powerful 150° up angulation, the scope is suitable for both observation and therapeutic procedures.



**EASY TO
CONTROL BY
ELEVATOR
ASSIST**

PERFORMANCE

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.

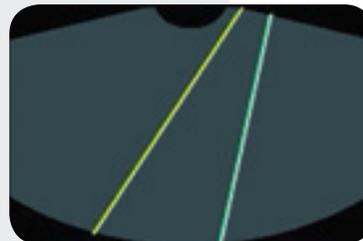


This function reduces strain on thumb caused by repeatedly operating the lever during procedures. It also enables flexible and subtle endoscopic operations during therapeutic procedures and supports stable puncture trajectory.

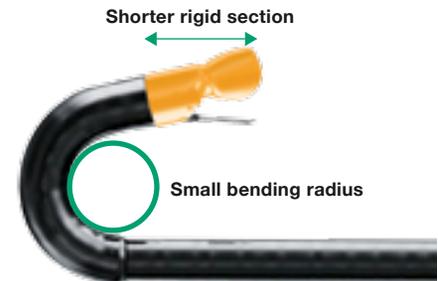


Hold maximum UP forceps elevator

22Ga
— Forceps Elevator DOWN
— Forceps Elevator UP



GREAT APPROACH ABILITY



40° FRONT OBLIQUE 140° ENDOSCOPIC FIELD



WIDE PUNCTURE RANGE



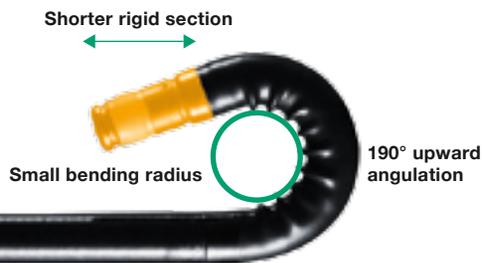
EG-580UR EXCELLENT MOBILITY &



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. 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. An upward bending capability of 190° allows the endoscope to be operated almost in the same way as a standard gastroscop.

MANEUVERABILITY

GREAT APPROACH ABILITY

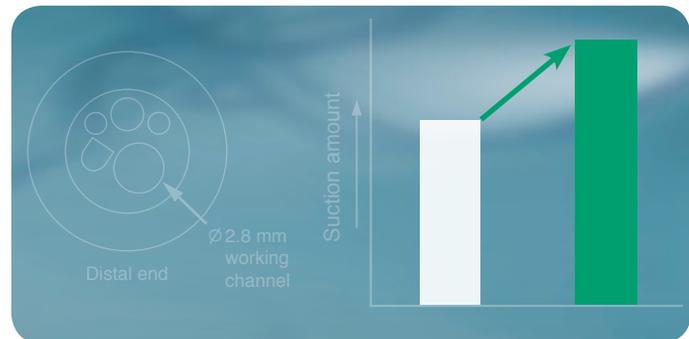


SLIM 11.4 MM DISTAL END DIAMETER



Ø 2.8 MM WORKING CHANNEL SUPPORTING IMPROVED SUCTION POWER

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



Current model EG-580UR

ULTRASONIC BRONCHOSCOPE

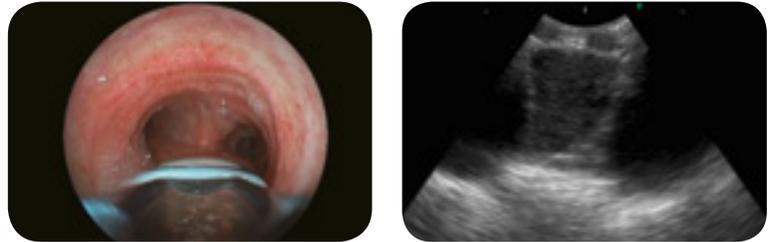
EB-530US

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



EQUIPPED WITH THE SUPER CCD

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.

Biopsy 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 biopsy. The opening of the working channel is constantly displayed in an endoscopic image to help locate the puncture needle.

Two lights to support biopsy

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

Appropriate bending angle for easy biopsy

A large bending angle facilitates biopsy at the target site.

ULTRASONIC MINI PROBE

SP-900

A small high-performance user-friendly system to improve examination efficiency and diagnostic capability during ultrasonographic diagnosis. This small and lightweight system with improved installation performance can be a stand-alone system or set in an existing endoscopy system.

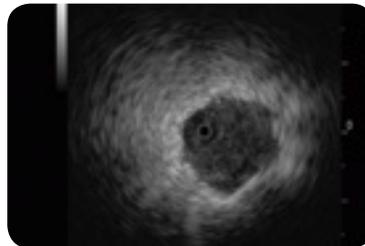
NEW

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CLEAR IMAGES

High resolution ultrasonic images can be obtained through the digital video signal output and digital corrections of the imaging artefacts.



IMPROVED INSERTABILITY

The shorter distal rigid section has an optimized inner structure and therefore ensures clear images without rotation irregularities even when the endoscope is bent.

EASY-TO-CONTROL TOUCH PAD

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

TECHNICAL SPECIFICATIONS

SU-1



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

Power supply	Power rating	AC 100–240 V
	Frequency rating	50 Hz / 60 Hz
	Power consumption	2.0–1.2 A
Size	Dimensions	390 x 135 x 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
Received signal processing	Special modes*	Elastography / CHI
	Received gain correction	0–100, 2-step
	STC	6-step gain settings per depth
	Sound speed correction	Full screen ROI settings
Display	Dynamic Range	40–100, 5-step
	PinP	Endoscopic / Ultrasound Imaging
Applicable	Observation screen	Hospital / Date / Time / Patient
	Curved linear array	EG-580UT, EG-530UT2, and EB-530US
Frequency	Radial	EG-580UR and EG-530UR2
		5 MHz, 7.5 MHz, 10 MHz, and 12 MHz
Image input terminal	DVI image input terminal	1

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
	Foot switch terminal	1
Measurement function	Network terminal	1
	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

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

EG-580UR



Ultrasonic Endoscope (Radial Scan) EG-580UR

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	1550 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

EG-580UT



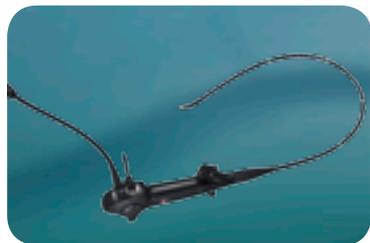
Ultrasonic Endoscope (Curved Linear Array) EG-580UT

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

TECHNICAL SPECIFICATIONS

EB-530US



Ultrasonic Bronchoscope EB-530US

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
	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

SP-900



Ultrasonic Mini Probe Processor SP-900

Voltage	AC 100-240 V
Current consumption (rated)	0.7-0.5 A
Scanning mode	B mode
Scanning method	Mechanical radial
Penetration depth	20 mm or more
Frequency	50 / 60 Hz
Dimensions (W x H x D)	377 x 80 x 480 mm
Weight	8.0 kg

Generic Name: Ultrasound system, imaging, general-purpose

P-series for Gastroenterology

Model name	Working length	Outer diameter	Frequency
P2625-M	M Type 2120 mm	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			20 MHz
P2615-L	L Type 2620 mm	2.6 mm	15 MHz
P2612-L			12 MHz

P-series for Bronchoscopy

PB2020-M	2150 mm	1.4 (distal) – 1.9 (proximal)	20 MHz
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Generic Name: Transducer assembly, ultrasound, diagnostic, intracorporeal, surgical

360° SERVICE



**ADVANCING DEEPER INSIGHTS
IN ENDOSCOPY**

FUJIFILM

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