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ENDOSCOPIC ULTRASOUND SYSTEMS



FUJIFILM serves	Ower processors (so-1
SU-1	1850







ENDOSCOPIC ULTRASOUND SYSTEMS

HIGH-PRECISION DIAGNOSES AND PROCEDURES

Ultrasonography has revolutionised clinical approaches to patients with digestive and respiratory diseases. Today ultrasonography is being widely used to examine and visualise internal body structures for possible lesions, supporting definitive diagnosis and helping doctors in their decision making regarding suitable treatment methods.



EG-580UR

Ultrasonic Endoscope (Radial Scan)

Small bending radius and short 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



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)

- Small bending radius and short 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

SU-1 PROVIDES ADVANCED IMAGE IN A COMPACT DEVICE



ENDOSCOPIC ULTRASONIC PROCESSOR

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

Pinpointing of the affected area, small vessels or pancreatic ducts might be viewed clearly, supporting accurate evaluation of the affected area and high-precision ultrasonographic results.

THI (TISSUE HARMONIC IMAGING)

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

CH (COMPOUND HARMONIC IMAGING)

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





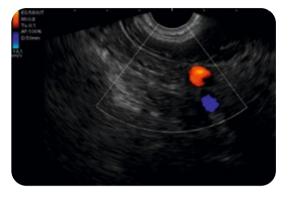




VARIOUS IMAGING MODES

COLOUR DOPPLER

Colour Doppler obtains hemodynamic information. It helps to locate an observation site and blood flow. Improved sensitivity of Colour Doppler might depict blood flow more precisely and reduce artefacts.



CHI (CONTRAST HARMONIC IMAGING)

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

POWER DOPPLER

Power Doppler sonography is a technique that displays the strength of the Doppler signal in colour, rather than the speed and direction information. It is more sensitive and there is no possibility of signal aliasing.

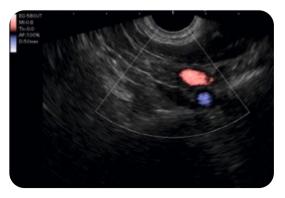


ELASTOGRAPHY

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

F-FLOW

F-Flow is a directional Power Doppler Mode that enables visualisation of tiny, low-flow vessels including flow direction with high-resolution.



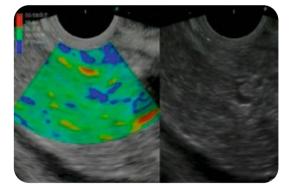
SOUND SPEED CORRECTION

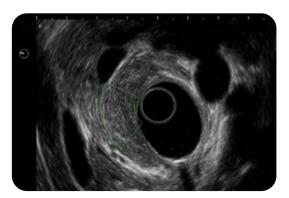
Images are recomposed using the estimated optimal sound speed inside the body. With the SU-1, it is possible to set the ROI (Region Of Interest) and display a clearer image of the targeted area.











EG-580UT / EG-580UR

ULTRASONIC ENDOSCOPES

Experience advanced therapeutic performance that allows more precise puncture and interventional procedures. Both the EG-580UT and EG-580UR are equipped with a FUJIFILM EG-580UT SOT (High-Resolution Super CCD), Fujifilm high-resolution image senwhich ensures sensitive and highquality images. Together with a highly efficient optical lens, a wide range of brilliant pictures can be obtained.

Promotolle

HIGHLY MANOEUVRABLE

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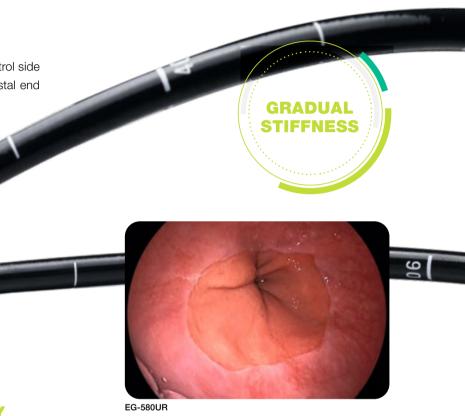
The flexible section is designed to be harder at the control side and gradually more flexible as you get closer to the distal end for better pushability.

G7 GRIP - OPERATION-FRIENDLY CONTROL PORTION

The lightweight G7 grip is designed to be comfortable to use to improve performance and reduce stress while performing clinical procedures.

G7 GRIP







EG-580UT

EG-580UT PRECISE THERAPEUTIC

ULTRASONIC ENDOSCOPE (CURVED LINEAR ARRAY SCAN)

The endoscope with a small bending radius and short rigid section enables easy access to the targeted areas. A wide puncture range is expected to be useful for FNA (Fine Needle Aspiration Biopsy) from a variety of positions to achieve broader accessibility. The 40° front oblique view and 140° endoscopic field of view is expected to reduce stress during the insertion process. Combined with 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 the thumb caused by repeatedly operating the lever during procedures. It also supports flexible and subtle endoscopic operations during therapeutic procedures and stable puncture trajectory.





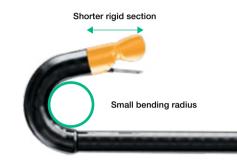
Hold maximum UP forceps elevator

22Ga Forceps Elevator DOWN Forceps Elevator UP

EASY TO CONTROL BY ELEVATOR ASSIST



GREAT APPROACH ABILITY



40° FRONT OBLIQUE 140° ENDOSCOPIC FIELD



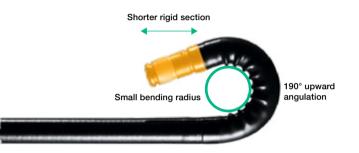
WIDE PUNCTURE RANGE





EG-580UR EXCELLENT MOBILITY & MANOEUVRABILITY

GREAT APPROACH ABILITY



ULTRASONIC ENDOSCOPE (RADIAL SCAN)

IMPROVED

NSERTION

The shorter rigid section with a slim distal end of 11.4 mm, an upward bending capability of 190° and a direct forward view are designed to be useful to operate almost the same way as with a standard gastroscope. The enhanced manoeuvrability supports the approach in retroflex observation of fundus and cardia.

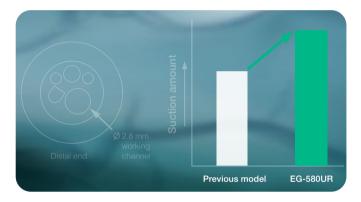
SLIM 11.4 MM DISTAL END DIAMETER





Ø 2.8 MM WORKING CHANNEL SUPPORTING IMPROVED SUCTION POWER

Suction performance is increased by adopting a larger working channel of \emptyset 2.8 mm. By quickly suctioning blood and bodily fluids, clear view can be obtained during endoscopic observation.



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 at the tip of the 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 is expected to reduce patient discomfort and improves manoeuvrability and insertion capability.



EQUIPPED WITH THE SUPER CCD

Full support for observation, diagnosis, and treatment of lesions and tissue collection in the bronchial region.

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 are expected to improve manoeuvrability 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 on the target site.

Appropriate bending angle for easy biopsy

A large bending angle facilitates biopsy at the target site.

PULMONOLOGY

SP-900 & PB2020-M

ULTRASONIC MINI PROBE SYSTEM

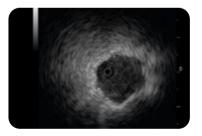
A small high-performance userfriendly system to improve examination efficiency and diagnostic capability during ultrasonographic diagnosis. The lightweight system can be a stand-alone solution or integrated into an existing endoscopy installation.





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 improved inner structure and therefore ensures clear images without rotation irregularities even when the endoscope is bent.

EASY-TO-CONTROL TOUCHPAD

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

SPECIFICATIONS

SU-1 ENDOSCOPIC ULTRASONIC PROCESSOR





	Power rating	AC 100 – 240 V	
Power supply	Frequency rating	50 Hz / 60 Hz	
	Power consumption	2.0 – 1.2 A	
	Dimensions	390 × 135 × 485 mm	
Size	Weight	13 kg	
	Scanning method	Electronic scanning	
JItrasonography	Probe types	Curved linear array / Radial	
mage display	Scanning modes	B, M, CD, PD, PW, THI, CH, F-FLOW	
	Special modes	Elastography / CHI	
	Received gain correction	0 – 100, 2-step	
Received signal	STC	6-step gain settings per depth	
processing	Sound speed correction	Full screen ROI settings	
	Dynamic Range	40 – 100, 5-step	
	PinP	Endoscopic / Ultrasound Imaging	
Display	Observation screen	Hospital / Date / Time / Patient	
	Curved linear array	EG-580UT, EG-530UT2, EB-530US	
Applicable	Radial	EG-580UR and EG-530UR2	
Frequency		5 MHz / 7.5 MHz / 10 MHz / 12 MHz	
nput terminal	DVI image input terminal	1	
	Video terminal	1	
	S-video terminal	1	
mage output	RGB TV terminal	1	
erminals	DVI terminal (digital)	1	
	DVI terminal (digital / analog)	1	
	HD-SDI terminal	2	
Sound output	RCA terminal	1	
	Remote terminal	2	
	Remote terminal (input)	1	
	RS-232C terminal	1	
Control terminal	Keyboard terminal	1	
	Foot switch terminal	1	
	Network terminal	1	
leasurement function	Measurement items	Distance, perimeter, area, volume, flow speed	
	Data formats	JPEG, TIFF, and DICOM	
Storage	Storage device	Internal / External memory (USB)	
	Cine memory	Storage / Playback	

EG-580UT ULTRASONIC ENDOSCOPE (CURVED LINEAR ARRAY)



EG-580UR ULTRASONIC ENDOSCOPE (RADIAL SCAN)





Endoscopic functions

Ultrasonic 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	1250 mm
Overall length	1550 mm
Working channel diameter	3.8 mm
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

Viewing o	direction	0°
Observat	tion range	3 – 100 mm
Field of vi	iew	140°
Distal end	d diameter	11.4 mm
Flexible p	oortion diameter	11.5 mm
Bending	capability	Up 190° / Down 90° Right 100° / Left 100°
Working	length	1250 mm
Overall le	ngth	1550 mm
Working	channel diameter	2.8 mm
Scanning	g method	Electronic radial scan
Scanning	g angle	360° (in combination with SU-1)
Frequenc	су	5 MHz / 7.5 MHz / 10 MHz / 12 MHz

OUR SERVICE

EB-530US ULTRASONIC BRONCHOSCOPE



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
Scanning method	Electronic curved linear array scan
Scanning angle	65°(Combination with SU-1 & SU-8000)
Frequency	5 MHz / 7.5 MHz / 10 MHz / 12 MHz

SP-900 & PB2020-M ULTRASONIC MINI PROBE SYSTEM

Endoscopic functions

Ultrasonic functions



Ultrasonic	Mini	Probe	Processor	SP-900
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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 Bronchoscopy	P-series for Gastroenterology
Model name	PB2020-M	P2620-L
Working length	2150 mm	2620 mm
Outer diameter	1.4 (distal) – 1.9 (proximal)	2.6 max.
Frequency	20 MHz	17 MHz











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