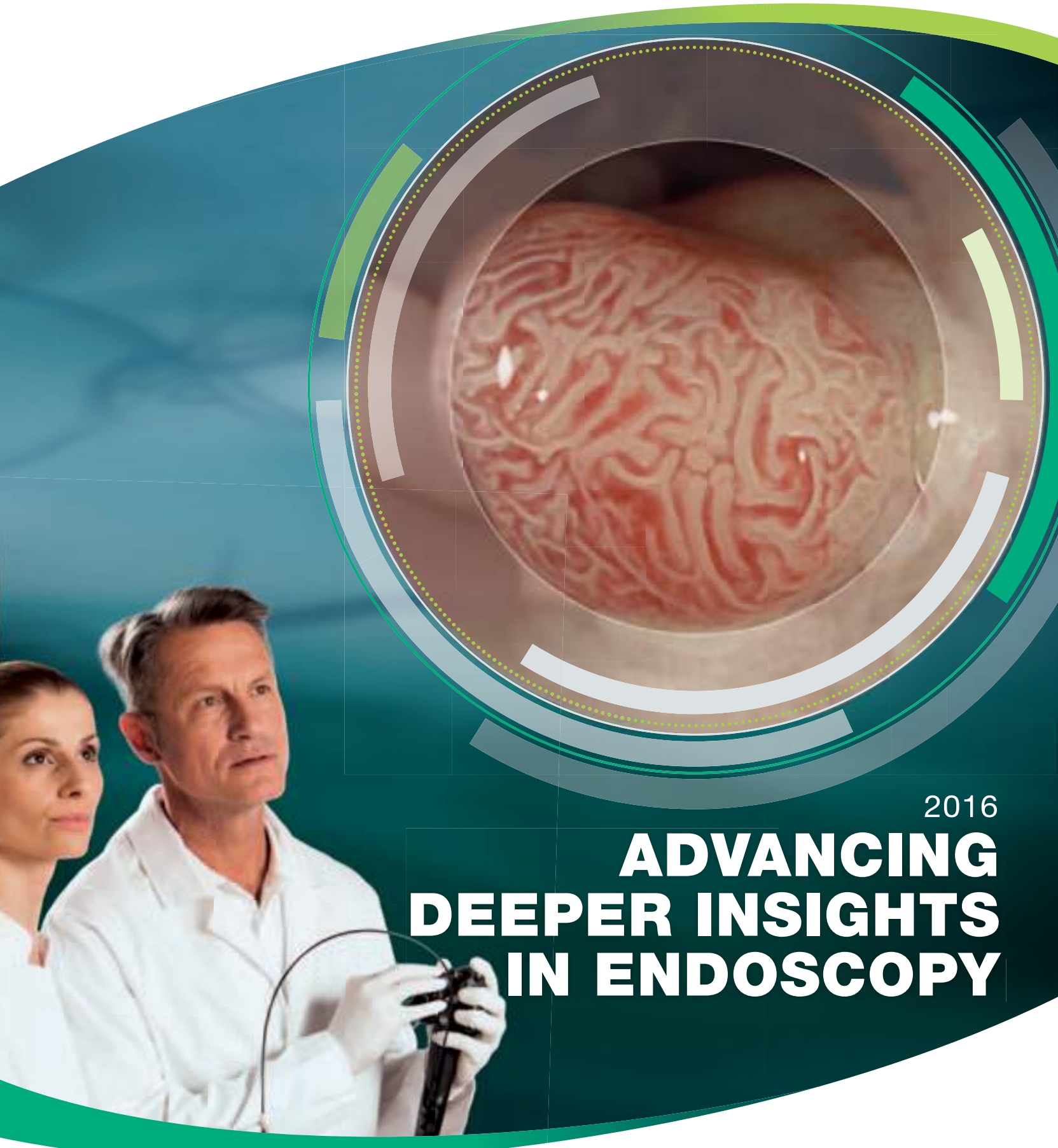

2016

ADVANCING DEEPER INSIGHTS IN ENDOSCOPY

FUJIFILM
Value from Innovation

FUJIFILM

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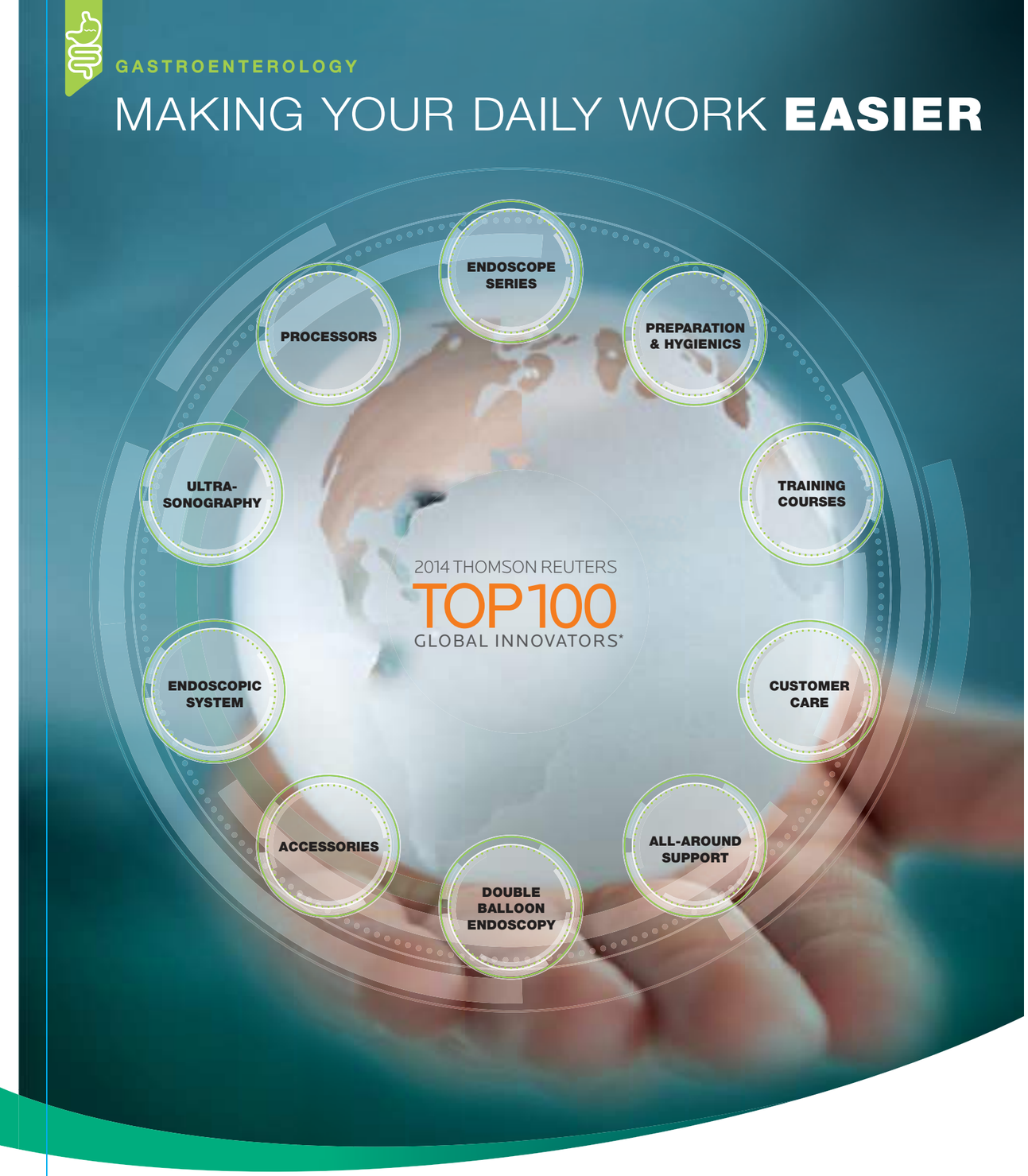
CONTENT

GASTROENTEROLOGY

MAKING YOUR DAILY WORK **EASIER**



*FUJIFILM Corporation was named a Thomson Reuters 2014 Top 100 Global innovator for the third year in a row, in recognition of its achievements as one of the world's most innovative companies.

FUJIFILM
Value from Innovation

HEALTHCARE

Fujifilm is renowned as one of the world's largest imaging companies, pioneering high-definition diagnostic imaging and information systems for healthcare facilities and medical institutions.

Our clinically proven products and technologies are constantly being developed and refined to make the work of health professionals more effective and efficient.

At Fujifilm we are constantly innovating, creating new solutions that address the practical needs of our global customers in various business fields including healthcare, graphics systems, optical devices, recording media and photographic technologies.

Every year we invest around seven per cent of our consolidated turnover in research and development including dedicated research and the nurturing of close working relationships with international specialists. This ensures that we not only meet the highest quality requirements but also contribute to the advancement of culture, science, industry and technology as well as improved health and environmental protection in society.

At Fujifilm, we are continuously developing new technologies, products and services that inspire and excite people everywhere and offer the potential to expand the horizons of tomorrow's businesses and lifestyles.

ENDOSCOPY

As one of the leading companies in the development of endoscope technology, Fujifilm is constantly elaborating new opportunities to provide top quality products, excellent services and highly customized business solutions in the world of endoscopy.

We regularly set new benchmarks in the industry, for example, with devices for double balloon endoscopy and endoscopic ultrasound systems.

The focus at Fujifilm is firmly on holistic patient care which means that our service portfolio includes expert technical assistance, a comprehensive range of hygiene products and individual consulting.

Today Fujifilm operates in over 50 companies in Europe, employing more than 5,000 people engaged in R&D, manufacturing, sales, and service support.

GASTROENTEROLOGY

DEVELOPING TECHNOLOGIES
BEYOND THE EXPECTED

Fujifilm's comprehensive portfolio of advanced solutions meets a wide range of diagnostic and therapeutic endoscopic requirements and by linking state-of-the-art technologies we can provide you with some unique possibilities. One example is the combination of specialist applications, such as double balloon endoscopy and endoscopic ultrasound, in one complete system which would enable you to steamline your workflow. In addition, the continuous enhancement of imaging technologies ensures high precision and excellent quality.

Our overarching aim is to help to improve the quality of life of people worldwide through the early detection and successful treatment of disease.

FUJIFILM
Value from Innovation

SELECTION OF INNOVATIVE TECHNOLOGIES

CMOS TECHNOLOGY
The leading-edge CMOS technology realizes less noise and brilliant images. The chip is placed directly in the tip of the scope enabling the CMOS image sensor to change the analogue signal to digital without interference from outside noise during transmission.

FICE TECHNOLOGY
FICE can enhance slight color differences such as vascular and mucosal patterns without tissue staining. The procedure digitally selects three wavelengths of light and displays reconstructed images.

SUPER CCD TECHNOLOGY
The new Super CCD and high performance optical system ensures high quality images. It provides brilliant images which can facilitate procedures for detection and treatment of lesions.

HD TECHNOLOGY
This component offers premium endoscopy in HDTV (High Definition Television) quality resulting in detailed sharp pictures.

COLOASSIST TECHNOLOGY
By adopting ColoAssist II both torque and force transmission have been improved. Even when the tip of the scope is located in the deep part of colon, it can react sensitively to produce better operability and reduce patient discomfort. Using ColoAssist II, it is possible to transmit the insertion power to the tip of the scope more effectively.

DICOM TECHNOLOGY
The goal of the DICOM Standard is to achieve compatibility and improve workflow efficiency between imaging systems and other information systems.

SMART BEND TECHNOLOGY
Smart Bend allows excellent maneuverability and observation through a 210° bending angle. In addition, the smart bending ability and the small bending radius make treatment of difficult to reach lesions easier.

MULTI ZOOM TECHNOLOGY
The latest Multi Zoom technology enables programming in up to 3 magnification modes according to your needs to realize an easy-to-control zoom endoscopy with excellent detectability of structures and ultrastructures.

ANTI-BLUR FUNCTION
The clearest image is automatically selected and displayed by pressing the freeze button.
All captured images are saved in razor-sharp detail.

DOUBLE BALLOON ENDOSCOPY
Double Balloon Endoscopy is a revolutionary technique that allows the whole length of the small intestine to be visualized, thus opening doors to new therapeutic interventions.

ULTRASONOGRAPHY
The SU-1 system, which is equipped with proprietary image processing technology, supports accurate diagnosis with a variety of imaging modes including the high-resolution B-Mode, Contrast Harmonic Imaging and Elastography.

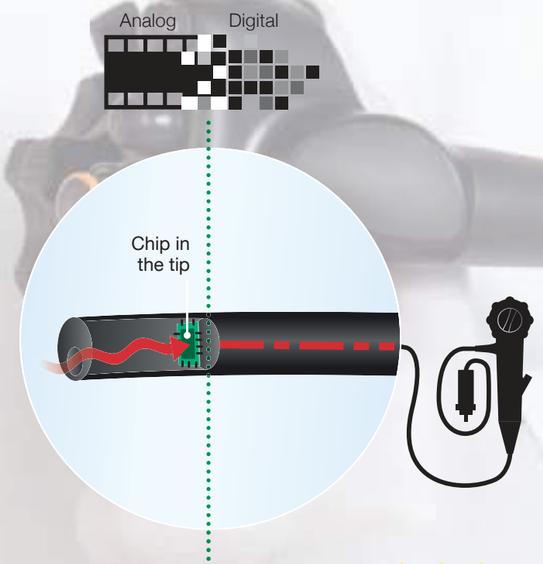
ESD TECHNOLOGY
ClutchCutter: the 3 in 1 ESD tool for efficient and safe therapeutic procedures – incision, dissection and coagulation.
FlushKnife: aimed at achieving enhanced usability, ideal for all physicians from ESD trainees to skilled practitioners

HIGHLIGHTS

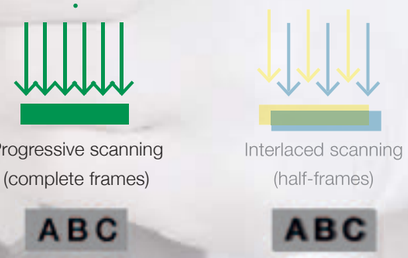
FUJIFILM
Value from Innovation

CMOS TECHNOLOGY

A CMOS chip in the tip of the endoscope for a noiseless transmission



The CMOS Chip is positioned directly in the tip of the scope and thus transforms the analogue signal into a digital signal at the site of examination. This ensures a noiseless and brilliant transmission of the images.



The CMOS Technology supports the 60 frames progressive scanning method where all the complete pictures are read out and not only the half-frames compared to interlaced scanning. Both features lead to smooth still images with minimized blur and super high resolution videos.

EC-600WM/WI/WL

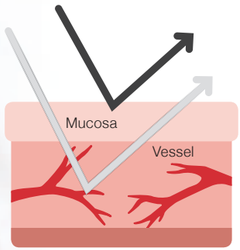
- Super High Resolution
- Anti-Blur images
- Smooth video ability

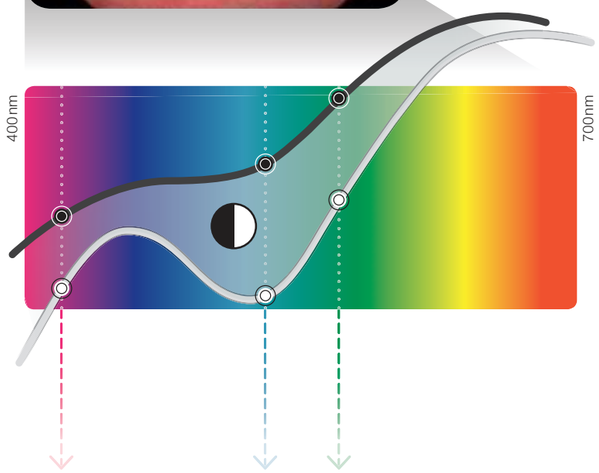
FICE

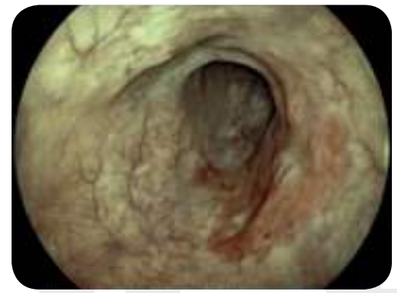
Better visibility for detection and diagnosis

FICE – “Flexible Spectral Imaging Color Enhancement“ – in the EPX-4450HD can enhance slightly colour differences such as vascular and mucosal patterns without the need for tissue staining. The procedure digitally selects three wavelengths of the light and displays the reconstructed images. The endoscope switch allows physicians to change between the conventional image and the FICE image in a split second, ensuring an uninterrupted examination with the eyes always concentrated on the monitor.

XENON endoscopy white light image
Red wavelength is mostly reflected.







FICE
(Flexible Spectral Imaging Colour Enhancement)
The contrast is enhanced and the vascular pattern is highlighted by focusing on the difference in wavelength reflection of mucosa and blood vessels.

This drawing is only for illustration, not an actual repesentation.

HIGHLIGHTS

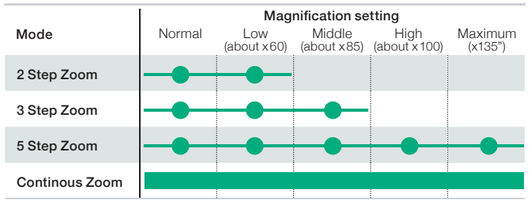
MULTI ZOOM

Optical Zoom for precise focusing

The latest Multi Zoom technology enables programming up to 3 magnification modes to realize an easy to control zoom endoscopy.

- **2-step Zoom**
- **3-step Zoom**
- **5-step Zoom**

The optical zoom allows a close examination of the mucosa tissue and capillary structures in combination with excellent focusing and orientation during magnification throughout the wide focal plane.



High image resolution enables advanced detection and characterization

Fujifilm´s new generation of magnification endoscopy enables a stepwise and easy-to-handle zoom technology for fast and precise focusing of lesions and structures. Also, at low magnification levels, the latest lens technology provides excellent visualization of structures and ultrastructures by keeping a stable zoom. Examinations without additional endoscopy caps are possible with this new magnification endoscope.

Latest CMOS Technology with standard magnification

Latest CMOS Technology with Multi Zoom 3 steps

Latest CMOS Technology with Multi Zoom 2 steps and FICE

Latest CMOS Technology with Multi Zoom 3 steps and FICE

Lower gastrointestinal tract

The images describe a small tubular adenoma which is located next to the LST-GT. Image 1 shows this small adenoma on the left back side.

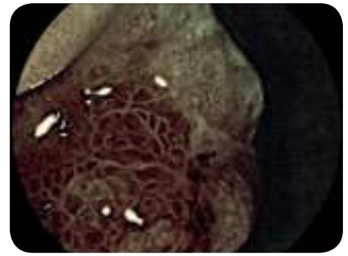
By focusing to the 2 step magnification mode, advanced detection and characterization is possible. The additional usage of FICE facilitates advanced structure enhancement.

E-ZOOM

Electronic Zoom provides better visibility

E-Zoom images can be provided by pressing the scope button once. Normally, E-Zoom increases noise of an image. Now, the E-Zoom function can be used with the 600 series to produce an FICE image with less noise so that it is possible to observe the detail of surface pattern as well as the vascular pattern.

White light Stomach



FICE + E-Zoom

COLOASSIST II

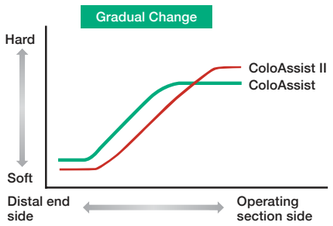
Gradual stiffness level adjusted to increase patient comfort

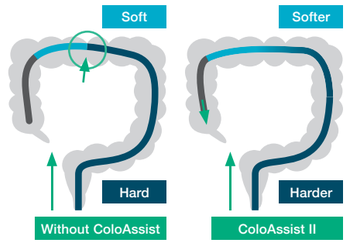
The flexibility of the insertion portion gradually increases towards the distal end. Gradual stiffness level is adjusted to increase patient comfort. The modified gradual stiffness produces a softer distal end and harder operating side compared to the previous type (ColoAssist I). The insertion power can be transmitted to the tip of the scope more effectively.

Improved torque and force transmission and operation ability

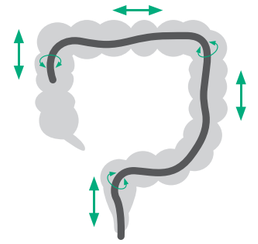
With ColoAssist II both torque and force transmission have been improved. Even when the tip of the scope is located in the deep part of colon, it can react sensitively.

Gradual Stiffness





Improved operation ability

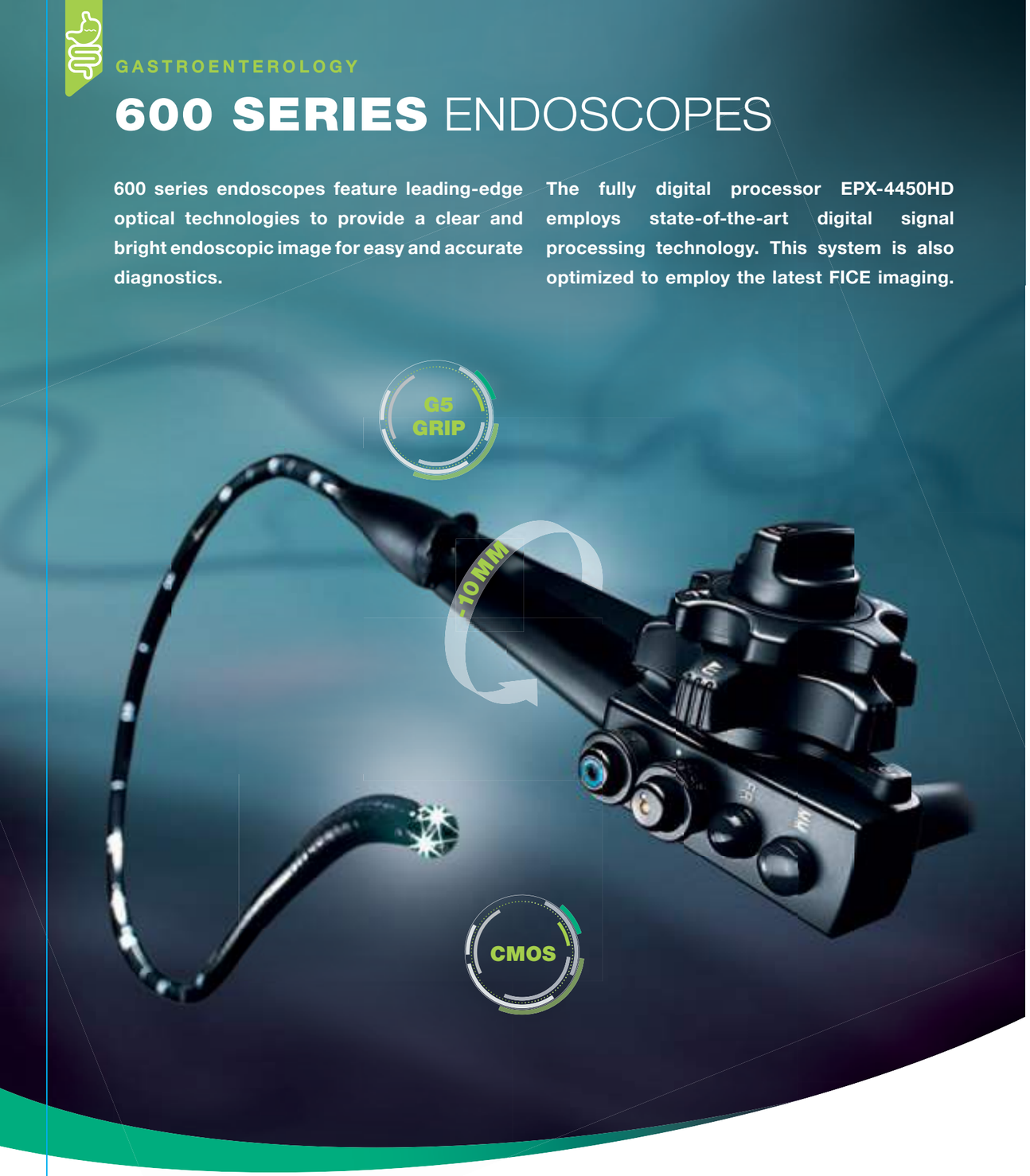


GASTROENTEROLOGY

600 SERIES ENDOSCOPES

600 series endoscopes feature leading-edge optical technologies to provide a clear and bright endoscopic image for easy and accurate diagnostics.

The fully digital processor EPX-4450HD employs state-of-the-art digital signal processing technology. This system is also optimized to employ the latest FICE imaging.



FUJIFILM
Value from Innovation

The leading-edge 600 series CMOS endoscopes with a full digital processor realize advanced observation and diagnostics.

OVER MEGAPIXEL CMOS IMAGE SENSOR PRODUCING SUPER-HIGH RESOLUTION IMAGE

With over megapixel CMOS image sensor, 600 series endoscopes produce super-high resolution images, while the leading-edge CMOS Technology realizes less noise and brilliant images. The CMOS image sensor can change the analogue signal to digital in the tip of the scope. During transmission, the digital signal is much less affected by noise from outside, making possible advanced observation and diagnosis.

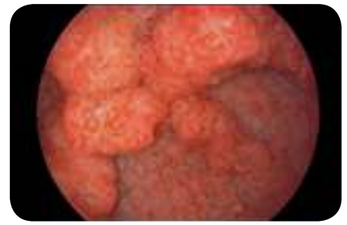
EG-600WR

EC-600WM/WI/WL

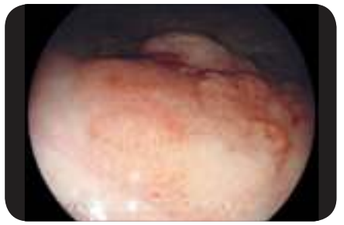
CLOSE FOCUS ENHANCES IMAGING FOR DIAGNOSIS

The newly designed high performance optical system enhances close focus observation capability **up to 2 mm.** The focus at the edges of an image has been improved, minimizing distortion in observation of a lumen. The combination of the Megapixel CMOS image sensor and the high performance optical system assists various observations ranging from close-up to distant views.

EG-600WR



EG-600WR



EC-600WM / WI / WL

600

FUJIFILM
Value from Innovation

FICE PROVIDES ADVANCED IMAGES

Through higher resolution and improved noise reduction, FICE images are sharper and clearer than ever, enabling easier differentiation between lesion and normal mucosa.

FICE Colon

FICE Colon

Single push button to quickly switch between FICE modes

Use the endoscope button to select up to three wavelength patterns from presets. You can switch quickly, moving to the next FICE image with a single push of a button to allow selection of the best pattern for the diagnosis.

DUAL MODE

Simultaneously displays a FICE image and a white light image on the same monitor

A dual view of a FICE image and a white light image on the same monitor allows you to collect more information for examination and diagnosis.

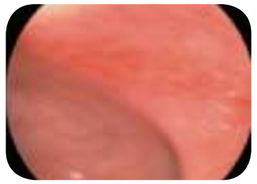
FICE1 Stomach

AUTO PHOTOMETRIC CONTROL

The automatic photometric mode optimally adjusts the lighting in accordance with the positioning of the endoscope, providing you with a well-balanced picture, whether close-up or distant focusing, so you always get optimally illuminated images.*

ANTI-BLUR FUNCTION

This extracts the best still image from multiple images to offer the sharpest and clearest every time.



Freezing the image during the examination

A sequence of images always kept in the background

Automatic selection and display of the sharpest image

WATER JET FUNCTION

The gastroscope and colonoscope both feature a water jet function which aids visualization for both diagnostic and therapeutic procedures.

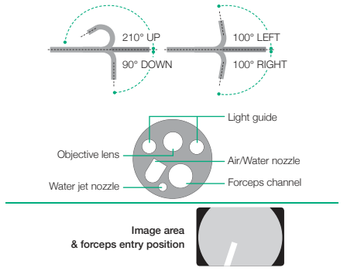
* Available with the 600 and 500 series endoscopes

600

FUJIFILM
Value from Innovation

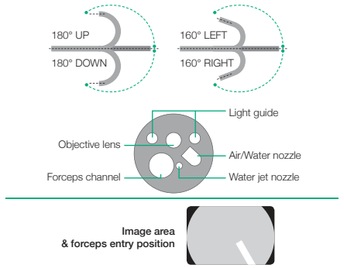
VIDEO GASTROSCOPE **EG-600WR**

Field of view	**140°**
Observation range	**2–100 mm**
Bending capability	**Up 210°/Down 90° Right 100°/Left100°**
Distal end diameter	**9.2 mm**
Flexible portion diameter	**9.3 mm**
Forceps channel diameter	**2.8 mm**
Working length	**1,100 mm**
Total length	**1,400 mm**
Water jet	**Equipped**



VIDEO COLONOSCOPE **EC-600W-M / W-I / W-L**

Field of view	**140°**
Observation range	**2–100 mm**
Bending capability	**Up 180°/Down 180° Right 160°/Left 160°**
Distal end diameter	**12.0 mm**
Flexible portion diameter	**12.0 mm**
Forceps channel diameter	**3.8 mm**
Working length	**1,330/1,520/1,690 mm**
Total length	**1,630/1,820/1,990 mm**
Water jet	**Equipped**



THE HIGH-DEFINITION (HD) MAGNIFICATION ENDOSCOPE SERIES 600 WITH OVER MEGAPIXEL CMOS IMAGE SENSOR AND EASY ZOOM CONTROL

The introduction of HD technology into endoscopic procedures has made the detection and characterization of lesions within the upper or lower gastrointestinal tract more precise and effective. Our latest 600 series Magnification endoscopes set new standards in diagnostic procedures. By simply pushing a button, endoscopists can switch the level of magnification modes, and there is also the option to select two or three focus modes for visualization of mucosal morphology.

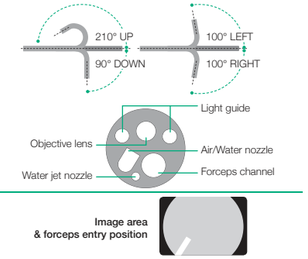
OPTICAL MAGNIFICATION

Improved optical lens for better focusing and a powerful magnified endoscopic images

The latest lens technology developed especially for the 600 series Magnification endoscopes provides a wide observation range and an easier and faster focus on the inspected area. A maximum 135* times magnified image can enhance detailed observation.

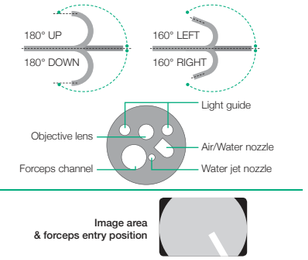
MAGNIFICATION VIDEO GASTROSCOPE **EG-600ZW**

Field of view	**Normal: 140°/Close: 56°**
Observation range	**1.5–100 mm Normal: 3–100 mm Close: 1.5–2.5 mm**
Bending capability	**Up 210°/Down 90° Right 100°/Left 100°**
Total magnification	**135* times**
Distal end diameter	**9.9 mm**
Flexible portion diameter	**9.8 mm**
Forceps channel diameter	**2.8 mm**
Working length	**1,100 mm**
Total length	**1,400 mm**



MAGNIFICATION VIDEO COLONOSCOPE **EC-600ZW-M / ZW-L**

Field of view	**Normal: 140°/Close: 56°**
Observation range	**1.5–100 mm Normal: 3–100 mm Close: 1.5–2.5 mm**
Bending capability	**Up 180°/Down 180° Right 160°/Left 160°**
Total magnification	**135* times**
Distal end diameter	**12.8 mm**
Flexible portion diameter	**12.8 mm**
Forceps channel diameter	**3.8 mm**
Working length	**1,330/1,690 mm**
Total length	**1,630/1,990 mm**



* on a 19" monitor

600

GASTROENTEROLOGY

580 SERIES ENDOSCOPES

The 580 series by Fujifilm stands out for its wide range of special features for a wide range of purposes. The unique specifications include ultraslim and smart bending types as well as the double balloon system.

FUJIFILM
Value from Innovation

White light image of intestinal villi

FICE image of intestinal villi

CLOSE FOCUS FOR IMPROVED DIAGNOSIS

The high resolution Super CCD ensures vivid and high quality images, while the newly designed Close Focus optics increase the likelihood of obtaining more detailed images, facilitating compilation of a wide range of data for diagnosis.

Used in combination with FICE, it provides better contrast for vascular and surface patterns in close focus, emphasizing the structure of tissue aspects and vessels.

For further information about FICE please see page 9.

SMART BEND

Smart Bend provides excellent maneuverability, observation and therapeutic treatments from 210º up angulation and a small bending radius.

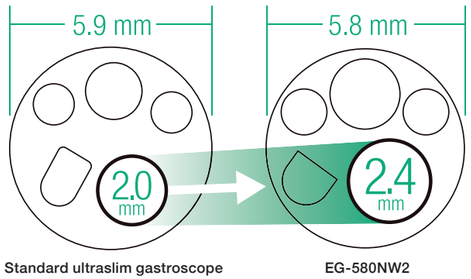
Lesions which are difficult to reach can be easily treated due to the smart bending ability as well as the small bending radius.

Smart bend colonoscope EC-580RD/M,L

Colonoscope without smart bend

ENLARGED FORCEPS CHANNEL FOR IMPROVED SUCTION CAPACITY FOR THE ULTRASLIM GASTROSCOPE

The 2.4 mm forceps channel of the EG-580NW2 realizes a higher suction ability compared to other ultraslim gastroscopes, especially when the therapeutic accessory is inserted into the forceps channel.

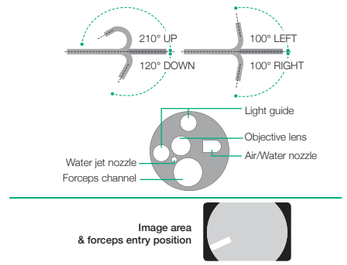


Standard ultraslim gastroscope EG-580NW2

FUJIFILM
Value from Innovation

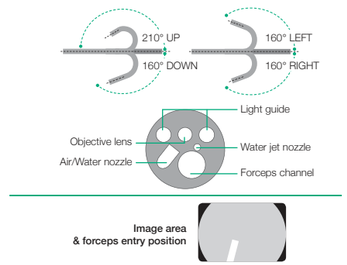
SMART BEND VIDEO GASTROSCOPE **EG-580RD** Treatment Type

Viewing direction	**0° (Forward)**
Field of view	**140°**
Observation range	**3–100 mm**
Bending capability	**Up 210° / Down 120° Right 100° / Left 100°**
Distal end diameter	**9.8 mm**
Flexible portion diameter	**9.8 mm**
Forceps channel diameter	**3.2 mm**
Working length	**1,100 mm**
Total length	**1,400 mm**



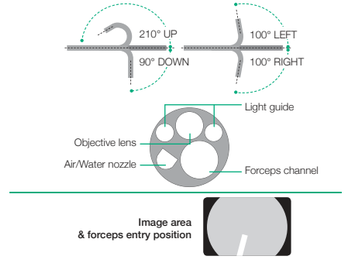
SMART BEND VIDEO COLONOSCOPE **EC-580RD-M / RD-L** Slim & Treatment Type

Field of view	**140°**
Observation range	**3–100 mm**
Bending capability	**Up 210° / Down 160° Right 160° / Left 160°**
Distal end diameter	**9.8 mm**
Flexible portion diameter	**10.5 mm**
Forceps channel diameter	**3.2 mm**
Working length	**1,330 / 1,690 mm**
Total length	**1,630 / 1,990 mm**



ULTRASLIM VIDEO GASTROSCOPE **EG-580NW2**

Field of view	**140°**
Observation range	**3–100 mm**
Bending capability	**Up 210° / Down 90° Right 100° / Left 100°**
Distal end diameter	**5.8 mm**
Flexible portion diameter	**5.9 mm**
Forceps channel diameter	**2.4 mm**
Working length	**1,100 mm**
Total length	**1,400 mm**



580

GASTROENTEROLOGY

DOUBLE BALLOON ENDOSCOPY SYSTEM

By developing the double balloon endoscopy, Fujifilm made it possible for the first time to examine and treat the complete small intestine. The two-balloon system is revolutionary, providing an unparalleled level of detail and is, to this day, the gold standard in examination of the small intestine. It is also commonly used in ERCPs with altered conditions post-surgery.

NEW AND IMPROVED DOUBLE-BALLOON ENDOSCOPE SYSTEM

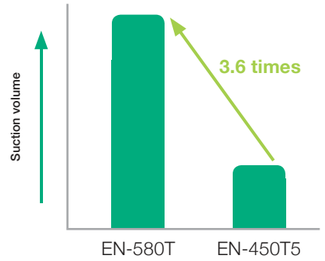
Double-Balloon Endoscopy is a revolutionary technique that allows the whole length of the small intestine to be visualized, opening doors to new therapeutic interventions. Fujifilm developed the DBE system to meet the clinical needs for more precise and efficient diagnoses and treatment.

Oral insertion (small intestine)

Anal insertion (small intestine)

FORCEPS CHANNEL WITH 3.2 MM DIAMETER

The enlarged 3.2 mm forceps channel suits procedures such as hemostasis and balloon dilation. It enables blood or mucus to be aspirated while a therapeutic device is inserted, making hemostasis quicker. The large forceps channel is also designed for easier insertion and removal of a balloon catheter before and after dilation of stricture.



With Ø2.4 device

The 3.2 mm forceps channel provides greater suction performance than conventional models.
(According to Fujifilm data)

ESPECIALLY DESIGNED ONE-TOUCH CONNECTOR AND RELOCATED BALLOON AIR FEED INLET FOR BETTER OPERABILITY

The balloon air feed inlet has been relocated from the control portion to the connector portion, creating a better examination environment. Also, a one-touch type connector especially designed for the balloon air feed inlet on the endoscope is provided, making the preparation simpler.

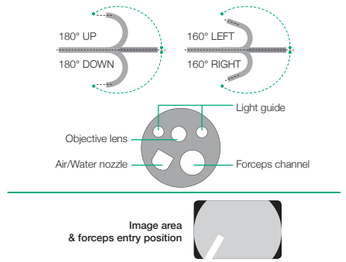
580

FUJIFILM
Value from Innovation

ENTEROSCOPE **EN-580T** Therapeutic Type

DBE 3.2mm | Close Focus | SUPER CCD | FICE | DOUBLE BALLOON ENDOSCOPY

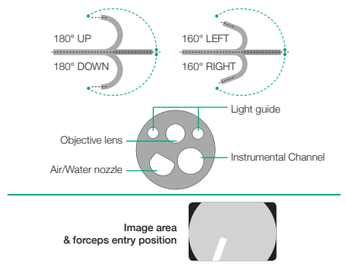
Viewing direction	**0° (Forward)**
Field of view	**140°**
Observation range	**2–100 mm**
Bending capability	**Up 180° / Down 180° Right 160° / Left 160°**
Distal end diameter	**9.4 mm**
Flexible portion diameter	**9.3 mm**
Forceps channel diameter	**3.2 mm**
Working length	**2,000 mm**
Total length	**2,300 mm**



ENTEROSCOPE **EN-580XP** Slim Type

Close Focus | SUPER CCD | FICE | DOUBLE BALLOON ENDOSCOPY

Field of view	**140°**
Observation range	**2–100 mm**
Bending capability	**Up 180° / Down 180° Right 160° / Left 160°**
Distal end diameter	**7.5 mm**
Flexible portion diameter	**7.7 mm**
Forceps channel diameter	**2.2 mm**
Working length	**2,000 mm**
Total length	**2,300 mm**

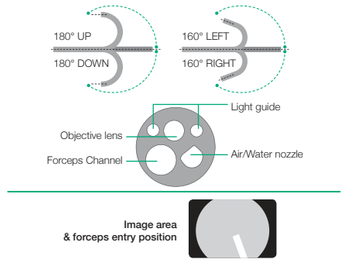


NEW

„SHORT“ DOUBLE-BALLOON ENDOSCOPE **EI-580BT**

DBE 3.2mm | Close Focus | FICE | SZ | DOUBLE BALLOON ENDOSCOPY

Viewing direction	**0° (Forward)**
Field of view	**140°**
Observation range	**2–100 mm**
Bending capability	**Up 180° / Down 180° Right 160° / Left 160°**
Distal end diameter	**9.4 mm**
Flexible portion diameter	**9.3 mm**
Working length	**1,550 mm**
Total length	**1,850 mm**
Forceps channel diameter	**3.2 mm**



Now latex-free tubes and ballons available

NEW

OVERTUBE **TS-1114B / 1214B / 1314B** LATEX FREE

Silicone overtube, sterile, single-use, with expiration date (contains silicone rubber)

Overtube model	TS-1114B	TS-1214B	TS-1314B
Applicable endoscopes	EN-580XP	EN-450P520	EN-450T5 EN-580T

OVERTUBE **TS-12140 / 13140 / 13101**

Latex overtube, sterile, single use, with expiration date (contains natural rubber latex)

Overtube model	TS-12140	TS-13140	TS-13101
Applicable endoscopes	EN-450P520	EN-450T5 EN-580T	EC-450BI5

NEW

CONNECTION TUBE **TY-400 / TY-500** LATEX FREE

TY-400:
Connection tube kit for silicone overtube, PB-20/30 and 450 series – exchange once every month or once every 10 cases

TY-500:
Connection tube kit for silicone overtube, PB-20/30 and 500 series – exchange once every month or once every 10 cases

Now latex-free tubes and ballons available

580

FUJIFILM
Value from Innovation

CONNECTION TUBE **TY-04 / TY-06**

TY-04:
Connection tube kit for latex overtube, PB-20/30 and 450 series – exchange once every month or once every 10 cases

TY-06:
One-touch-connector set (2 tubes) for latex overtube, PB-20/30 and 500 series

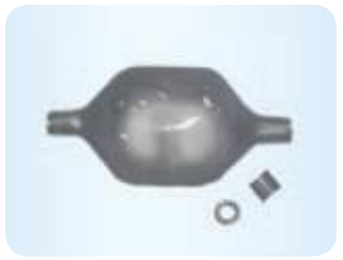
BALLOON CONTROL UNIT **PB-30**

To be used to control the pressures inside the balloons which are inflated and deflated during DBE examinations

Maximum flow rate of pump	**170 ml ± 50 ml / 10 sec.**
Set pressure accuracy	**± 2 kpa**
Set pressure of balloon	**5.6 kpa**
Weight	**7 kg (Main unit), 0.4 kg (Remote switch)**
Power	**AC100-240V 50/60 Hz 0.8A**
Dimensions (W x H x D)	**145 x 170 x 410 mm**

NEW

BALLOON **BS-4** LATEX FREE

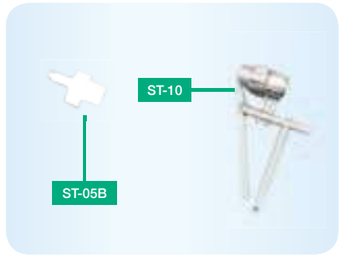


Endoscope balloon Ø 35 mm, single-use, with expiration date (contains silicone rubber)

(10 pcs balloon + 20 pcs rubber band/pack)

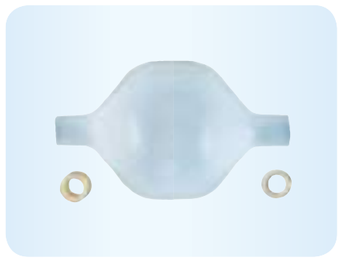
***ST-10 is needed to attach**

BALLOON SETTING TOOLS **ST-05B / ST-10**



To fix the balloon and the rubber bands

BALLOON **BS-2**



Endoscope balloon Ø 35 mm, single-use, with expiration date (contains natural rubber latex)

(10 pcs balloon + 20 pcs rubber band/pack)

Now latex-free tubes and ballons available

GASTROENTEROLOGY

590 & 530 SERIES ENDOSCOPES

Natural color reproduction, a high resolution Super-CCD chip for excellent image quality and good bending operability are just three of the many advantages presented by the 590 and 530 series endoscope.

The endoscopes can be run optionally with the EPX-3500 processor in HD quality or with the EPX-4450HD HDTV processor. The 530 series can be connected with the EPX-2500 as well.

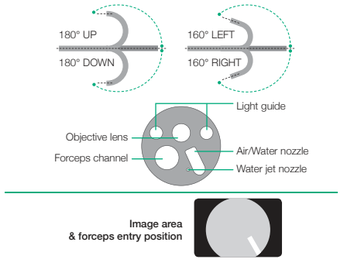
Excellent image quality
Fujifilm's Super CCD, which has been exclusively developed for the endoscope, is built in, to provide clear images.

FUJIFILM
Value from Innovation

VIDEO COLONOSCOPE **EC-590WM4 / WI4 / WL4**

These endoscopes for lower GI tract routine examinations have an ultra-wide 140° field of view, a large 3.8 mm channel and a water jet function which is effective for washing off mucus.

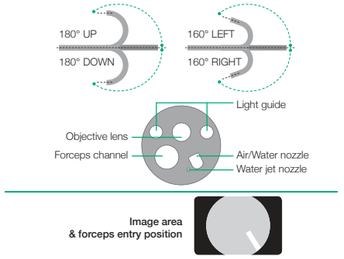
Viewing direction	**0° (Forward)**
Field of view	**140°**
Observation range	**3–100 mm**
Bending capability	**Up 180° / Down 180° Right 160° / Left 160°**
Distal end diameter	**12.8 mm**
Flexible portion diameter	**12.8 mm**
Forceps channel diameter	**3.8 mm**
Working length	**1,330 / 1,520 / 1,690 mm**
Total length	**1,630 / 1,820 / 1,990 mm**



VIDEO COLONOSCOPE **EC-590ZW3-M / ZW3-L** Optical Magnification

These optical magnifying endoscopes for lower GI tract have a water jet function which is effective for washing off mucus and securing a better field of view. Furthermore both have a wide variety of functions, such as a large 3.8 mm forceps channel, optical magnifying and water jet.

Viewing direction	**0° (Forward)**
Field of view	**WD: 140° / TL: 55°**
Observation range	**WD: 6–100 mm / TL: 2–3 mm**
Bending capability	**Up 180° / Down 180° Right 160° / Left 160°**
Distal end diameter	**12.8 mm**
Flexible portion diameter	**12.8 mm**
Forceps channel diameter	**3.8 mm**
Working length	**1,330 / 1,690 mm**
Total length	**1,630 / 1,990 mm**




Colon (Zoom)


FICE Colon (Zoom)

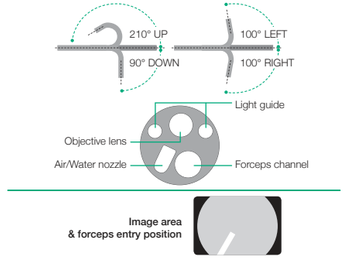
590/530

FUJIFILM
Value from Innovation

VIDEO GASTROSCOPE **EG-590WR**

This endoscope is relatively slim with a distal end of 9.6 mm, yet is equipped with all the functions necessary for routine examinations. The air/water nozzle is redesigned to constantly secure a clear field of view, and its water flush function is significantly improved.

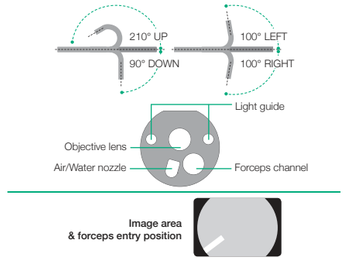
Viewing direction	**0° (Forward)**
Field of view	**140°**
Observation range	**6–100 mm**
Bending capability	**Up 210° / Down 90° Right 100° / Left 100°**
Distal end diameter	**9.6 mm**
Flexible portion diameter	**9.3 mm**
Forceps channel diameter	**2.8 mm**
Working length	**1,100 mm**
Total length	**1,400 mm**

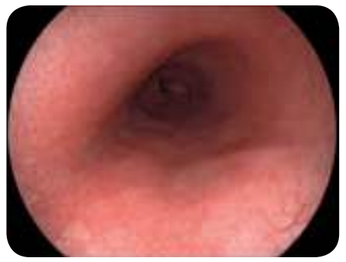


VIDEO GASTROSCOPE **EG-590ZW** Optical Magnification

EG-590ZW is a high quality optical magnifying electronic endoscope for the upper GI tract. The optical magnification enhances the images for easier and closer observation. This endoscope has maximum optical magnification levels of up to 135 times when viewed on a 19 inch monitor and an excellent field of view.

Viewing direction	**0° (Forward)**
Field of view	**WD: 140° / TL: 55°**
Observation range	**WD: 6–100 mm / TL: 2–3 mm**
Bending capability	**Up 210° / Down 90° Right 100° / Left 100°**
Distal end diameter	**10.8 mm**
Flexible portion diameter	**9.8 mm**
Forceps channel diameter	**2.8 mm**
Working length	**1,100 mm**
Total length	**1,400 mm**



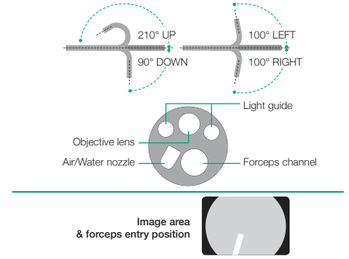

Esophagus


Esophagus (Zoom)

VIDEO GASTROSCOPE **EG-530NW** Transnasal Type

This ultra-slim transnasal gastroscope with a distal end diameter of 5.9 mm is made possible by Fujifilm's proprietary microfabrication technology and offers a wide field of view with high resolution imaging similar to that obtainable with transoral gastroscopes. The flexible gastroscope is ideal for transnasal insertion and provides the operator with highly visible endoscopic images, while reducing patient discomfort.

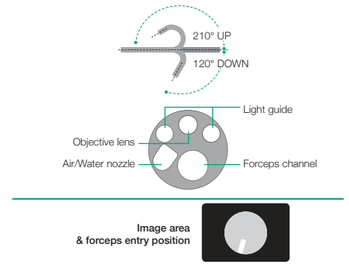
Viewing direction	**0° (Forward)**
Field of view	**140°**
Observation range	**4–100 mm**
Bending capability	**Up 210° / Down 90° Right 100° / Left 100°**
Distal end diameter	**5.9 mm**
Flexible portion diameter	**5.9 mm**
Forceps channel diameter	**2.0 mm**
Working length	**1,100 mm**
Total length	**1,400 mm**



VIDEO GASTROSCOPE **EG-530NP** Transnasal Type

The EG-530NP transnasal gastroscope is slimmed down as much as is possible providing a 4.9 mm distal end (5.1 mm in the flexible portion) which immensely supports a soft transnasal insertion. This transnasal endoscope is also equipped with dual light guides and a 2.0 mm forceps channel.

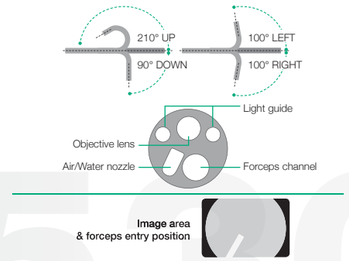
Viewing direction	**0° (Forward)**
Field of view	**120°**
Observation range	**3–100 mm**
Bending capability	**Up 210° / Down 120°**
Distal end diameter	**4.9 mm**
Flexible portion diameter	**5.1 mm**
Forceps channel diameter	**2.0 mm**
Working length	**1,100 mm**
Total length	**1,460 mm**



VIDEO GASTROSCOPE **EG-530WR**

The EG-530WR with a wide field of view of 140° provides exceptional visualization. With the forceps channel of 2.8 mm, it is a standard endoscope producing high quality images, and is highly suited for both biopsies and treatment.

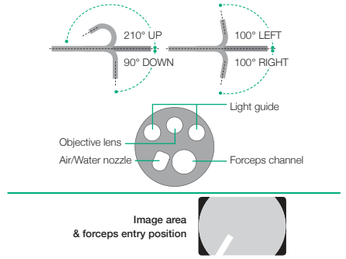
Viewing direction	**0° (Forward)**
Field of view	**140°**
Observation range	**4–100 mm**
Bending capability	**Up 210° / Down 90° Right 100° / Left 100°**
Distal end diameter	**9.4 mm**
Flexible portion diameter	**9.3 mm**
Forceps channel diameter	**2.8 mm**
Working length	**1,100 mm**
Total length	**1,400 mm**



VIDEO GASTROSCOPE **EG-530FP** Slim Type

EG-530FP is a slim endoscope for the upper GI tract having a forceps channel of 2.8 mm diameter and a distal end of 8.5 mm. Observation capability has been increased with a wide field of view of 140° and Fujifilm's Super CCD technology.

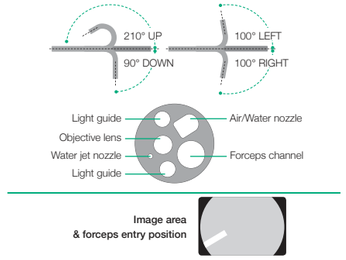
Viewing direction	**0° (forward)**
Field of view	**140°**
Observation range	**3–100 mm**
Bending capability	**Up 210°/Down 90° Right 100°/Left 100°**
Distal end diameter	**8.5 mm**
Flexible portion diameter	**8.5 mm**
Forceps channel diameter	**2.8 mm**
Working length	**1,100 mm**
Total length	**1,400 mm**



VIDEO GASTROSCOPE **EG-530CT** Therapeutic Treatment

With the forceps channel as wide as 3.8 mm, EG-530CT's distal end is as slim as 10.8 mm in diameter. A water jet function is incorporated to support therapeutic interventions.

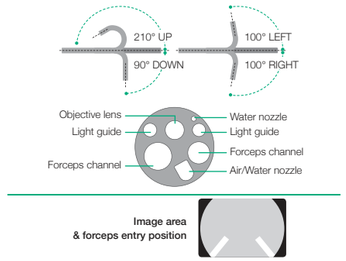
Viewing direction	**0° (forward)**
Field of view	**140°**
Observation range	**3–100 mm**
Bending capability	**Up 210°/Down 90° Right 100°/Left 100°**
Distal end diameter	**10.8 mm**
Flexible portion diameter	**10.8 mm**
Forceps channel diameter	**3.8 mm**
Working length	**1,100 mm**
Total length	**1,400 mm**



VIDEO GASTROSCOPE **EG-530D** Therapeutic Treatment

EG-530D is an endoscope for treatment of the upper GI tract, with two forceps channels, 3.8 mm and 2.8 mm, and a distal end as slim as 11.5 mm. A water jet function is also incorporated for use in various treatment methods during endoscopy.

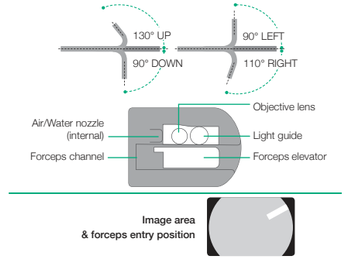
Viewing direction	**0° (forward)**
Field of view	**140°**
Observation range	**3–100 mm**
Bending capability	**Up 210°/Down 90° Right 100°/Left 100°**
Distal end diameter	**11.5 mm**
Flexible portion diameter	**11.5 mm**
Forceps channel diameter	**3.8 mm / 2.8 mm**
Working length	**1,090 mm**
Total length	**1,405 mm**
Water jet	**Equipped**



VIDEO DUODENOSCOPE **ED-530XT / XT8** Therapeutic Treatment

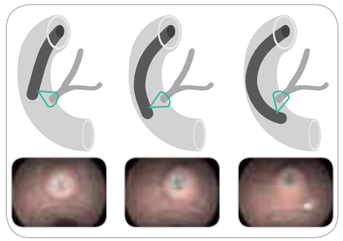
The structure of the distal end bending and flexible portion is changed for improved operability during examination and treatment.

Viewing direction	**98° (8° rearward)**
Field of view	**100°**
Observation range	**4–60 mm**
Distal end diameter	**13.1 mm**
Flexible portion diameter	**11.5 mm**
Bending capability	**Up 130°/Down 90° Right 110°/Left 90°**
Working length	**1,250 mm**
Total length	**1,550 mm**
Forceps channel diameter	**4.2 mm**



IMPROVED INSERTION CAPABILITY OF ERCP ACCESSORIES INTO THE PAPILLA

A newly designed forceps elevator has been included for more precise and secure accessory control, facilitating easier ERCP treatment.



ENHANCED OPERABILITY

Easy to catch the papilla

The objective lens arrangement and bending performance have been carefully arranged to catch the papilla easily from various endoscope positions.

IMPROVED CLEANING AND DISINFECTION

Removable distal end cap*

The ED-530XT8 is equipped with a disposable distal end cap which enables brushing all channels and helps to improve the hygiene of the environment.

IMPROVED STIFFNESS

The stiffness of the insertion portion has been improved for easier stomach stretching and insertion capability.

COVERED TILT-UP MECHANISM

A covered tilt-up mechanism of the forceps elevator keeps the elevator wire clean without any additional cleaning procedure.

590/530

*ED-530XT8 only

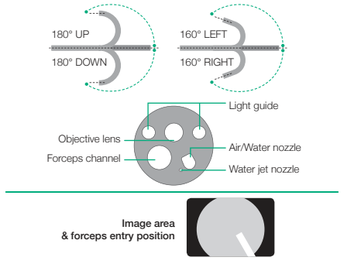
FUJIFILM
Value from Innovation

VIDEO COLONOSCOPE **EC-530WM3 / WI3 / WL3**

ColoAssist II · Water Jet

With a wide field of view of 140°, these lower GI tract endoscopes offer a greater resolution.
The new ColoAssist II design facilitates improved insertion capability.

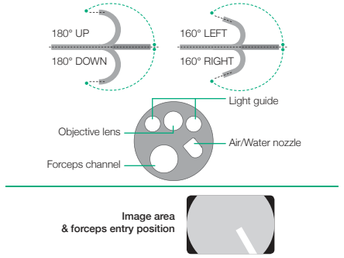
Viewing direction	**0° (Forward)**
Field of view	**140°**
Observation range	**3–100 mm**
Bending capability	**Up 180° / Down 180° Right 160° / Left 160°**
Distal end diameter	**12.8 mm**
Flexible portion diameter	**12.8 mm**
Forceps channel diameter	**3.8 mm**
Working length	**1,330 (WM3)/1,520 (WI3) /1,690 (WL3) mm**
Total length	**1,630 (WM3)/1,820 (WI3) /1,990 (WL3) mm**



VIDEO COLONOSCOPE **EC-530MP / LP** Slim Type

These are slim-type colonoscopes with a distal end of 11.0 mm. While these two slimmed-down endoscopes have improved insertability, they retain a 3.2 mm forceps channel to accommodate various treatment methods.

Viewing direction	**0° (Forward)**
Field of view	**140°**
Observation range	**3–100 mm**
Bending capability	**Up 180° / Down 180° Right 160° / Left 160°**
Distal end diameter	**11.0 mm**
Flexible portion diameter	**11.1 mm**
Forceps channel diameter	**3.2 mm**
Working length	**1,330 (MP) mm 1,690 (LP) mm**
Total length	**1,630 (MP) mm 1,990 (LP) mm**

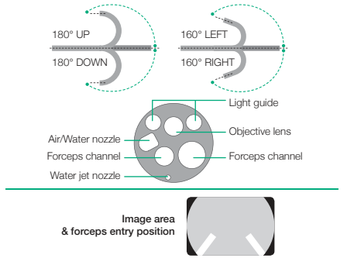


VIDEO COLONOSCOPE **EC-530DM / DL** Therapeutic Treatment

Water Jet

These lower GI tract endoscopes have two forceps channels (3.8 mm and 2.8 mm), especially useful for treatments such as EMR.

Viewing direction	**0° (Forward)**
Field of view	**140°**
Observation range	**3–100 mm**
Bending capability	**Up 180° / Down 180° Right 160° / Left 160°**
Distal end diameter	**12.8 mm**
Flexible portion diameter	**12.8 mm**
Forceps channel diameter	**3.8 / 2.8 mm**
Working length	**1,330 (DM) mm 1,690 (DL) mm**
Total length	**1,645 (DM) mm 2,005 (DL) mm**

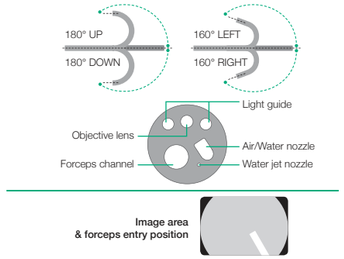


VIDEO COLONOSCOPE **EC-530FI / FL**

SUPER CCD · Water Jet

These super wide-angle standard colonoscopes provide a large 3.8 mm working channel inside a slim 12.8 mm outside diameter. An ultra-wide 140° field of view enhances the image quality. They also offer a wider observation range from 3 – 100 mm. In addition, an integrated forward water jet allows for lavage in clinical situations.

Viewing direction	**0° (Forward)**
Field of view	**140°**
Observation range	**3–100 mm**
Bending capability	**Up 180° / Down 180° Right 160° / Left 160°**
Distal end diameter	**12.8 mm**
Flexible portion diameter	**12.8 mm**
Forceps channel diameter	**3.8 mm**
Working length	**1,520 (FI) 1,690 (FL) mm**
Total length	**1,820 (FI) 1,990 (FL) mm**

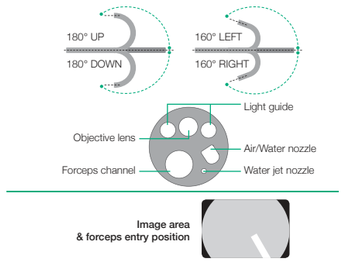


VIDEO SIGMOIDOSCOPE **ES-530WE**

Water Jet

ES-530WE is a sigmoidoscope with an effective length of 790 mm. The forceps channel diameter is 3.8 mm, and it is equipped with a water jet function.

Viewing direction	**0° (Forward)**
Field of view	**140°**
Observation range	**3–100 mm**
Bending capability	**Up 180° / Down 180° Right 160° / Left 160°**
Distal end diameter	**12.8 mm**
Flexible portion diameter	**12.8 mm**
Forceps channel diameter	**3.8 mm**
Working length	**790 mm**
Total length	**1,090 mm**



590/530

GASTROENTEROLOGY

EPX VIDEO-PROCESSORS

Video processor technology from Fujifilm provides you with the best processor for your application at all times. Products range from the EPX-4450HD for demanding examinations in HDTV quality to the EPX-2500, an affordable alternative for HD endoscopy.

All models offer full digital image processing and video interfaces. With ergonomic and intuitive user controls, these video processors help to save valuable time and to facilitate more comfortable examinations.

EPX-3500HD HD Full HD endoscopy

EPX-4450HD HD TV1080 endoscopy

EPX-2500 HD endoscopy

FUJIFILM
Value from Innovation

VIDEO PROCESSOR **EPX-4450HD**

FUJIFILM'S STATE-OF-THE-ART TECHNOLOGY FOR ENDOSCOPY

HD TV1080 endoscopy · FICE · EXCOM · Anti-blur Function

Clear and sharp image quality, advanced image processing features and interface allow for user-friendly operations and efficient workflows. The high-end EPX-4450HD processor, from Fujifilm's full range of of endoscopy systems, provides an optimal environment for clinical examinations.

PREMIUM ENDOSCOPY IN HDTV

The EPX-4450HD HDTV video processor offers top-level endoscopy in HDTV for the 400, 500 and 600 series endoscopes. Thanks to further enhanced image quality and optimized integration into the hospital network, it opens the door to a new world of diagnostic opportunities. With an intuitive user interface, clear operating controls and an extensive range of settings, the EPX-4450HD is an excellent video processor for both routine procedures and specialized clinical issues.

VP-4450HD processor

Digital output	**HD-SDI: HDTV 1080i (2ch) DVI (Digital Visual Interface): 1280 x 1024 px Ethernet: 100/10 Base**
Analog output	**RGB: 1280 x 1024 p SDTV (120 V/NTSC, 230 V/PAL): RGB Y/C, Composite**
Color adjustment	**Brightness, Red, Green, Blue, R-Hue, Chroma; 9 steps**
Detail	**High, Low; 9 steps**
Contrast (gamma)	**3 steps**
Hyper-Sharpness	**High, Mid, Low, Off**
Color emphasis	**High, Mid, Low, Off**
FICE	**Flexible spectral imaging Color Enhancement 10 presets**
Iris	**Average/Peak/Auto**
Image storage	**CF Card**
Power rating	**120 V 60 Hz 0.8 A / 230 V 50 Hz 0.5 A**
Dimensions (W x H x D)	**390 x 105 x 460 mm**
Weight	**9.5 kg**
DICOM	**MWL, Store**

XL-4450 Light source

Lamp rated value	**Main Lamp: 300 W Xenon lamp LMP-002 Emergency Lamp: 75 W Halogen lamp**
Light control	**Automatic light control**
Lamp cooling method	**Forced air cooling**
Air supply pump	**High, Mid, Low, Off**
Light save	**On, Off**
Transmitted illumination	**On, Off**
Power rating	**120 V 60 Hz 3.3 A / 230 V 50 Hz 1.7 A**
Dimensions (W x H x D)	**390 x 155 x 450 mm**
Weight	**15 kg**

HDTV IMAGE QUALITY

FICE DUAL MODE

ANTI-BLUR FUNCTION

EPX

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VIDEO PROCESSOR **EPX-3500HD**

ADVANCED ENDOSCOPIC DIAGNOSTICS AND THERAPY

The EPX-3500HD, with its advanced image processing technology, facilitates endoscopic diagnostics and therapies. It provides clear images by using superior functions such as structure enhancement (FICE), automatic light control and anti-blur. The EPX-3500HD is compatible with our full range of 500 and 600 series endoscopes. Three patterns of FICE, which enhances the color tone of the endoscopic images by image processing, are pre-defined and can be easily operated by pressing the scope switch button. Thanks to the anti-blur function, all captured images are documented in razor-sharp detail. During the archiving stage, the video processor automatically selects and saves the cleanest image.

VP-3500HD processor

Digital output	**2 x DVI: 1280 x 1024 p or 1920 x 1080 px**
Analog output	**1 x RGB TV (PAL, RGB+SYNC), 1 x S-VIDEO (Y/C), 1 x VIDEO (Composite)**
Control terminal	**2 x Remote, 2 x Peripheral, 1 x Keyboard, 1 x Card reader, 1 x Aux, 1 x Digital printer, 1 x Foot switch, 1 x Ethernet (100/1O Base)**
Color adjustment	**Brightness, Red, Green, Blue, R-Hue, Chroma, 9 steps**
Contrast	**3 steps**
Structure emphasis	**High, Mid, Low, Off**
Color emphasis	**High, Mid, Low, Off**
FICE	**3 presets (FICE 0, 1, 8)**
Iris	**Average/Peak/Auto**
Image storage	**USB Flash Drive**
Power rating	**AC 100 - 240 V ± 10 % 50/60 Hz 1,0–0,3A***
Dimensions (W x H x D)	**390 x 105 x 460 mm**
Weight	**8 kg**

*less than 90VA

XL-4450 Light source

Lamp rated value	**Main Lamp: 300 W Xenon lamp LMP-002 Emergency Lamp: 75 W Halogen lamp**
Light control	**Automatic light control**
Lamp cooling method	**Forced air cooling**
Air supply pump	**High, Mid, Low, Off**
Light save	**On, Off**
Transmitted illumination	**On, Off**
Power rating	**230 V ± 10 % 50 Hz 1.7 A / 120 V ± 10 % 60 Hz 3.3 A**
Dimensions (W x H x D)	**390 x 155 x 450 mm**
Weight	**15 kg**

ANTI-BLUR FUNCTION

THREE PRESET FICE PATTERNS AVAILABLE

VIDEO PROCESSOR **EPX-2500****

EPX-2500 VIDEO PROCESSOR: HIGH DEFINITION IN EVERYDAY WORK

The EPX-2500 combines convenient operation with high resolution images. The digital video output (DVI) of the EPX-2500 produces images in high definition without loss of quality.

- Two ports for connecting Fujifilm 200 series and 530 series endoscopes*
- Integrated xenon light source for bright, uniformly illuminated images
- Quick and simple operation
- Picture-in-picture function with freeze mode for live-display
- 2x zoom for instant enlargement

VP-2500 processor

Digital output	**DVI: 1024 x 768 px**
Analog output	**RGB (2): SDTV (NTSC/PAL) Y/C (2): SDTV (NTSC/PAL) Composite: SDTV (NTSC/PAL)**
Color adjustment	**Black, Red, Green, Blue, R-Hue, Chroma; 9 settings**
Detail	**High, Low; 9 settings**
Contrast (gamma)	**9 settings**
BLD	**High, Mid, Low, Off**
Picture in picture	**On, Off; Size: 1/4, 1/3**
Auto gain control	**Off, +3 db, +6 db**
Iris	**Average/Peak**
Zoom	**Electric zoom: x1.0–x2.0; 0.05 steps**
Lamp rated value	**Main lamp: 11.7 V 150 W Xenon lamp Emergency lamp: 12 V 75 W Halogen lamp**
Brightness control	**9 settings**
Lamp cooling method	**Forced air cooling**
Air supply pump	**High, Low, Off**
Power	**120 V 60 Hz 2.7 A / 230 V 50 Hz 1.4 A**
Dimensions (W x H x D)	**375 x 190 x 495 mm (including projections)**
Weight	**17.0 kg**

* Ultrasonic videoscopes EG-530UR and UT cannot be connected

STRAIGHT-FORWARD OPERATION

**Please check availability with your local distributor. Might not be available in all countries.

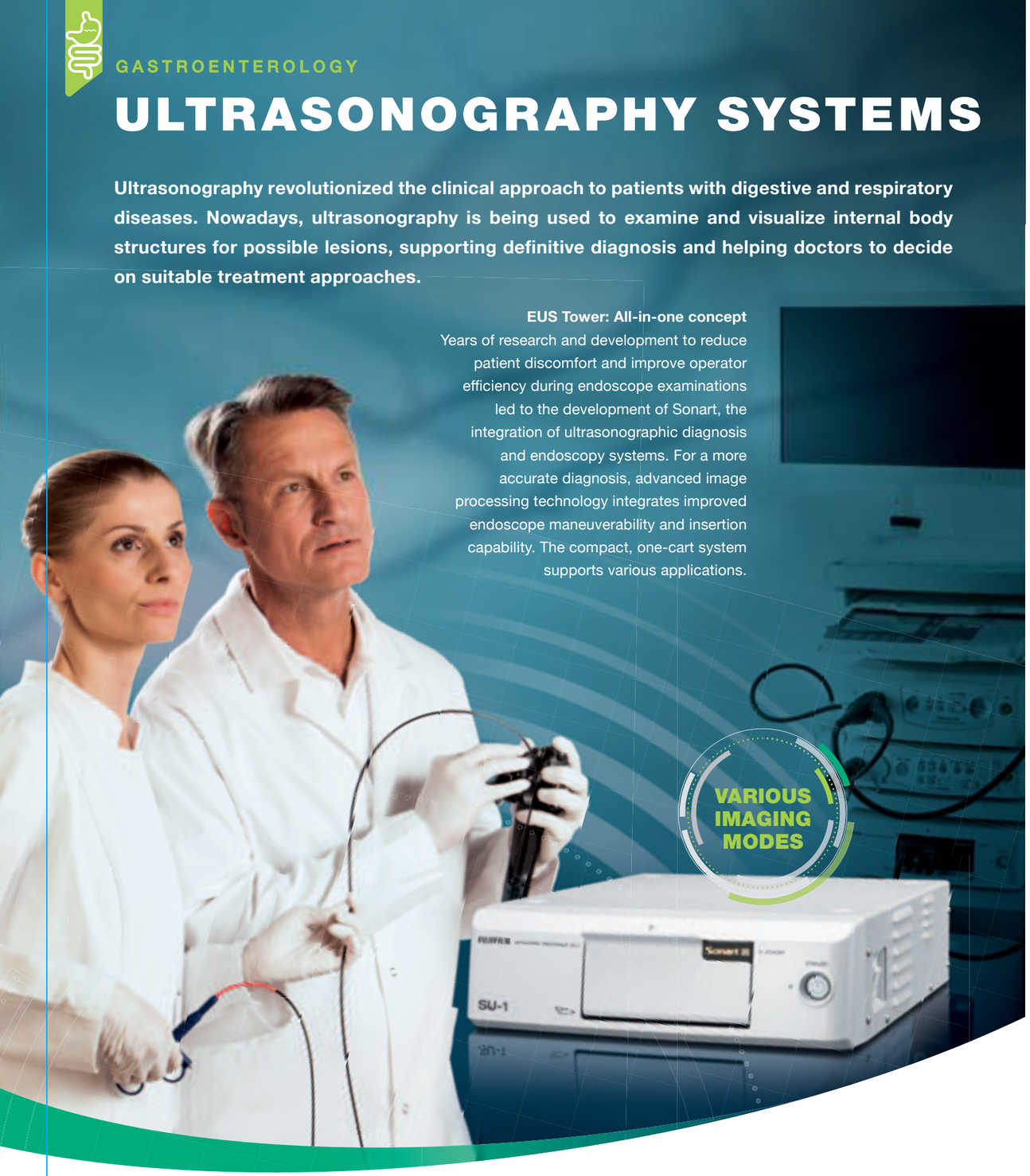
EPX

GASTROENTEROLOGY

ULTRASONOGRAPHY SYSTEMS

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

EUS Tower: All-in-one concept
Years of research and development to reduce patient discomfort and improve operator efficiency during endoscope examinations led to the development of Sonart, the integration of ultrasonographic diagnosis and endoscopy systems. For a more accurate diagnosis, advanced image processing technology integrates improved endoscope maneuverability and insertion capability. The compact, one-cart system supports various applications.



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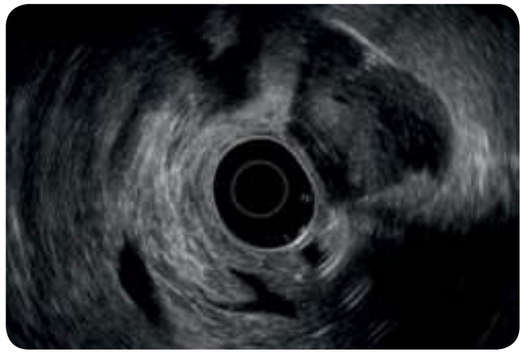
WITH NUMEROUS MODES

HIGH RESOLUTION B-MODE -H- -S-

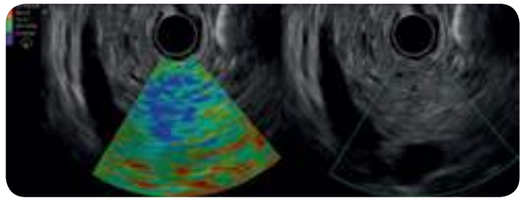
With a new ultrasonic wave transmission and reception design, the development of a proprietary image processing technology and high-sensitivity transducers, the SU-1 ultrasonic processor achieved a significant improvement in high resolution B-mode images. By pinpointing the affected area, small vessels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


EG-580UR


EG-580UT

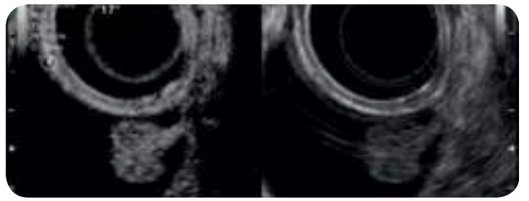
ELASTOGRAPHY* -H-

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.


Elastography Mode B Mode

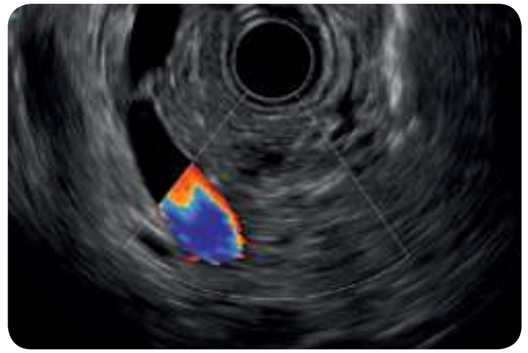
CHI (CONTRAST HARMONIC IMAGING)* -H-

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

COLOR DOPPLER -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 artifacts.



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

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

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

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

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

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 × 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, 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, EB-530US
	Radial	EG-580UR, EG-530UR2
Frequency		5 MHz, 7.5 MHz, 10 MHz, 12 MHz
Image input terminal	DVI image input terminal	1

* CHI and Elastography modes are available only in SU1-H-

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, flow speed
Storage	Data formats	JPEG, TIFF, DICOM, AVI
	Storage device	Internal/External memory (USB)
	Cine memory	Storage/Playback
Accessories		Keyboard and foot switch

Easy-to-clean flat keyboard for use by touch panel and touch pad, also available with trackball keyboard

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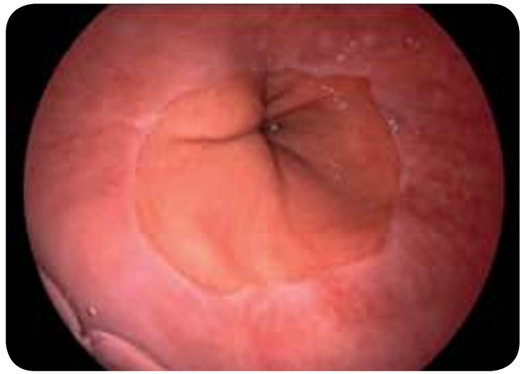
HIGH RESOLUTION IMAGES WITH ULTRASONIC ENDOSCOPES

Both the EG-580UR and EG-580UT are equipped with a Fujifilm high resolution image sensor, High Resolution Super CCD which, together with a highly efficient optical lens, allows a wide range of sensitive and brilliant quality images to be obtained to help diagnosis.



EG-580UR

EG-580UT

NEW OPERATION-FRIENDLY CONTROL PORTION: G7 GRIP

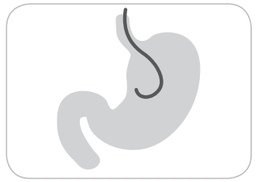
We have renewed the layout and size of the components of the control portion and repositioned the angulation knobs to increase accessibility from the grip. The new G7 grip is designed to have an easy and comfortable feel to optimize performance and minimize stress during clinical procedures.

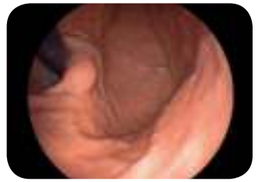
NEW HIGHLY MANEUVERABLE FLEXIBLE PORTION

Materials for the flexible portion have been completely reviewed, especially in terms of their elasticity, in order to enhance maneuverability and insertion capabilities as well as torquability. Using the exclusive new material, the flexible portion is designed to be stiffer at the control portion side and become gradually more flexible towards the distal end side for better pushability.

EXCELLENT INSERTION CAPABILITY

The newly designed structure of the flexible portion improves insertion capability. A small bending radius provides better observation.





IN PURSUIT OF BALLOON OPERABILITY

An air/water and suction button inflates and deflates water into and from the balloon.

EUS

ULTRASONIC ENDOSCOPE **EG-580UR** Radial Scan

FICE

Equipped with a slim distal end diameter of 11.4 mm and a shorter rigid section, the echo-endoscope is highly flexible. The enhanced maneuverability makes it easier to approach in retroflex observation of fundus and cardia, and with its round tip design and a direct forward view, the EG-580UR can be inserted into narrow lumen – just like a standard gastroscopic procedure. Furthermore the upward bending capability of 190° allows maximum flexibility.

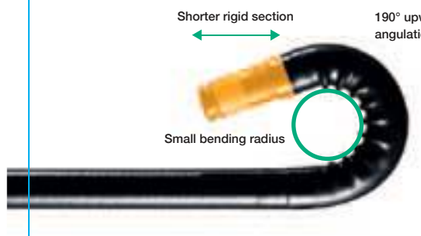
Endoscopic functions

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

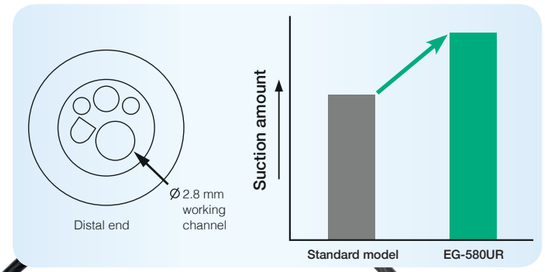
Scanning mode	Color Doppler, Power Doppler, Pulse Doppler, B mode, M mode
Scanning method	Electronic radial scan
Scanning angle	360° (in combination with SU-1)
Frequency	5 MHz / 7.5 MHz / 10 MHz / 12 MHz

GREAT APPROACH ABILITY



Ø2.8 MM WORKING CHANNEL SUPPORTING IMPROVED SUCTION POWER

The use of a larger working channel of Ø 2.8 mm allows easy suctioning of blood and bodily fluids, providing a clear view during endoscopic observation.



SLIM DISTAL END 11.4 MM

ULTRASONIC ENDOSCOPE **EG-580UT** Curved Linear Array

FICE

The therapeutic echo-endoscope with a small bending radius and a short rigid section enables easier access to the targeted areas. A wide puncture range assists for FNA. The 140° endoscopic field of view, together with the 40° forward oblique view, reduces stress during the insertion process. Combined with a powerful 150° up angulation, the scope is suitable for both observation and therapeutic procedures.

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

WIDE PUNCTURE RANGE

40° FRONT OBLIQUE, 140° ENDOSCOPIC FIELD

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 clicked into place. This function reduces strain on the 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 upwards forceps elevator

EUS

MONITORS

FUJIFILM
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19“ LCD monitor

FUJIFILM CDL 1909A HD endoscopy

Input signal	DVI-D, VGA, S-Video, Composite
Output signal	S-Video, Composite
Dimensions (W x H x D)	432 x 353 x 84,5 mm
Weight	7 kg

19“ HD type LCD monitor for FUJIFILM Endoscope system

RADIANCE® HD 19“ HD TV1080 endoscopy

High-Definition, Full Multi-Modality

Input signal	HD-SDI x 2, DVI-D, DVI-I, RGBS, YPbPr, S-Video, composite, VGA
Output signal	HD-SDI, DVI, RGBS, YPbPr/VGA, S-Video, Composite
Dimensions (W x H x D)	465 x 400 x 98 mm
Weight	6.8 kg

26“ HD type LCD monitor with LED Backlight for FUJIFILM Endoscope system

RADIANCE® G2 26“ HD TV1080 endoscopy

High-Definition, Color Correction Technology (CCT), Full Multi-Modality

Input signal	HD-SDI x 2, DVI-D, DVI-I, RGBS, YPbPr, S-Video, Composite, VGA
Output signal	HD-SDI, DVI, RGBS, YPbPr/VGA, S-Video, Composite
Dimensions (W x H x D)	673 x 418 x 88 mm
Weight	7.3 kg

26“ HD type High Brightness LCD monitor with LED Backlight for FUJIFILM Endoscope system

RADIANCE® G2 HB 26“ HD TV1080 endoscopy

High-Definition, Color Correction Technology (CCT), Full Multi-Modality

Input signal	HD-SDI x 2, DVI-D, DVI-I, RGBS, YPbPr, S-Video, Composite, VGA
Output signal	HD-SDI, DVI, RGBS, YPbPr/VGA, S-Video, Composite
Dimensions (W x H x D)	673 x 418 x 88 mm
Weight	8.2 kg

24“ HD type LCD monitor with LED Backlight for FUJIFILM Endoscope system

RADIANCE® G2 24“ HD TV1080 endoscopy

High-Definition, Color Correction Technology (CCT), Full Multi-Modality

Input signal	HD-SDI x 2, DVI-D, DVI-I, RGBS, YPbPr, S-Video, Composite, VGA
Output signal	HD-SDI, DVI, RGBS, YPbPr/VGA, S-Video, Composite
Dimensions (W x H x D)	597 x 401 x 100 mm
Weight	7.1 kg

27“ HD type LCD monitor with Ultra bright LED Backlight

RADIANCE® ULTRA 27“ HD TV1080 endoscopy

High-Definition, Color Correction Technology (CCT), Full Multi-Modality, Gorilla Glass front panel

Input signal	HD-SDI x 2, DVI-D, DVI-I, RGBS, YPbPr, S-Video, Composite, VGA
Output signal	HD-SDI, DVI, RGBS, YPbPr/VGA, S-Video, Composite
Dimensions (W x H x D)	678 x 445 x 84 mm
Weight	8.9 kg

Monitors might not be available in all countries. Please check with your local partner.
Radiance monitors include FUJIFILM BIOS for the best performance.

COMPLETING **ACCESSORIES**

ESD KNIFE **FLUSH KNIFE / FLUSH KNIFE BT**

Aimed at achieving enhanced usability and ideal for all physicians from ESD trainees to skilled practitioners.

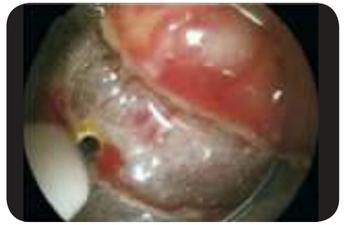
ONE KNIFE COVERS FROM MARKING TO ARREST OF BLEEDING, ACHIEVING HIGH VERSATILITY

One single knife allows procedures including 1. marking, 2. incision, 3. dissection and 4. arrest of bleeding. The high versatility improves operation abilities and cost efficiencies. Safer and more efficient treatment is achieved by using the protruding knife length best suited for each treatment area.

1. Marking

2. Mucosal incision

3. Submucosal dissection



4. Arrest of bleeding

WATER JET SYSTEM MAINTAINS A CLEAN TIP

The water jet system keeps the tip of the knife clean by washing off debris and lesion tissue adhering to the tip, thereby maintaining the sharpness of the knife throughout the treatment.

FLUSH KNIFE

FlushKnife has a slim electrode portion tip with high voltage concentration, which provides stronger dissection capability. The working length is 180 cm. For the 1.5 mm and the 2.00 mm tip a working length of 230 cm is also available.

FLUSH KNIFE BT

The tip is designed to enhance safety and treatment capability. FlushKnife BT has a ball tip which produces good traction, enabling the target tissue to be dissected smoothly. The ball tip touches a wider part of the tissue and arrests bleeding more efficiently. The working length is 180 cm. For the 1.5 mm and the 2.00 mm tip, a working length of 230 cm is also available.

FlushKnife

3 mm | 2.5 mm | 2 mm | 1.5 mm | 1 mm

FlushKnife BT

3 mm | 2.5 mm | 2 mm | 1.5 mm

RECOMMENDATION FOR USE

Diameter	1 mm	1.5 mm	2 mm	2.5 mm	3 mm
Esophagus	○	◎	◎	△	△
Stomach	○	◎	◎	◎	○
Colon	○	◎	◎	△	△

◎ Best indication ○ Possible Use △ Indicated in certain cases

Examples of the suitable protruding lengths are suggested by Takashi Toyonaga M.D. of Kobe University Hospital.
A physician must take consideration of each condition of the area or lesion to be dissected when selecting a protruding knife length.

ESD KNIFE **CLUTCH CUTTER**

The 3 in 1 ESD tool for efficient and safe therapeutic procedures – incision, dissection and coagulation.

FEATURES

- Toothed jaws – to grip the mucosa membrane securely and efficiently
- Rotatable distal jaws – for a precise lesion approach
- Insulated outer edge – for a safe procedure without damaging tissue
- Two jaw lengths – available in 3.5 mm and 5 mm

Product name	ClutchCutter single use	
Identifier	-35-	-50-
Jaw length	3.5 mm	5.0 mm
Working length	1,800 mm	
Maximum diameter of insertion portion	2.7 mm	
Forceps channel diameter of compatible endoscope	2.8 mm or more	

SHORT TYPE HOODS **ST HOODS**

ST hoods help to perform safer and more efficient ESD and POEM by preventing the surgical field of view being blocked by mucosa and provide a clear view during the endoscopic treatment.

FEATURES

- Shorter distance from the endoscope tip and wider inner diameter of the distal end than current hoods enhance visibility
- Easier insertion of accessories without guide ditch is available for all series of endoscopes
- Equipped with two drains

Model	DH-28GR	DH-29CR	DH-30CR
Outer diameter	11.8 mm	13.0 mm	14.8 mm
Inner diameter of tip	7.0 mm	7.0 mm	7.0 mm
Tip length	8.0 mm	8.0 mm	8.0 mm
Drains	2	2	2
Applicable endoscope	EG-590WR EG-530WR EC-580RD M,L	EG-590ZW, M, L EC-530MP EC-530LP	EC-600WM, WI, WL EC-590WM4, WI4, WL4, EC-590ZW3 M/L, EC-530WM3, WI3, WL4

WATER PUMP **JW-2**

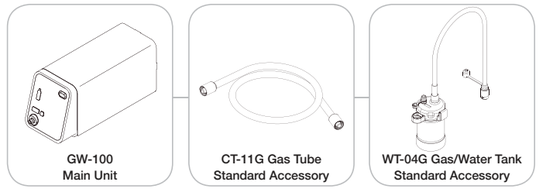
Specially designed for advanced endoscopic examination. Proprietary piping technology enables water flow to be quickly stopped. The one litre water bottle enables prolonged water use and minimizes the need for constant refilling.

CO_2 INSUFFLATOR **GW-100**

Fast resorption of insufflated CO_2 for timesaving and patient friendly examinations. Our latest GW-100 CO_2 insufflator offers clinicians an optimized and easy-to-handle procedure as well as maximum patient comfort.

FEATURES

- Direct connection to hospital's medical CO_2 pipeline as well as to medical CO_2 cylinder
- Easy-to-use CO_2 flow rate switching function and compact design
- 2 controlled flow rate settings



GW-100
Main Unit

CT-11G Gas Tube
Standard Accessory

WT-04G Gas/Water Tank
Standard Accessory

Tube sets for the connection of GW-100 to the medical gas pipeline and medical gas cylinders are available.

ACCESSORIES

ACCURATE **VISUALIZATION**

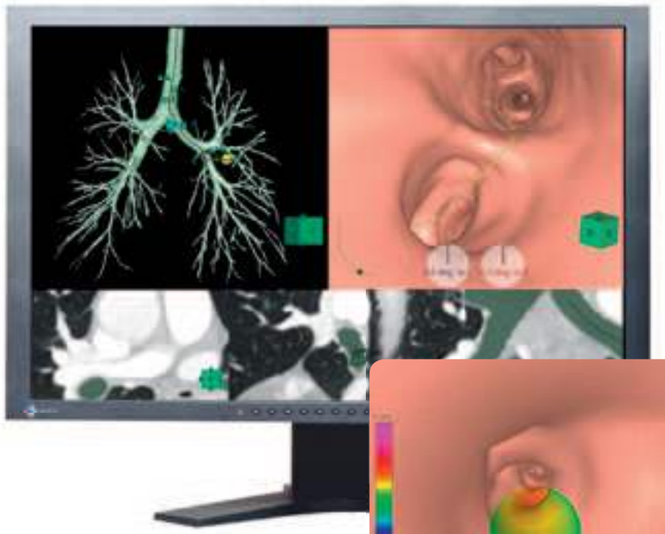
3D imaging and virtual simulation

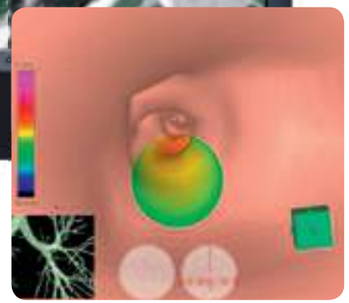
SYNAPSE 3D

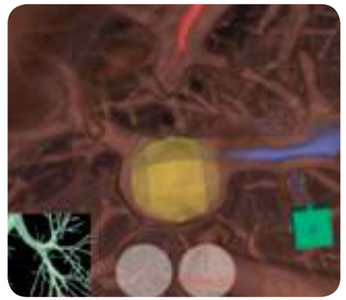
SYNAPSE 3D uses unique image recognition technologies to automatically extract organs and vessels. The technology enables automatic extraction of lung, lung lobes the bronchus, pancreas, the colon etc. This feature makes possible a large variety of 3D analyses, such as visualization of chronic respiratory disease.

Powerful Simulation Tool

The Bronchus Scope Simulation and Fine Bronchus Extracting functions make it possible to find an optimum bronchus path to reach a lung nodule by using the volume data collected with CT and then to simulate the insertion of the bronchoscope into this path.







SYNAPSE® 3D

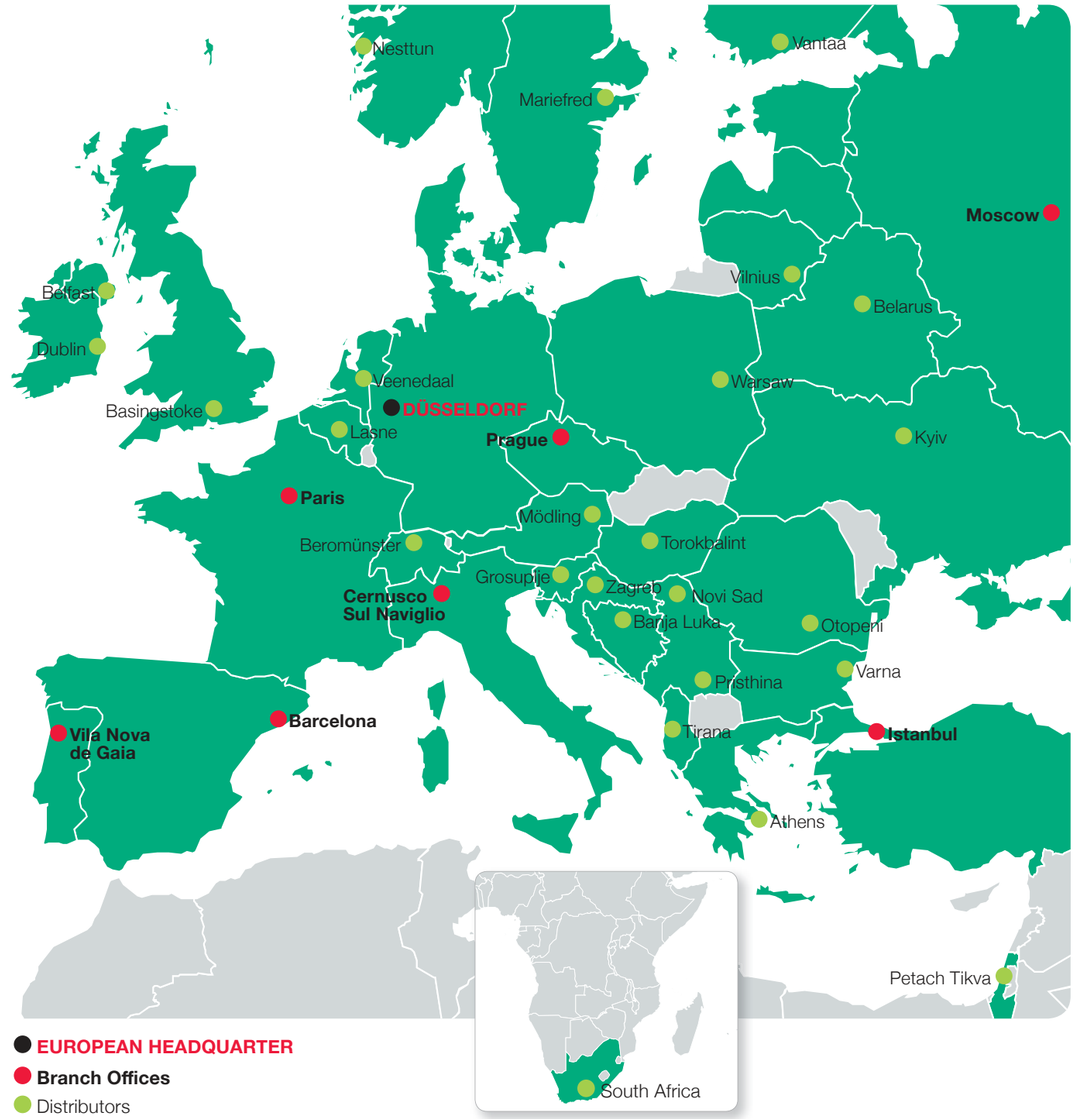
SYNAPSE

POWERED BY **PARTNERSHIP**

FUJIFILM
Value from Innovation

Fujifilm, a pioneer in the field of diagnostic imaging and information systems for medical institutions, operates in about 50 group companies in Europe and employs around 5.000 people engaged in R&D, manufacturing, sales and service. Dialogue and continuous partnership have a special significance for us and at our locations.

Our products and technologies are constantly being developed in agreement with you to meet your specific needs. Your contact persons are available for you – no matter where you are. Living this kind of partnership inspires us to do all we can to make the world a little better.



PRODUCT **RECOMMENDATIONS**

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Recommended endoscopes for different gastrointestinal segments	Diseases	Special endoscopes to cope with these diseases	Special features of the special endoscope	Endoscopes for further diagnosis
Oesophagus				
EG-600ZW EG-600WR EG-580RD EG-580NW2 EG-580UR EG-580UT EG-590WR EG-590ZW EG-530FP EG-530CT EG-530WR EG-530D EG-530NW EG-530NP	Zenker diverticle	EG-580RD; EG-530CT; EG-530D	WCH* 3.2; WCH 3.8; dual channel	
	Other oesopahgus diverticle	EG-530CT; EG-530D	WCH 3.8; dual channel	
	Barrett oesophagus	EG-600ZW; EG-600WR	Magnification: high image quality	EG-580UT/UR
	Oesophagitis	EG-600ZW; EG-600WR	Magnification: high image quality	
	Mallory Weiss syndrome	EG-580RD		
	Oesophagus varices	2 endoscopes prepared		
	Tumors	EG-600ZW; EG-600WR	Magnification: high image quality	EG-580UT/UR
	Squamous cell carcinoma	EG-600ZW; EG-600WR	Magnification: high image quality	EG-580UT/UR
	Achalasia / POEM	EG-580RD		
	Stenosis	EG-580NW2; EG-530NP	Small outer diameter	EG-580UT/UR
Gastro intestinal				
EG-600ZW EG-600WR EG-580RD EG-580NW2 EG-590WR EG-590ZW EG-530FP EG-530CT EG-530WR EG-530D EG-530NW EG-530NP	Gastritis	EG-600ZW; EG-600WR	Magnification: high image quality	
	Dyspepsia	EG-600ZW; EG-600WR	Magnification: high image quality	
	Ulcus ventriculi	EG-600ZW; EG-600WR	Magnification: high image quality	EG-580UT/UR
	Ulcus perforation	EG-580RD; EG-530CT; EG-530D	WCH 3.2; WCH 3.8; dual channel	
	Ulkus carcinomas	EG-600ZW; EG-600WR	Magnification: high image quality	EG-580UT/UR
	Ulkus bleeding	EG-580RD; EG-530D	WCH 3.2; dual channel	
	Gastro carcinomas	EG-600ZW; EG-600WR	Magnification: high image quality	EG-580UT/UR
	Praekanzerosen	EG-600ZW; EG-600WR	Magnification: high image quality	EG-580UT/UR
	Stomach exit stenosis	EG-580NW2; EG-530NP	Small outer diameter	
	Vessel abberation	EG-530CT; EG-530D	WCH 3.8; dual channel	EG-580UT/UR
	Fundus varices	EG-580RD	Smart Bend	
Duodenum				
EG-600ZW EG-600WR EG-580RD EG-580UT/UR EG-590WR EG-590ZW EG-530FP EG-530CT EG-530WR EG-530D EG-530NW EG-530NP	Duodenitis	EG-600ZW; EG-600WR	Magnification: high image quality	
	Duodenal ulcer	EG-600ZW; EG-600WR	Magnification: high image quality	
	Coeliac disease	EG-600ZW; EG-600WR	Magnification: high image quality	
	Bleeding	EG-580RD; EG-530CT; EG-530D	WCH 3.2; WCH 3.8; dual channel	
	Tumors	EG-600ZW; EG-600WR	Magnification: high image quality	EG-580UT/UR

* Working Channel

Recommended endoscopes for different gastrointestinal segments	Diseases	Special endoscopes to cope with these diseases	Special features of the special endoscope	Endoscopes for further diagnosis
Small Intestine				
EN-580T EN-580XP	Tumors of the small intestine	EN-580T	Bigger working channel	
	Erosive and ulcerated defects	EN-580XP	Small outer diameter	
	Bleeding	EN-580T	Bigger working channel	
	Vessel anomaly	EN-580T	Bigger working channel	
Biliary Tract and Pancreas				
EN-580T EN-580XP EG-580UT/UR ED-530XT8	Bile duct stones	ED-530XT8		EG-580UT/UR
	Cholelithiasis	ED-530XT8		
	Postoperative alterations	ED-530XT8		
	Malignant stenosis	ED-530XT8		EG-580UT/UR
	Tumors of the papilla	EG-600ZW; EG-600WR; ED-530XT8	Magnification: high image quality	
	Environmental Tumors	EG-600ZW; EG-600WR	Magnification: high image quality	EG-580UT/UR
	Infections	EG-600ZW; EG-600WR	Magnification: high image quality	
Colon				
EC-600WM/WI/WL EC-600ZW M/L EC-580RD M/L EN-580T EN-580XP EG-580UT/UR EC-590WM4/WI4/WL4 EC-590ZW3 M/L EC-530FI/FL EC-530WM3/WI3/WL3 EC-530MP/LP EC-530DM/DL ES-530WE EC-450BI5	Colorectal polyps	EC-600ZW M/L; EC-600WM/WI/WL	High image quality; magnification	
	Flat adenomas	EC-600ZW M/L	High image quality; magnification	
	Malignant Tumors	EC-600ZW M/L	High image quality; magnification	EG-580UT/UR
	Intestinal inflammation	EC-600ZW M/L; EC-600WM/WI/WL	High image quality; magnification	
	Irritable bowel syndrome	EC-600ZW M/L; EC-600WM/WI/WL	High image quality; magnification	
	Ulcerative colitis	EC-600ZW M/L; EC-600WM/WI/WL	High image quality; magnification	
	Crohn's disease	EC-600ZW M/L; EC-600WM/WI/WL	High image quality; magnification	
	Hemorrhoids	2 endoscopes prepared		
	Anal diseases	EC-580RD M/L	Smart Bend	

All endoscopes are compatible with the video processors EPX-3500HD and EPX-4450HD.
All endoscopic ultrasonography systems are compatible with processor SU1.

This overview contains selected information and recommendations and does not purport to be complete.

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