OLYMPUS®

Your Vision, Our Future

EVIS EXERA II

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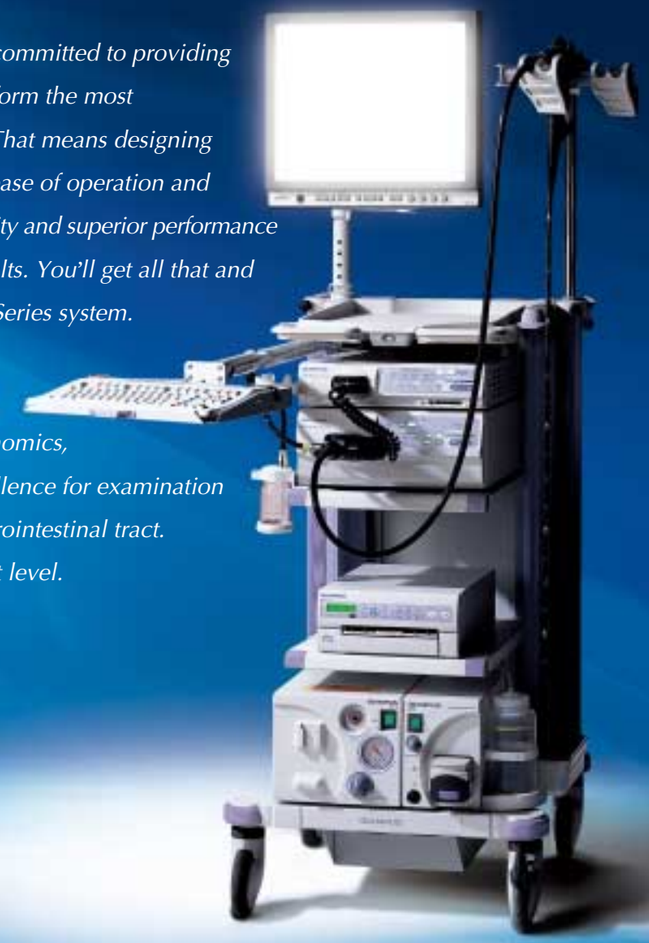
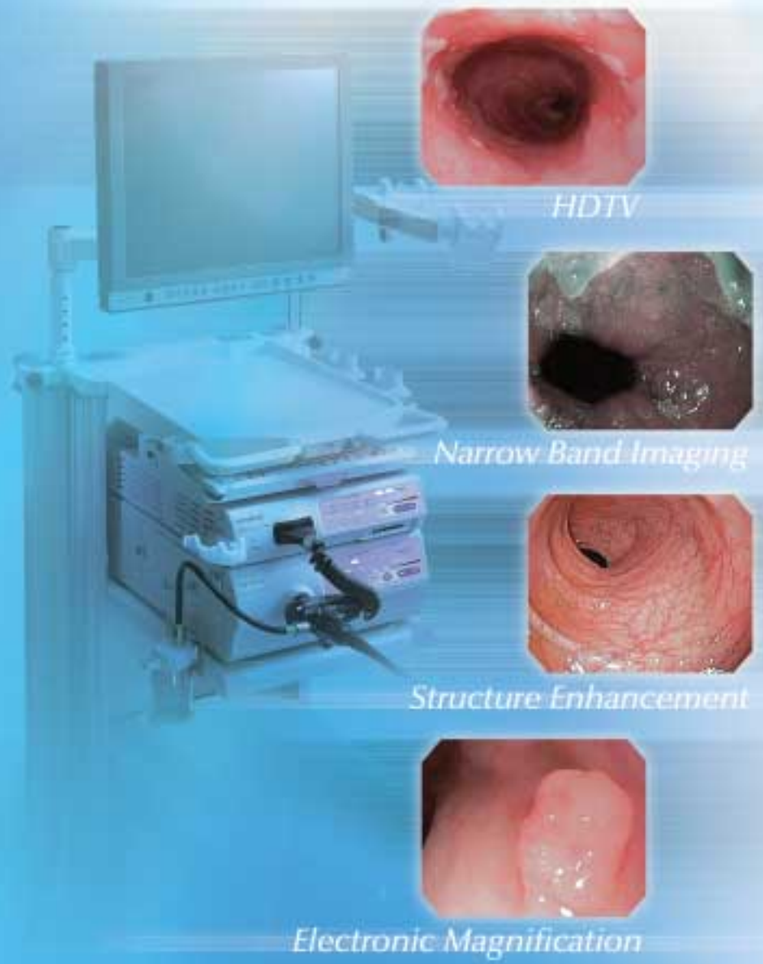
Advanced performance and refined design take your endoscopic procedures to the next level

As the pioneer of endoscopy, Olympus is committed to providing physicians with the tools they need to perform the most challenging procedures with confidence. That means designing endoscopes and accessories that provide ease of operation and maneuverability, while offering the top quality and superior performance needed to achieve consistent, reliable results. You'll get all that and more with the all-new EVIS EXERA II 180 Series system.
Featuring unprecedented image quality,
enhanced optics, ultra-slim design,
expanded compatibility, and refined ergonomics,
EVIS EXERA II sets a new standard of excellence for examination and treatment in the upper and lower gastrointestinal tract.
EVIS EXERA II. Take endoscopy to the next level.



The image clarity and advanced scope capabilities that will allow you to redefine endoscopy

Imaging Performance

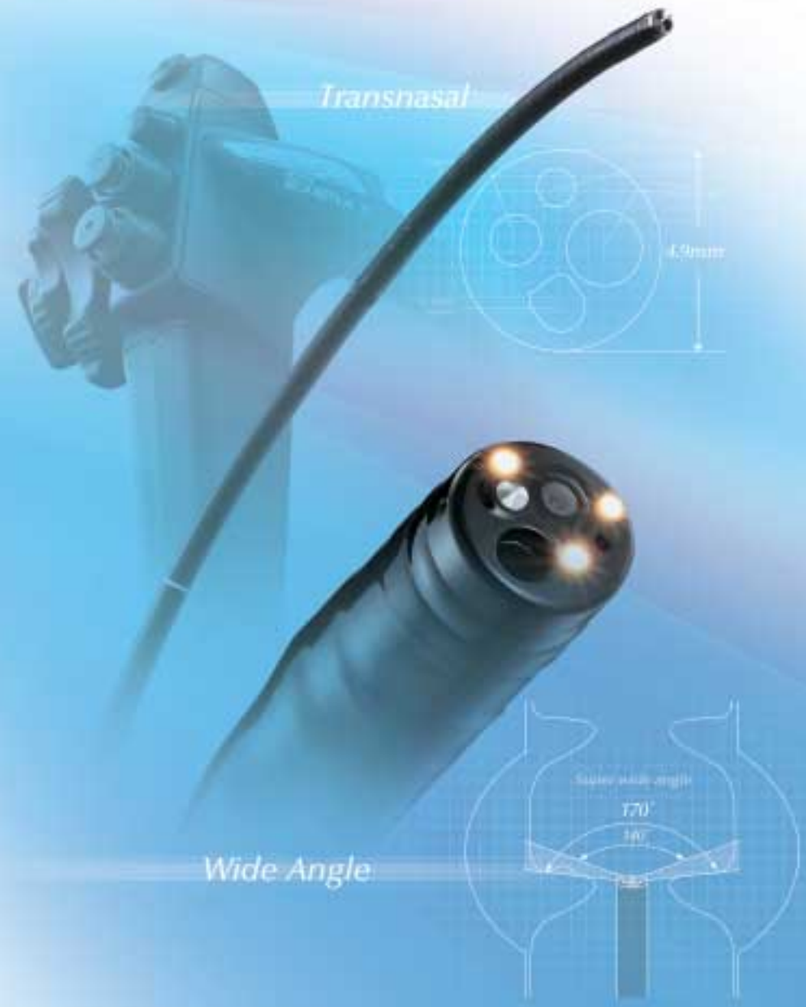


See better and see more

With EVIS EXERA II, Olympus is creating a new paradigm with endoscopic imaging and processing capabilities that have evolved to a new level. Advanced new features like HDTV* put phenomenal imaging power at your disposal, enabling even minute capillaries and subtle mucosal structures to be displayed with life-like clarity. Narrow Band Imaging gives you the ability to observe pit patterns and differentiation of lesions. Improved structure enhancement makes it even easier to discern subtle tissue textures and color variations on the mucosa. Convenient Close Focus capability makes it possible to bring the scope tip so close to a site that the resulting macro images are virtually equal to magnified images*. And, of course, if you need to magnify images, you can — electronic magnification capability is available to enlarge images even more. And for more efficient image management, EVIS EXERA II is equipped with digital output, enabling images to be transferred, archived, and transmitted in a digital format. Therefore, there's no loss of quality and annotations can easily be added for convenient data management on your PC.

* Available with the GIF-H180and CF-H180AL/I only

Scope Performance



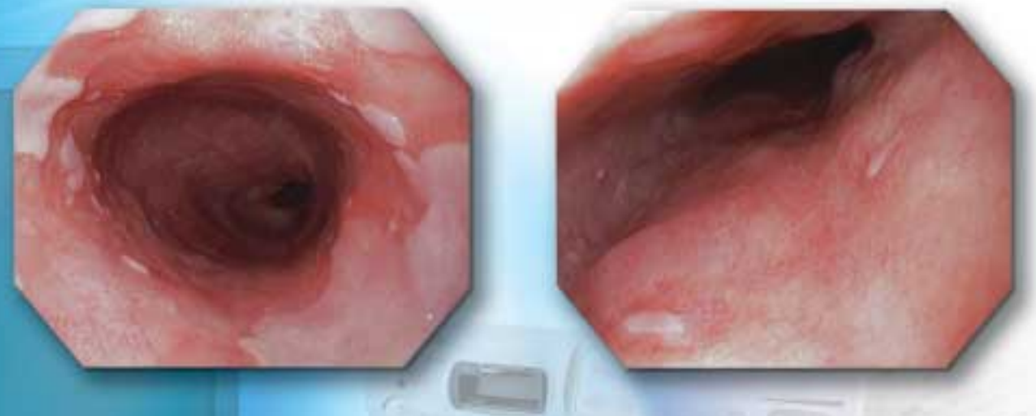
A broad portfolio of upper GI scopes

The EVIS EXERA II upper GI scope portfolio includes a super-slim scope that's the first in the world to boast distal end and insertion tube diameters of less than 5 mm. Even more impressive is the fact that this size reduction was achieved while improving the image quality. This portfolio also includes a state-of-the-art HDTV upper GI scope able to depict fine capillaries and subtle mucosal structures with the highest possible fidelity and high-quality non-HDTV scope.

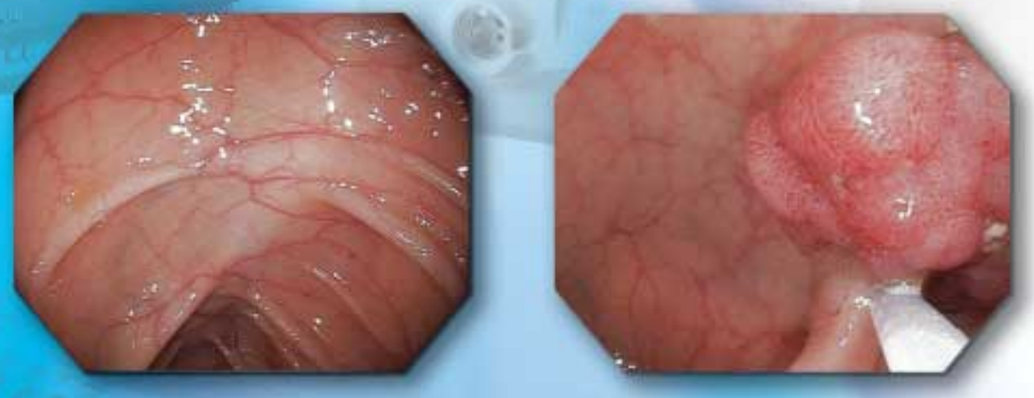
Wide choice of versatile lower GI scopes

The EVIS EXERA II lower scope portfolio not only includes an HDTV scope, it offers a dramatically improved non-HDTV scope as well. New enhancements assure today's finest performance at every level. A scope with 170° field of view is available for wide-angle observation in the colon while a new slim scope offers significantly improved image quality and a built-in water jet function without any increases in size or diameter.

High-definition imaging is the new endoscopy standard



HDTV images of upper gastrointestinal tract



HDTV images of lower gastrointestinal tract

High-resolution HDTV images*

In our quest for the best-possible image quality, it was only natural that we add HDTV compatibility to EVIS EXERA II's impressive features. The HDTV images produced by EVIS EXERA II are composed of more than double the number of scanning lines and horizontal pixels used in conventional video systems. This hundred-fold increase in image information produces a picture that's incredibly sharp and detailed with virtually no detectable pixelation or artifacts. With HDTV, it is now possible to accurately render capillaries and subtle mucosal structures throughout the screen area. This enhanced image quality may improve diagnostic capability and procedural efficiency.

* Available with the GIF-H180 and CF-H180AL/I only

What is HDTV?

HDTV — or high-definition television — offers image quality comparable to film and all the convenience and flexibility of conventional video. With 1,080 effective scanning lines of picture information, compared to 480 for NTSC and 576 for PAL, HDTV delivers picture quality that is more than twice as good as conventional TV. Increased pixel density produces a smooth clear picture whose remarkable detail, and natural colors are unmarred by the pixelation seen in lower-resolution images. This superb quality and realism makes HDTV ideal for demanding imaging applications such as endoscopy.

Conventional TV image HDTV image

Note: The images shown above are simulated pictures.

Improved structure enhancement

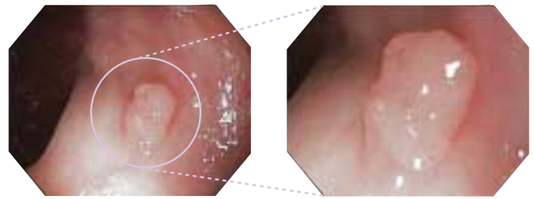
The improved structure enhancement function provides additional support to the excellent diagnostic capability available with both conventional and HDTV imaging. By electronically increasing the sharpness of the endoscopic image, while using sophisticated processing algorithms to suppress noise, structure enhancement highlights subtle tissue textures and slight color variations on the mucosa. In addition to the popular Type A structure enhancement, a new structure enhancement function has been provided. The conventional Type A is ideal for observation of larger mucosal structures with high contrast while the new Type B is suitable for observation of vascular structures in the upper gastrointestinal tract.

Electronic magnification

High resolution allows significant image enlargement with minimum loss of image quality. The CV-180's built-in electronic magnification system allows you to enlarge moving images by 1.2X or 1.5X. zoom into the area of interest at the touch of a button on the scope or on the keyboard.

Superior image quality of HDTV makes the difference

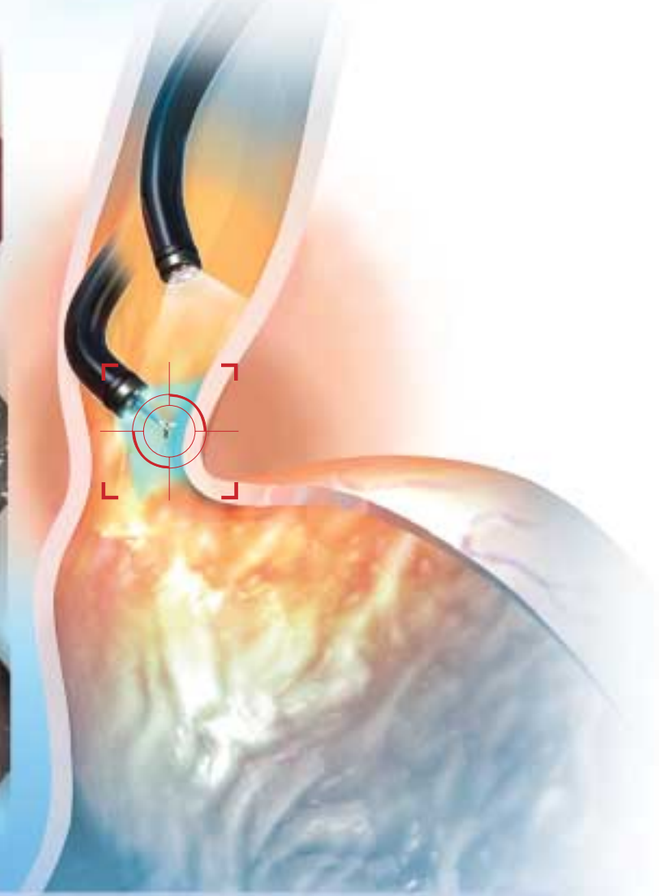
Partial enlargement of HDTV image



1.0 X 1.5 X

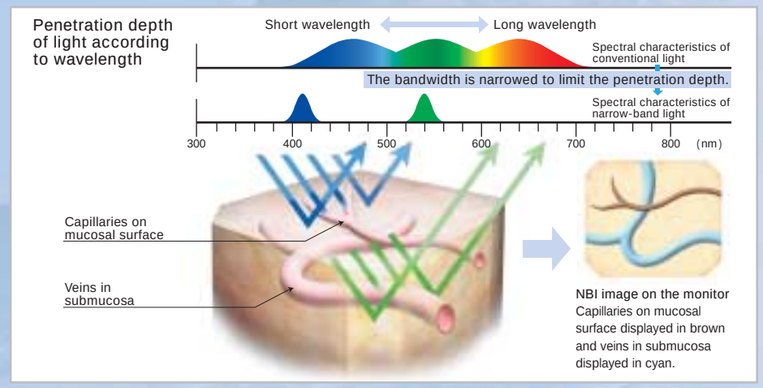
Mucosal details can finally be visualized with innovative NBI — Narrow Band Imaging

NBI may improve target biopsy yield



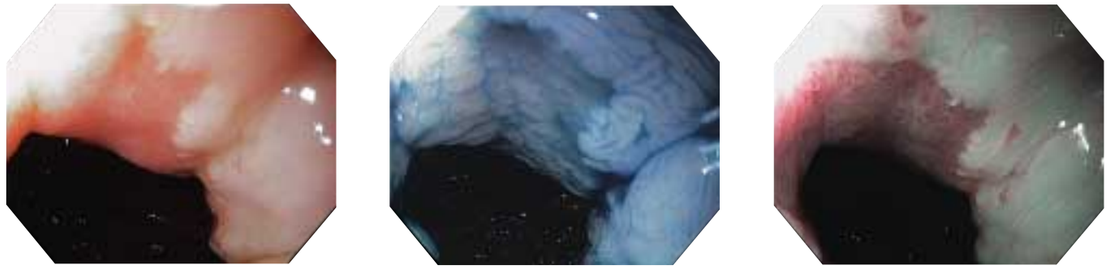
What is NBI?

NBI is an optical image enhancement technology that enhances the visibility of vessels and other structures on the mucosal surface. Because the gastrointestinal tract is mainly composed of blood vessels and mucosa, narrow-band illumination, which is strongly absorbed by hemoglobin and penetrates only the surface of tissues, is ideal for enhancing the contrast between the two. As a result, under narrow-band illumination, capillaries on mucosal surface are displayed in brown and veins in submucosa are displayed in cyan on the monitor.



Highlighting hidden tissue structures

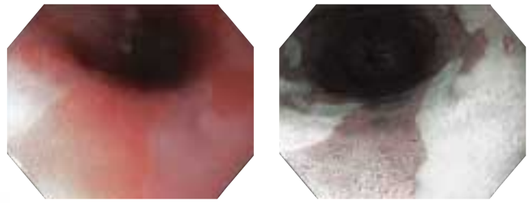
EVIS EXERA II's NBI capability enhances the visibility of capillaries and other structures on the mucosal surface. The improved visibility made possible by NBI may improve examination efficiency by helping to decrease examination time and reduce unnecessary biopsies. You can switch between regular and NBI images at the touch of a button on the scope or on the front panel of the light source.



NBI in the upper gastrointestinal tract

In the upper gastrointestinal tract, NBI helps identify areas of intestinal metaplasia within columnar mucosa in the distal esophagus. It can also identify specific patterns associated with Barrett's esophagus, which may represent lesions of high-grade dysplasia. NBI may also make it possible to more accurately target biopsies in patients with Barrett's esophagus.

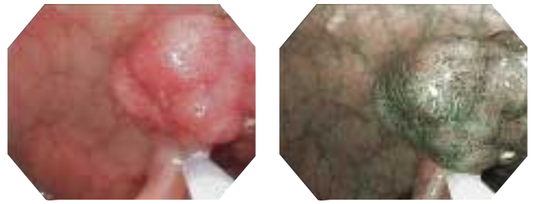
NBI images of upper gastrointestinal tract



NBI in the lower gastrointestinal tract

In the lower gastrointestinal tract, NBI emphasizes pit patterns and may prove to be a possible replacement for chromoendoscopy in the colon. In addition to helping improve detection of lesions in the colon, NBI helps identify suspicious areas for target biopsies in patients with ulcerative colitis.

NBI images of lower gastrointestinal tract



Superior picture quality, enhanced functionality, and slim designs offer improved performance in upper gastrointestinal endoscopy

GIF-H180

Sets the new standard for upper gastrointestinal endoscopy with superb, high-fidelity HDTV imaging and Close Focus observation in a slim insertion tube that supports Narrow Band Imaging.

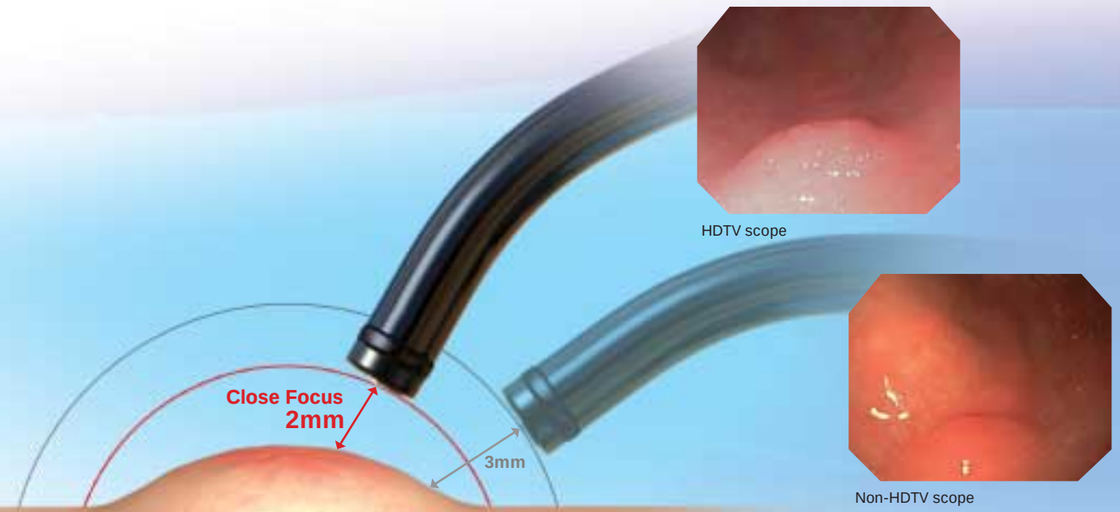
GIF-Q180

Versatile model with excellent image quality and large display size. Compatible with previous processors, and featuring a new, slimmer 8.8 mm diameter design.

GIF-N180

Super-slim next-generation scope with incredibly slim distal-end and insertion tube diameter of only 4.9 mm.

SlimSIGHT



HDTV imaging in the upper gastrointestinal tract

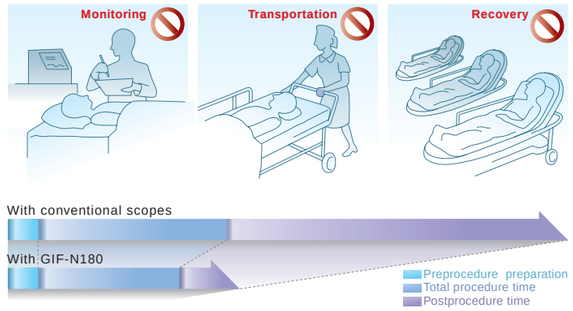
Thanks to its HDTV-compatible CCD, the GIF-H180 is able to deliver the true-to-life quality and heightened image detail you need to enhance your diagnostic accuracy and increase your diagnostic capabilities. HDTV renders even the tiniest details of the upper gastrointestinal tract with super-sharp clarity and precision color. When the images are displayed on the dedicated LCD monitor, eye fatigue is kept to a minimum.

Close Focus for detailed observation

The GIF-H180's HDTV-compatible CCD combined with the optical system's extended depth of field achieves the same effect as with electronic magnification simply by bringing the scope tip as close as 2 mm from the observation area.

Extra-slim 4.9 mm distal end and insertion tube

The distal-end and insertion tube diameter of the GIF-N180 measures a mere 4.9 mm. It's the first time that a videoscope has broken the 5mm barrier. This super-slim scope makes it possible to minimize pain during examinations even with little or no sedation and even facilitates transnasal insertion. Reduction in patient recovery time will contribute to improvement in daily procedural efficiency.



Reduction in patient recovery time will contribute to improvements in daily procedural efficiency

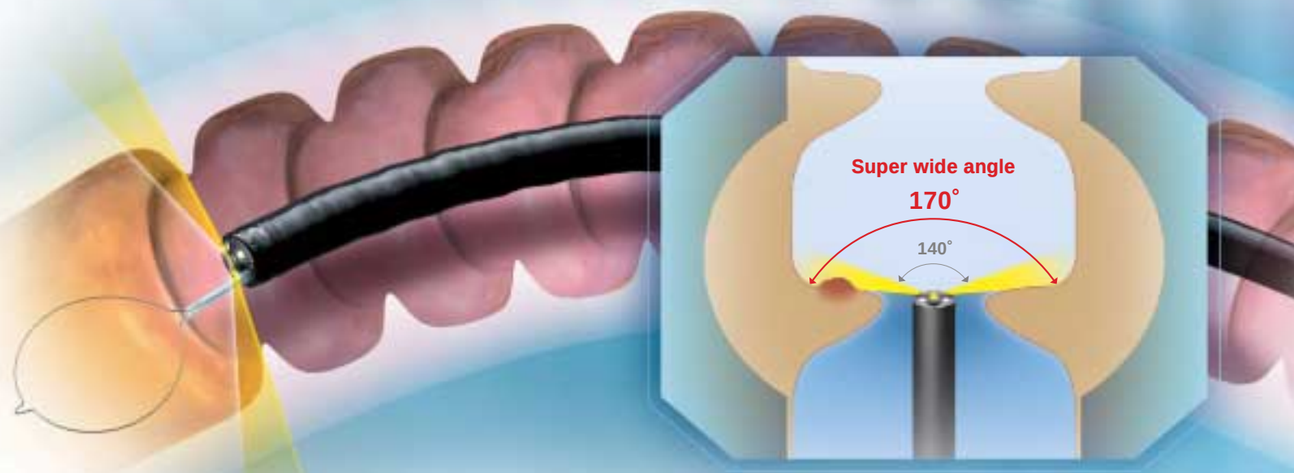
Super-slim design facilitates transnasal insertion

A line of colonoscopes equipped with the latest advanced features and enhanced imaging performance

CF-H180AL/I
Defining a new standard for colonoscopes with high-resolution HDTV-compatible CCD, Close Focus, Narrow Band Imaging compatibility, and extra-wide 170º field of view.

CF-Q180AL/I
All-purpose scope enhances versatility in colonoscopy with extra-wide 170º field of view, high image quality, and excellent treatment capability with a 3.7 mm diameter channel.

PCF-Q180AL/I
Long-awaited new-generation slim scope with improved image quality and auxiliary water function.



HDTV imaging in the lower gastrointestinal tract

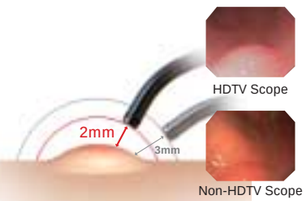
The images from the CF-H180AL/I's HDTV-compatible CCD will help increase diagnostic capability, enabling the colon interior to be rendered with improved clarity, detail, and life-like fidelity. Viewing the images on the dedicated LCD monitor may also reduce eye fatigue.

Improved image quality for slim colonoscope

The picture quality of the slim PCF-Q180AL/I has been significantly improved compared to its predecessor without increasing the insertion tube diameter.

Close Focus for a more detailed view

With its extended depth of field, the CF-H180AL/I's enhanced optical system is able to leverage the imaging power of the HDTV-compatible CCD to facilitate close-up observation as close as 2 mm from the site.



Wide-angle 170° field of view

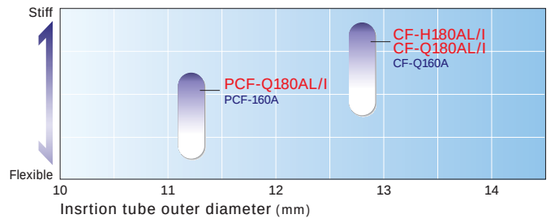
The fields of view of the CF-H180AL/I and CF-Q180AL/I have been increased to 170º from the 140º available with preceding models. By making it possible to view the surfaces behind the folds of the colon with minimal angulation of the scope tip, this wide-angle capability may help decrease examination time.

Auxiliary water jet

All colonoscopes are provided with an auxiliary water jet. This convenient feature removes mucus and debris inside the colon to provide a clear view at all times. Simply press the button on the scope or the footswitch unit to flush the colon.

Range of stiffness of Variable Stiffness insertion tubes

Insertion tube flexibility



Versatile, expandable excellence

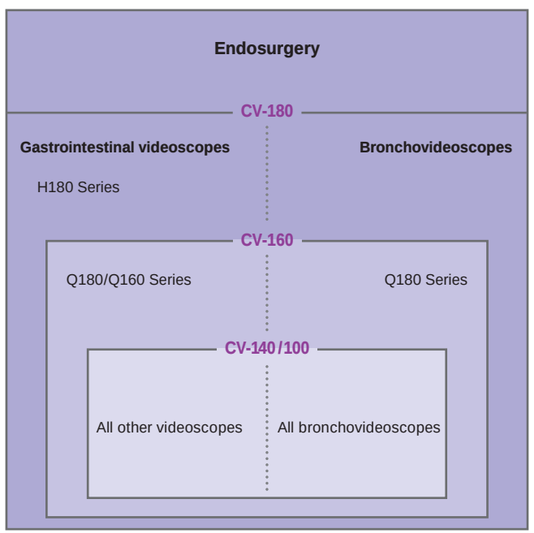
Compatibility with other specialty systems

In addition to gastrointestinal endoscopy, the EVIS EXERA II 180 Series system can be used with other specialties such as endosurgery and bronchoscopy. It also has backward compatibility with the EVIS 130, 140, and 160 Series scopes.

Automatic Iris

To cope with different light surfaces, conventional light metering systems have to be adjusted according to the subject. But with EVIS EXERA II, an automatic iris is provided to minimize the need to adjust the light metering system during a procedure.

Backward compatibility



When using forceps

Peak Iris

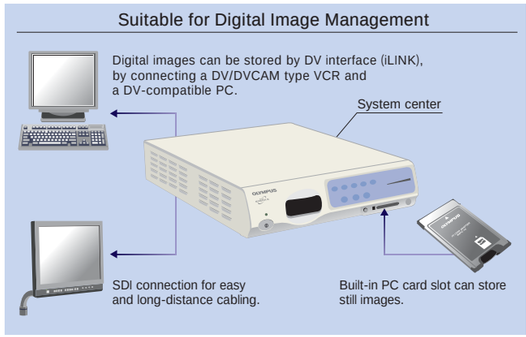
Automatic Iris

Picture-in-picture display

A convenient sub-screen can be displayed in four positions. You can display any combination of endoscopic, ScopeGuide, fluoroscopic, and ultrasound images in the sub-screen and main screen.

Digital output

A practical digital solution, EVIS EXERA II features a built-in PC card slot that allows you to store still images on removable media. An SDI connection is provided for easy, long-distance cabling. Digital images can be stored via DV interface (iLINK) by connecting a DV/DVCAM type VCR and DV-compatible PC.



Scope ID function

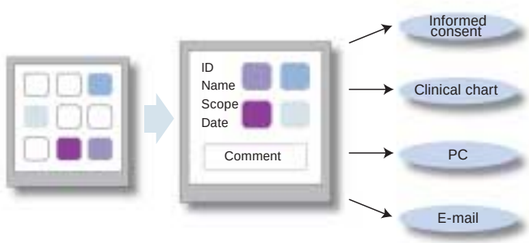
Model numbers, serial numbers, basic specifications, and white balance settings can all be stored on a memory chip in each EVIS EXERA II scope. The stored data is automatically transferred to the video processor whenever the scope is connected. Necessary adjustments are made automatically and all usage data is updated.

Start-up display

Annotation function

Annotations can be added to still images recorded on a PC card, and can be printed out and saved as html files without damaging the image quality. When the examination is finished, those images are called up on the monitor and some are selected for printing. The data recorded in the scope ID function and the processor is entered automatically. Comments are entered from the processor's keyboard.

Annotation function's flow



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