

# 7000 SYSTEM

ELUXEO



**FUJIFILM**



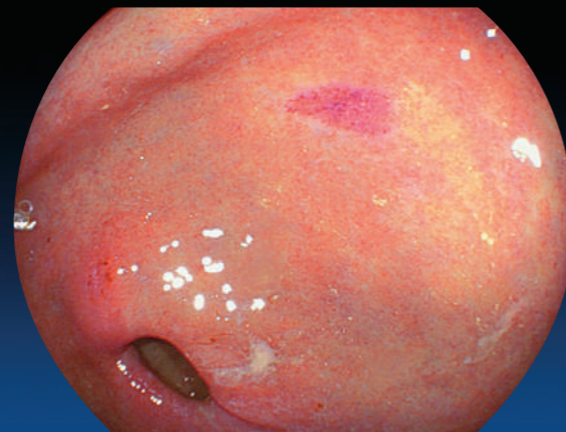


This is a simulated image. Actual image will differ.

# Welcome to BLI & LCI World



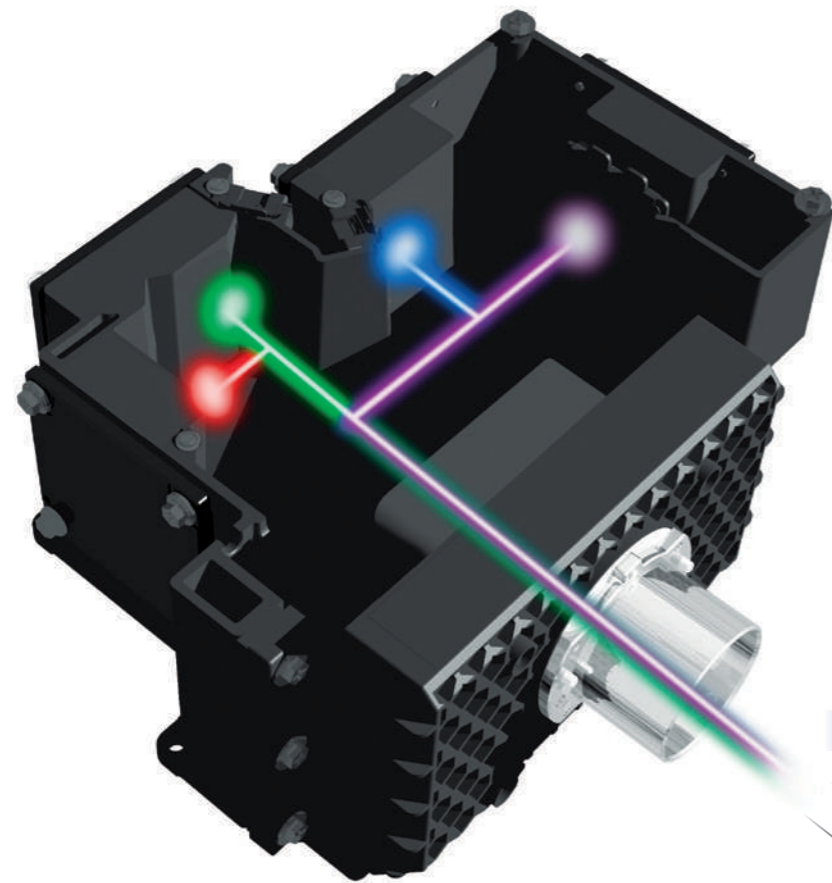
**BLI** Blue Light Imaging



**LCI** Linked Color Imaging

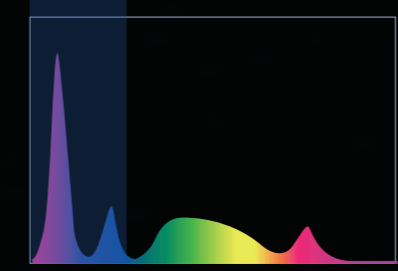
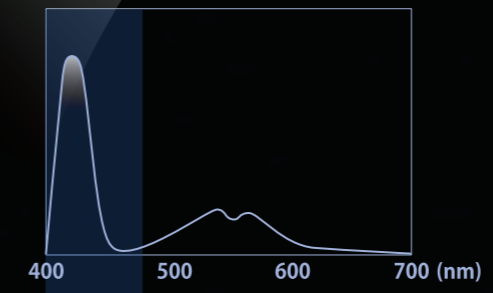
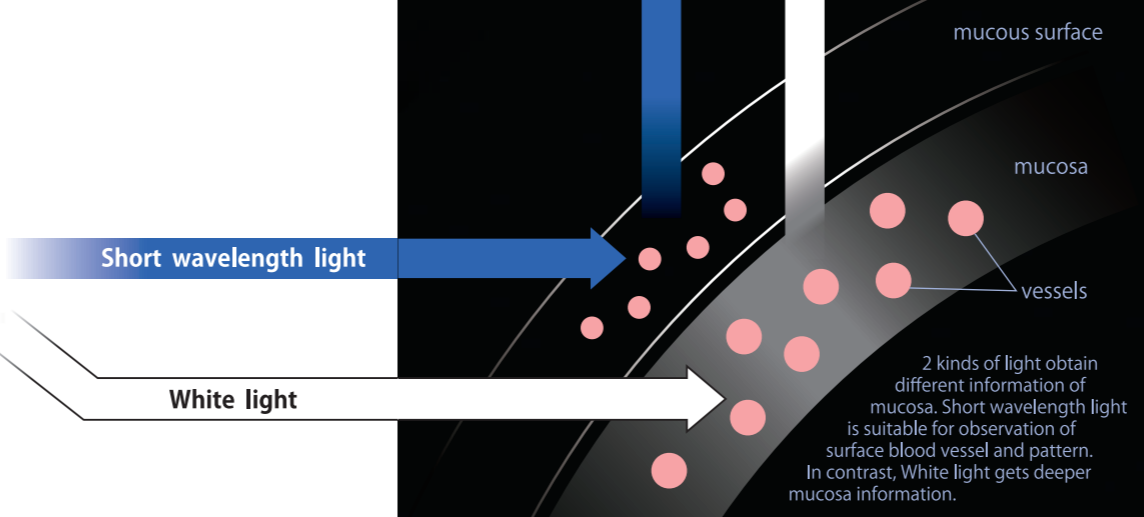
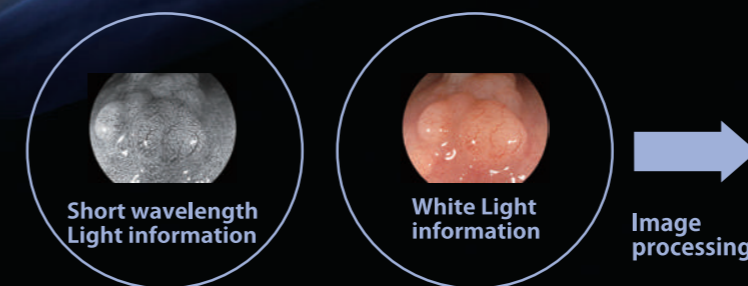
- For Better Diagnosis
- For Better Usability

# For Better Diagnosis



## Multi-Light Technology

This technology enables creation of images suitable for intended purposes through image processing combined with accurate control of intensity ratio between multiple lights. 7000 system employs four types of high-intensity LEDs: Blue LED creating short wavelength light and Red/Green/Blue LEDs combined into white light. Multi-light technology performs signal processing for images obtained by white light and short wavelength light to produce LCI and BLI images.



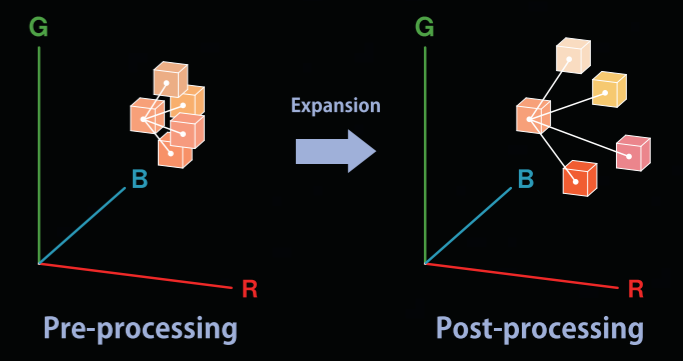
Short wavelength light around 410 nm is strongly absorbed by hemoglobin.

### White Light

### BLI

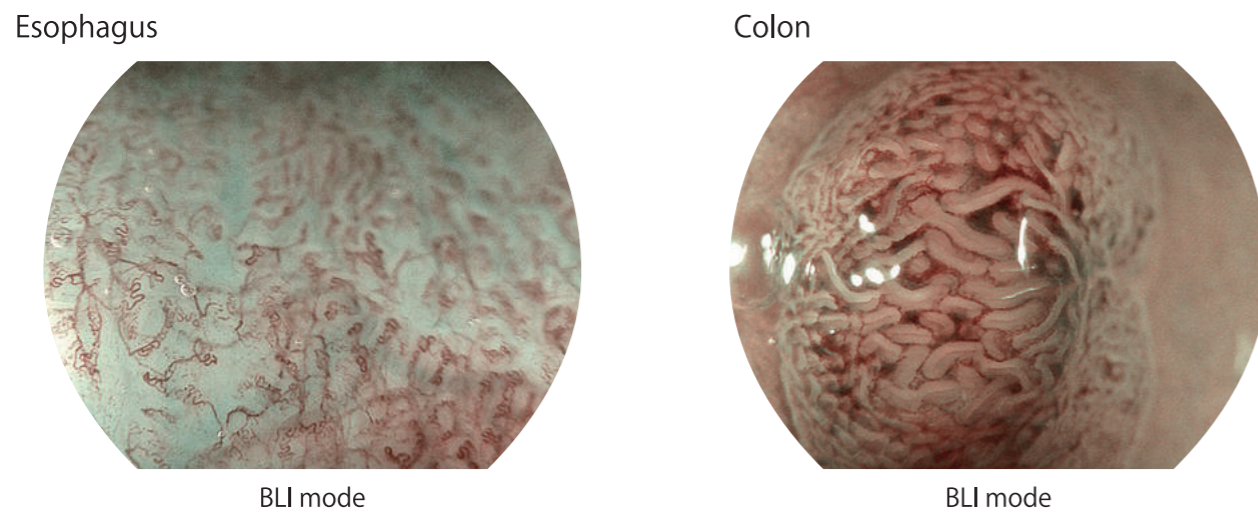
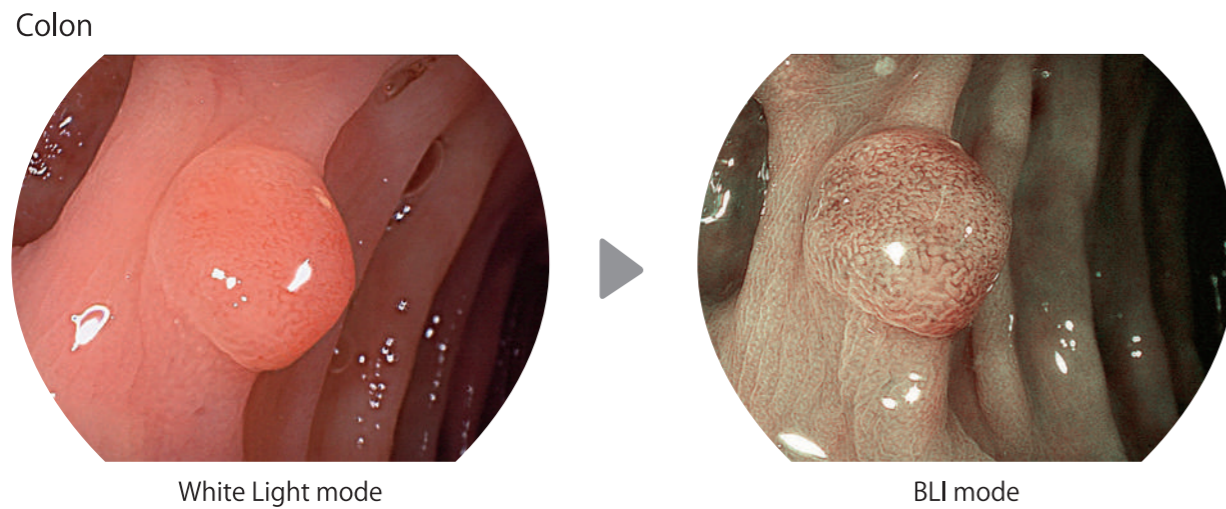
### LCI

#### LCI Principle



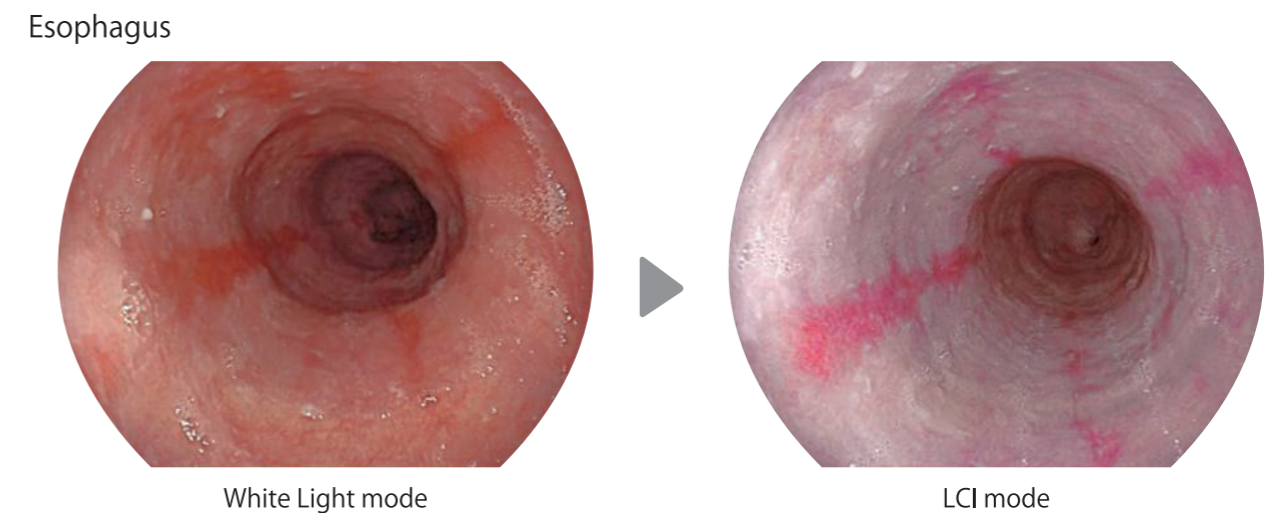
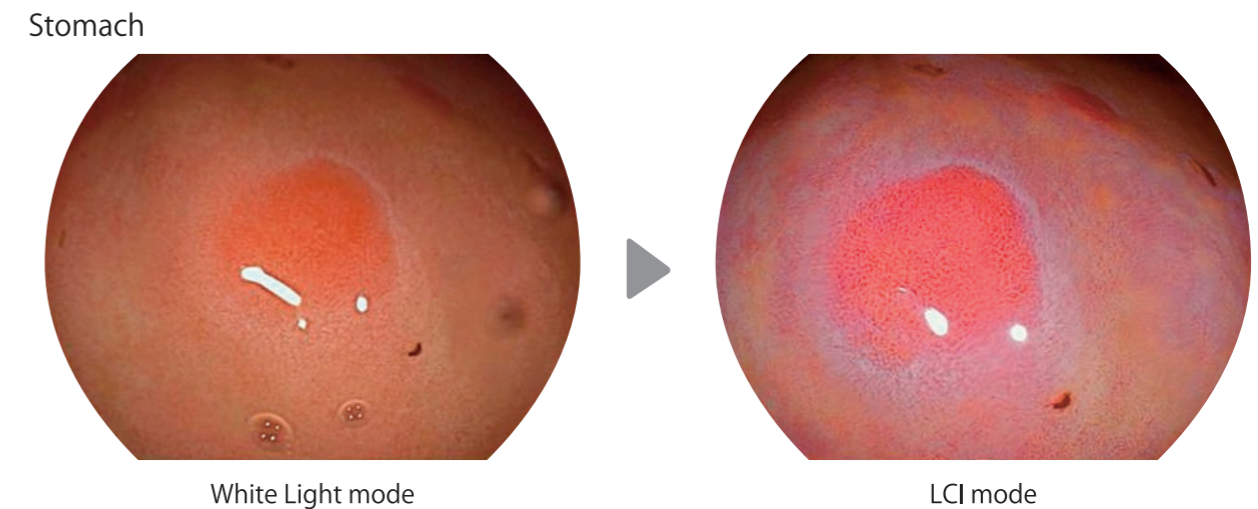
Expanding processing increases the color contrast nearby mucosal "Redness".

**1 BLI (Blue Light Imaging)** 



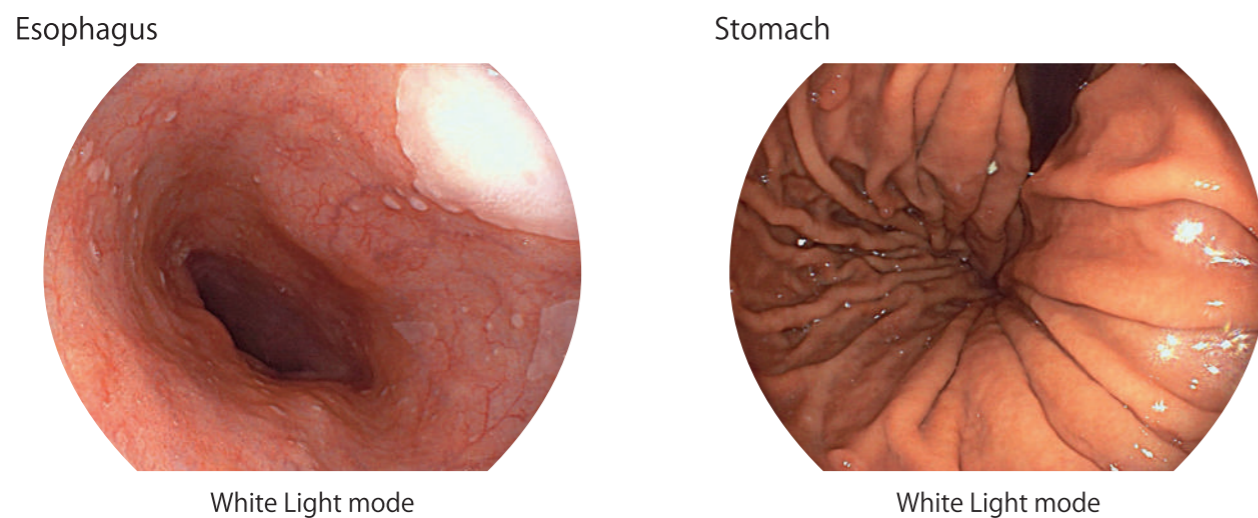
High contrast images suitable for observing microvascular and microsurface pattern are provided. Magnifying endoscopy is excellent with BLI.

**2 LCI (Linked Color Imaging)** 



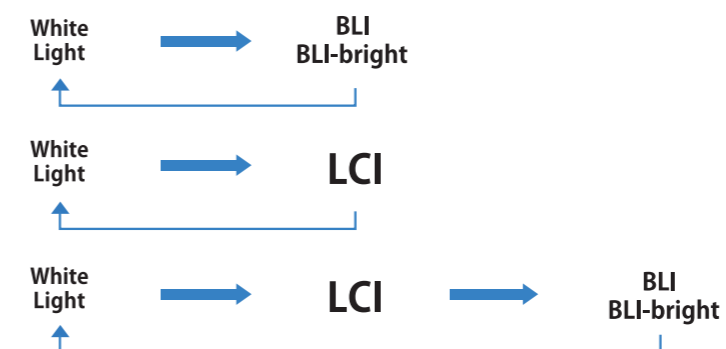
LCI would be helpful for detection with surface pattern and vessels. Slight color difference is visualized with natural tone, using "Red" component.

**White Light**



Bright, sharp, and stereoscopic images are accomplished with similar color tones to Xenon light source. Mega-pixel CMOS enables high-definition and quite low-level noise compatible.

**Observation modes can be switched by scope button.**

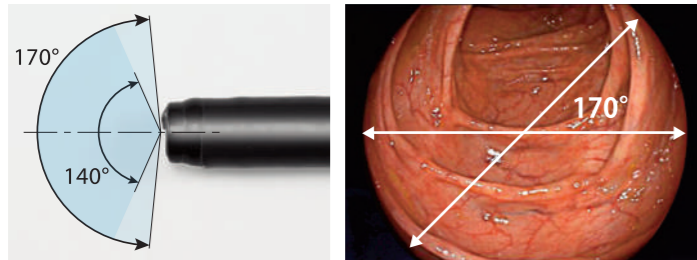


Scope button "2" enables observation modes to be switched in the default setting.



### 3 Wide 170° field of view

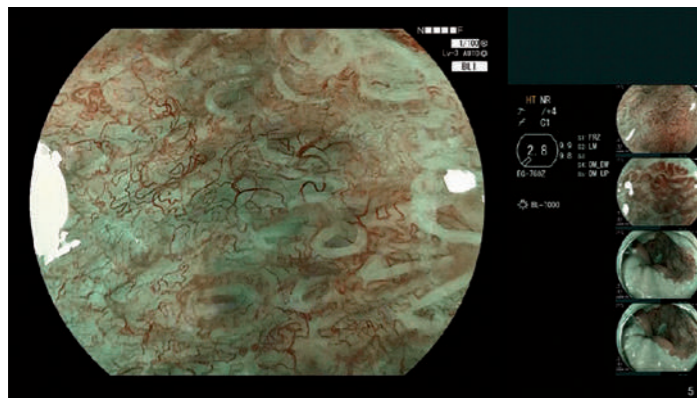
EC-760R-V/M, I, L, EC-760P-V/M, L and EC-760S-V/L



Even areas that are hard to observe such as the reverse side of folds could be observed and approached smoothly.

### 4 Megapixel CMOS + HDTV output

EG-760R, EG-760Z, EG-760CT, EC-760R-V/M, I, L, EC-760ZP-V/M, L, EC-760P-V/M, L, EC-760S-V/L and EC-760Z-V/M, L



Full HD display

High-definition images with quite low noise level are established by Megapixel CMOS sensor. It allows superior visualization for Full HD display.

### 5 Multi Zoom

EG-760Z, EC-760ZP-V/M, L and EC-760Z-V/M, L

#### Zoom function

Magnification Mode		Normal	Low	Middle	Hight	Maximum (x145*)
Step zoom	Continuous	[Progressive bar from Normal to Maximum]				
	2 Step	[Progressive bar from Normal to Low]				
	3 Step	[Progressive bar from Normal to Middle]				
	5 Step	[Progressive bar from Normal to Maximum]				

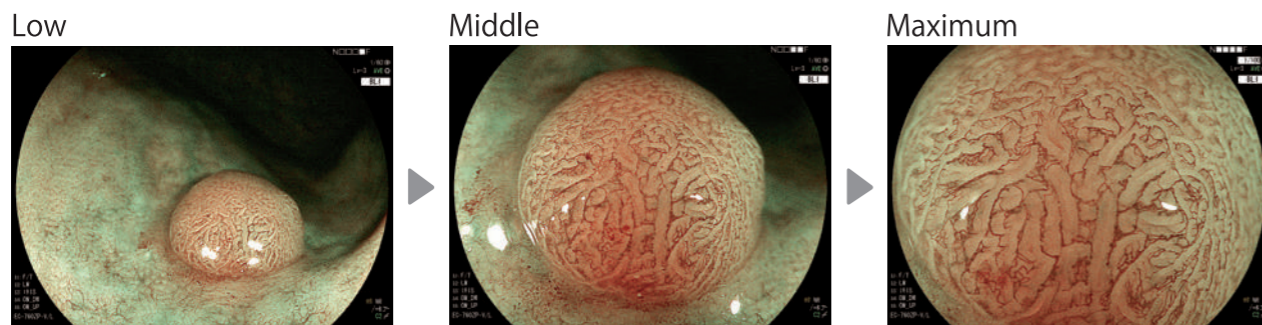
\*When using a 26 inch HD LCD monitor

With Continuous mode, Step Zoom mode of "2 Step", "3 Step" and "5 Step" are available. In this modes, images can be magnified in stages by simple press of button.

Switches for zoom in/out



#### Magnification Images



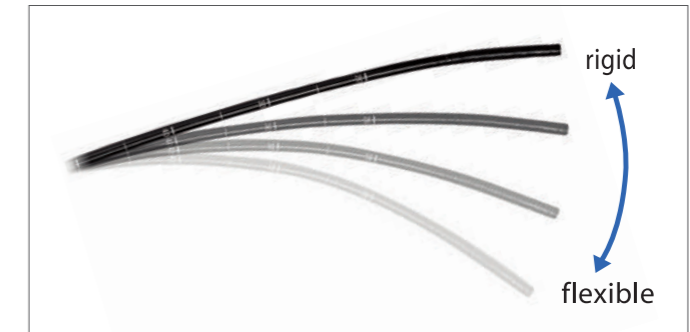
## For Better Usability

### 1 Flexibility Adjustment Mechanism

EC-760R-V/M, I, L, EC-760ZP-V/M, L, EC-760P-V/M, L, EC-760S-V/L and EC-760Z-V/M, L



● 1 2 3  
flexible rigid  
Index on flexibility adjustment ring

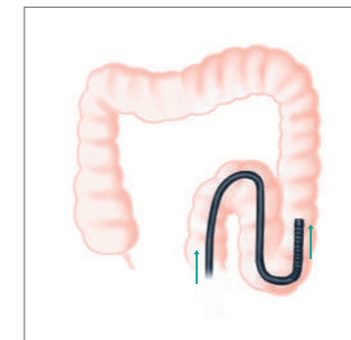


The flexibility of insertion tube can be adjusted with adjustment ring.

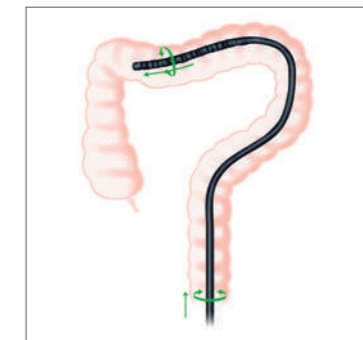
### Advanced Force Transmission

EC-760R-V/M, I, L, EC-760ZP-V/M, L, EC-760P-V/M, L, EC-740T/M, L, EC-760S-V/L and EC-760Z-V/M, L

The flexible portion is designed to transmit operator's movements, pushing and rotating, to the distal end of endoscope.



Passing the sigmoid colon

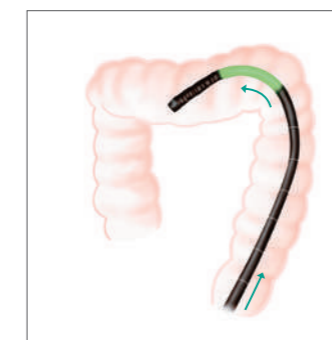


In deep insertion

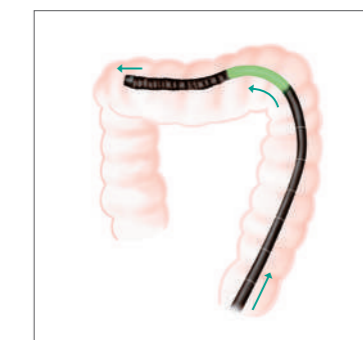
### Adaptive Bending

EC-760R-V/M, I, L, EC-760ZP-V/M, L, EC-760P-V/M, L, EC-740T/M, L, EC-760S-V/L and EC-760Z-V/M, L

The end of flexible portion is soft, allowing the scope to bend easily. Flexible portion is elastic, and easy to return to its straight shape.



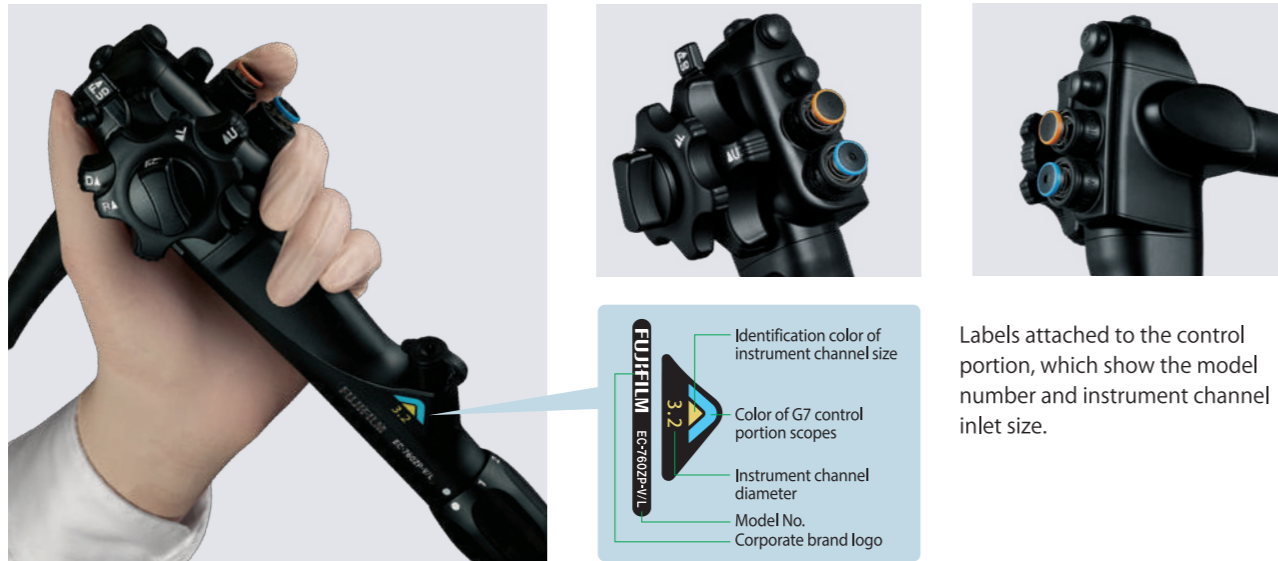
Bending easily



Returning to its straight shape easily

## 2 G7 control portion

G7 control portion is developed from ergonomics point of view. Scope has a rounded surface to fit the hand, and button layout makes intuitive operation possible.



## 3 One Step Connector with Contact-free Technology

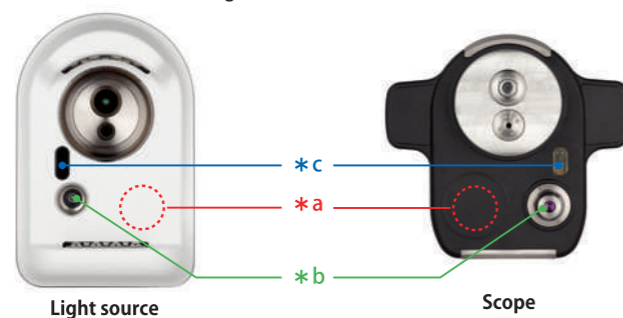


Scopes can be connected to light source in just 1 step operation. Scope cable connection is no longer required in setting up. One Step Connector enhances efficiency of clinical workflow.

### Contact-free Technology

This's the generic name of below 3 points. It means connectors do not need to touch to transmit power and image data. By this technology, durability and reliability of scopes is expected to improve.

- ▶ Power feed: Wireless electrical supply - \*a
- ▶ Image transmission: High speed optical laser - \*b
- ▶ Remote signal: infrared [IR] LED - \*c



## 4 Wide compatibility to conventional endoscope

Compatible with 700 series, 600 / 500 series endoscopes



700 Series

&



Conventional 600 / 500 Series

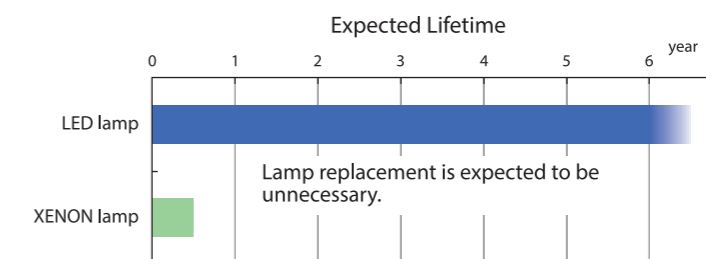
	BLI	BLI-bright	LCI	WLI	FICE
700 Series	○	○	○	○	○
600 / 500 Series	×	×	×	○	○

600/500 endoscopes can be used with White light and FICE mode.  
\* FICE : Flexible spectral Imaging Color Enhancement

## 5 Low-energy, long-lasting and bright light source

When compared to standard xenon light sources, the LED light source\* consumes about a third of the energy and lasts longer. Life time of the 4 LED light is expected for 6 years based on Fujifilm evaluation condition. Intensity of BL-7000 qualifies that of 300W Xenon lamp.

\*The warranty period is 1 year after date of purchase.

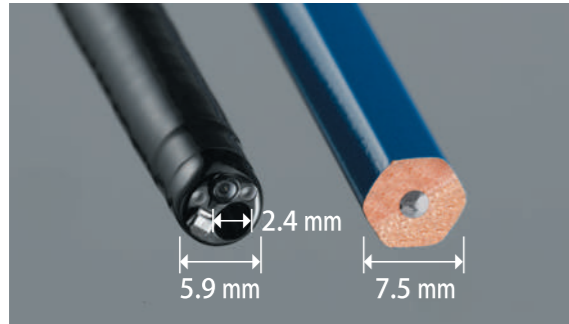


# For Various Needs

## 1 Small diameter scopes

Slim scopes offering various functions necessary for examinations, with a potential to alleviate patients' discomfort

Upper G.I. tract scope  
**EG-740N**



EG-740N, having 5.9-mm outer diameter and 2.4-mm instrument channel diameter, demonstrates good suction performance. Its slim body could support observations of stenosis and other areas where the scope insertion is difficult, offering a potential to alleviate patients' discomfort. Not only oral but also transnasal insertion is possible. EG-740N can be used for LCI/BLI as well as high-definition white light observation.

Lower G.I. tract scope  
**EC-760P-V/M, L**

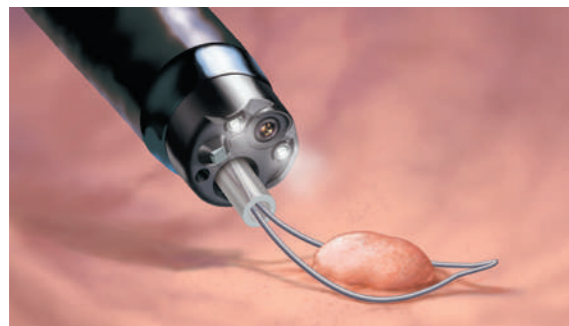


Loaded with Flexibility Adjustment Mechanism, Advanced Force Transmission and Adaptive Bending, these slim endoscopes 11.5 mm in diameter could be inserted into the body smoothly. A variety of feature including CMOS image sensor, LCI/BLI observations and water jet function make these scopes also useful as routine scopes.

## 2 Scopes for treatment

Accommodating various treatments with wide movement range

Upper G.I. tract scope for treatment  
**EG-760CT**



Instrument channel diameter as large as 3.8 mm offers powerful suction performance. This scope is suitable for observations of areas having many residues or concern of bleeding. As this endoscope is compatible with an array of endotherapy devices, it accommodates various treatments such as polypectomy, EMR and POEM.

Lower G.I. tract scope for treatment  
**EC-740T/M, L**



210° upward bending capability and small radius curvature allow for easy access to target observation point and lesions, supporting precise manipulation in EMR, ESD and other endoscopic procedures. In addition, with the distal end as small as 9.8 mm in diameter, these scopes are expected to be useful for cases where insertion is difficult.

## Specification

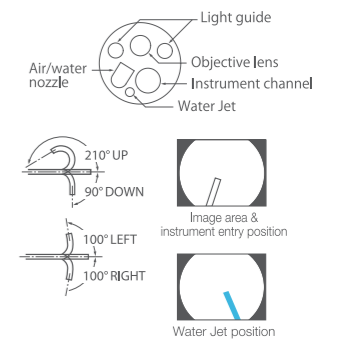
### Upper G.I. tract scopes

**EG-760R**



Field of view	140°
Viewing direction	0° (Forward)
Observation range	2~100 mm
Bending capability	UP: 210° DOWN: 90° RIGHT: 100° LEFT: 100°
Working length	1,100 mm
Total length	1,400 mm
Distal end diameter	9.2 mm
Insertion tube diameter	9.3 mm
Minimum instrument channel diameter	2.8 mm
Image size	Super image

Product name: Video Endoscope GMDN: 38805  
Generic name: Flexible video gastroduodenoscope

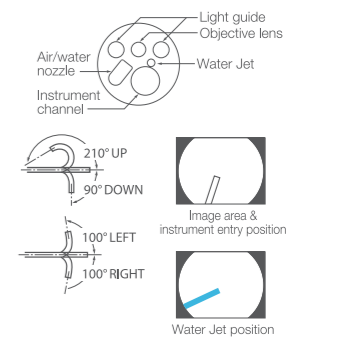


**EG-760Z**



Field of view	Normal: 140° Closest: 56°
Viewing direction	0° (Forward)
Observation range	1.5~100 mm Normal: 3~100 mm Closest: 1.5~2.5 mm
Bending capability	UP: 210° DOWN: 90° RIGHT: 100° LEFT: 100°
Working length	1,100 mm
Total length	1,400 mm
Distal end diameter	9.9 mm
Insertion tube diameter	9.8 mm
Minimum instrument channel diameter	2.8 mm
Image size	Super image

Product name: Video Endoscope GMDN: 38805  
Generic name: Flexible video gastroduodenoscope

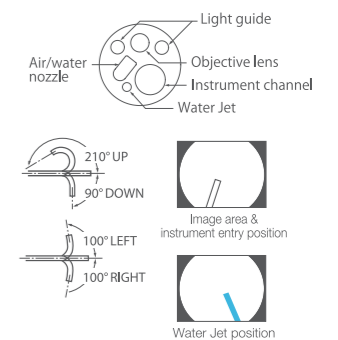


**EG-760CT**



Field of view	140°
Viewing direction	0° (Forward)
Observation range	2~100 mm
Bending capability	UP: 210° DOWN: 90° RIGHT: 100° LEFT: 100°
Working length	1,100 mm
Total length	1,400 mm
Distal end diameter	10.5 mm
Insertion tube diameter	10.8 mm
Minimum instrument channel diameter	3.8 mm
Image size	Super image

Product name: Video Endoscope GMDN: 38805  
Generic name: Flexible video gastroduodenoscope

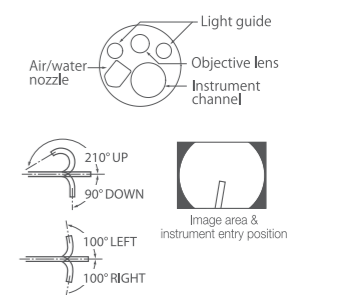


**EG-740N**



Field of view	140°
Viewing direction	0° (Forward)
Observation range	3~100 mm
Bending capability	UP: 210° DOWN: 90° RIGHT: 100° LEFT: 100°
Working length	1,100 mm
Total length	1,400 mm
Distal end diameter	5.8 mm
Insertion tube diameter	5.9 mm
Minimum instrument channel diameter	2.4 mm
Image size	Super image

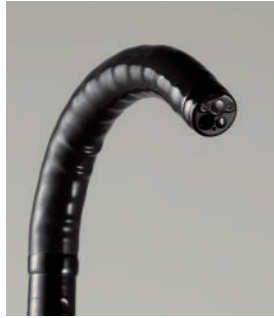
Product name: Video Endoscope GMDN: 38805  
Generic name: Flexible video gastroduodenoscope



# Specification

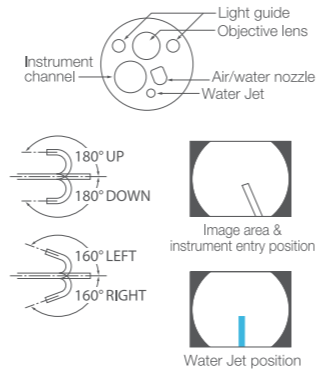
## Lower G.I. tract scopes

### EC-760R-V/M, I, L

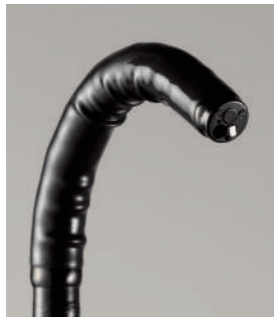


Field of view	170°
Viewing direction	0° (Forward)
Observation range	2~100 mm
Bending capability	UP: 180° DOWN: 180° RIGHT: 160° LEFT: 160°
Working length	1,330 mm (M) / 1,520 mm (I) / 1,690 mm (L)
Total length	1,650 mm (M) / 1,840 mm (I) / 2,010 mm (L)
Distal end diameter	12.0 mm
Insertion tube diameter	12.0 mm
Minimum instrument channel diameter	3.8 mm
Image size	Super image
Flexibility adjustment mechanism	Available

Product name: Video Endoscope GMDN: 36117  
Generic name: Flexible video colonoscope, reusable

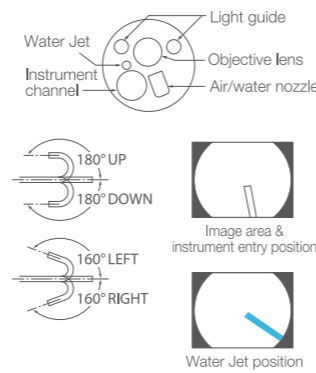


### EC-760ZP-V/M, L

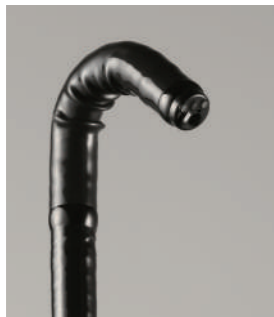


Field of view	Normal: 140° Closest: 56°
Viewing direction	0° (Forward)
Observation range	1.5~100 mm Normal: 3~100 mm / Closest: 1.5~2.5 mm
Bending capability	UP: 180° DOWN: 180° RIGHT: 160° LEFT: 160°
Working length	1,330 mm (M) / 1,690 mm (L)
Total length	1,650 mm (M) / 2,010 mm (L)
Distal end diameter	11.7 mm
Insertion tube diameter	11.8 mm
Minimum instrument channel diameter	3.2 mm
Image size	Super image
Flexibility adjustment mechanism	Available

Product name: Video Endoscope GMDN: 36117  
Generic name: Flexible video colonoscope, reusable

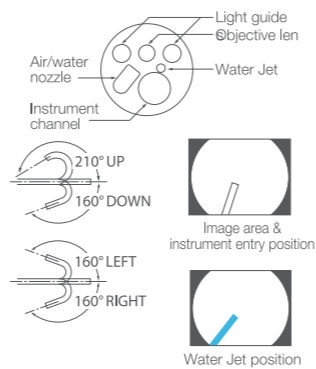


### EC-740T/M, L



Field of view	140°
Viewing direction	0° (Forward)
Observation range	3~100 mm
Bending capability	UP: 210° DOWN: 160° RIGHT: 160° LEFT: 160°
Working length	1,330 mm (M) / 1,690 mm (L)
Total length	1,630 mm (M) / 1,990 mm (L)
Distal end diameter	9.8 mm
Insertion tube diameter	10.7 mm
Minimum instrument channel diameter	3.2 mm
Image size	Super image

Product name: Video Endoscope GMDN: 36117  
Generic name: Flexible video colonoscope, reusable



### VP-7000

Power rating	Voltage	100 to 240 V ± 10 %
	Frequency	50/60 Hz
	Current consumption	0.8-0.5 A
Dimensions(WxHxD)	390x110x485 mm (incl. projection)	
Weight	9.0 Kg	
Observation	Type of color	NTSC/PAL
	Digital HDTV	HD-SDI: 2, DVI-D: 2
	Analog/Digital HDTV	DVH: 1
	Analog SDTV	RGB TV: 1, S VIDEO: 1, VIDEO: 1
	Screen resolution	SXGA (Default), Full HD
	Color adjustment	Brightness, Red, Green, Blue, Red tone, Chroma in nine levels (-4 to +4). Contrast in five levels (-1 to +4).
	Contrast	Available in three levels (-1 to +1).
	Iris mode	Function to control the screen brightness. AVE (controls brightness in general), PEAK (controls brightness in highlight areas), AUTO (sets average or peak iris automatically)
	Structure emphasis	Function to adjust the sharpness of the subject structure. Normal mode: Structure Emphasis (SE) 4 level, Detail Hi. (DH) -4 to +4, Detail Lo. (DL) -4 to +4, BLI, BLI-bright or LCI, SE A Mode and B Mode, A Mode 0 to 8, B Mode 0 to 8
	Tone	Function to emphasize slight differences between colors by emphasizing the degree of vividness of color. ON/OFF.
	Enlargement of the image	Function to enlarge the endoscopic image.
	Special light observation mode	BLI, BLI-bright, LCI
	FICE	Ten settings available.
Mask types	Type 1, Type 2, Type 2/Dual Mode.	
Freeze mode	Function to freeze the endoscopic images.	
Peak detection	Function to obtain the highest contrast image.	
Shutter speed	Normal 1/60-1/200, High 1/100-1/400, High (zoom scope) 1/100-1/800	
Assignment of switches	Scope Switch (1-5), Multi buttons on the front panel (1,2), Foot Switch (1,2), *1	
Other functions	Electronic Zoom, PoP Function, Network function, Dual Mode function.	
Applicable endoscope	700/ 600/ 500 series endoscope	
Data display	Remote control	Fujifilm specified peripherals can be controlled.
	Other information	Patient ID, Patient Name, Sex, Age, Date of Birth, Comments, Hospital name, Doctor name *2
Image recording	Recording status	Timer, Laptime
	Image quality setting status	Digital printer status, shooting counter, number of recordable images in internal storage device
	Image compression rate	Structure emphasis, Tone, Electronic Zoom Ratio, IEE observation modes, Focus Indicator.
Image recording	Number of recordable images in internal storage device	TIFF: no compression, JPEG: approx. 1/5, 1/10, 1/20
	Recommended external storage device	TIFF: 840, JPEG 1/20: 21,690, JPEG 1/10: 16,270, JPEG 1/5: 5,910 *3
Image recording	Searching and displaying images	Swissbit SFU-22048 E1BP2TO-HMS-111-STD or SFU22048E3BP2TO-HMS-121-STD *4
	Doctors' name	Search screen: Inspection No., Patient ID, Date of Inspection, Display: List, Thumbnail, Enlargement.
Data presetting	Setting by doctor	Up to 20 doctors' names.
	Clinical procedure	The information such as color tone, iris mode, contrast, brightness, special light observation modes are kept by setting the doctor's name.
Memory backup	When using lithium battery	Up to 20 procedures.
Control connector	Type of protection against electric shock	6 years (based on FUJIFILM criteria)
	Degree of protection against electric shock	Light source: 1, Remote: 2, Peripherals: 2, Keyboard: 1, Card reader: 1, Digital printer: 1, Footswitch: 1, Network: 1.
	Degree of explosion protection	Class I equipment
Category of medical electric equipment	Type of protection against electric shock	Type BF applied part
	Degree of protection against electric shock	Type BF applied part
	Degree of explosion protection	Prohibited in oxygen-rich environment/ flammable gas atmosphere.

\*1 Some limitations by endoscopes.  
\*2 Max. 45 patients  
\*3 The number of recordable images varies depending on the type of image.  
\*4 Concerning other external storage devices, please contact your representative or local dealer.  
Product name: Processor GMDN: 18034  
Generic name: Endoscopic Video image processor

### BL-7000

Power rating	Voltage	100V to 240 V ~ ± 10 %
	Frequency	50/60 Hz
	Current consumption	1.2-0.7 A
Dimensions(WxHxD)	390x155x485 mm (incl. projection)	
Weight	12Kg	
Illumination	Illumination source	LED, qualifies 300W Xenon lamp intensity
	Durability of LED	6 years (based on FUJIFILM criteria)
	Lighting system	Switching regulator
	Light control method	LED Auto power control
	Light cooling method	Forced air cooling
Automatic brightness adjustment	Special light observation mode	BLI, BLI-bright, LCI
	Maximum air supply pressure	65 kPa
Air supply	Automatic brightness adjustment method	Brightness is automatically adjusted according to the video output (manually possible).
	Pump	Diaphragm method pump
Water supply	Air supply pump	HUMID/LOW/OFF
	Method	Feeds water by pressurizing the detachable water container with air.
Indicators on front panel	Transmitted illumination	The light flashes with the maximum light intensity. Used to check the position of the distal end from outside the body.
	Light limitation	To avoid the blood of a bleeding patient becoming dotted by the illuminating light. Used to limit the maximum light intensity.
Memory of set value	Illumination mode	OFF/1/2/3. Observation modes can be switched by pressing the illumination mode button.
	Type of protection against electric shock	Set values are maintained even after turning off the system.
Category of medical electric equipment	Type of protection against electric shock	Class I equipment
	Degree of protection against electric shock	Type BF applied part
	Degree of explosion protection	Prohibited in oxygen-rich environment/ flammable gas atmosphere.

Product name: Light source GMDN: 35158  
Generic name: Endoscopic light source, Line-powered



### Accessories (Valve, Tank)

#### For routine examination



Air/Water Valve AW-603



Suction Valve SB-605



Water Tank WT-603

#### Used with CO<sub>2</sub> Regulator "GW-100"



Gas/Water Valve AW-604G



Water Tank WT-604G