

# OLYMPUS

Your Vision, Our Future

## ENDOCAPSULE

# SMART AND SAFE

## ENDOCAPSULE 10



# ENDOCAPSULE 10 SYSTEM – MORE THAN JUST A CAPSULE

## Smart Algorithm – Omni Mode Accelerates Reading

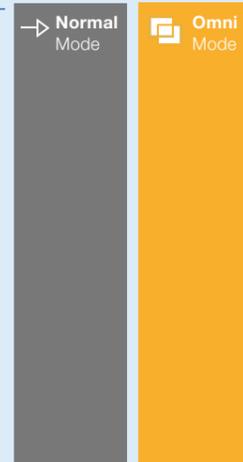


Cut reading time drastically while seeing everything of importance for the diagnosis. Out of thousands of images only those that are most relevant for your diagnosis are displayed. This helps to save up to 64%\* time during your reading process without compromising the diagnostic result.

\* Hosoe et al. Endosc Int Open 2016, DOI: 10.1055/s-0042-111389

## Safe Detection – Excellent Reading Reliability

### Detection



Precise reading results with high confidence. Omni Mode ensures every displayed area is shown, yet without duplication. It reliably differentiates between minute changes and whether only the angle of depiction has shifted. This supports a safe detection process.

The ENDOCAPSULE 10 SYSTEM reflects our vast experience in opto-digital technology for endoscopes. This small-intestine endoscope system produces extremely high-quality images for fast, efficient, and precise examinations that you can trust – the ideal solution for medical institutions looking to expand diagnostic capabilities in this critical field.

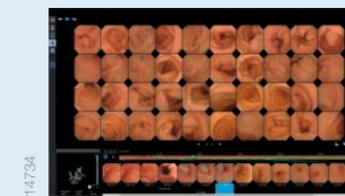
Olympus endoscopic imaging technology makes diagnosis easier than ever thanks to high-quality images along with excellent usability and efficiency, all of which are hallmarks of our continually evolving advancements in the field of endoscopy.

## Trusted Visualization for Detailed Observations



Olympus' trusted opto-digital technology results in improved high-quality images and a wide angle of view for accurate observations and diagnosis.

## Trusted Efficiency for Stable Operations

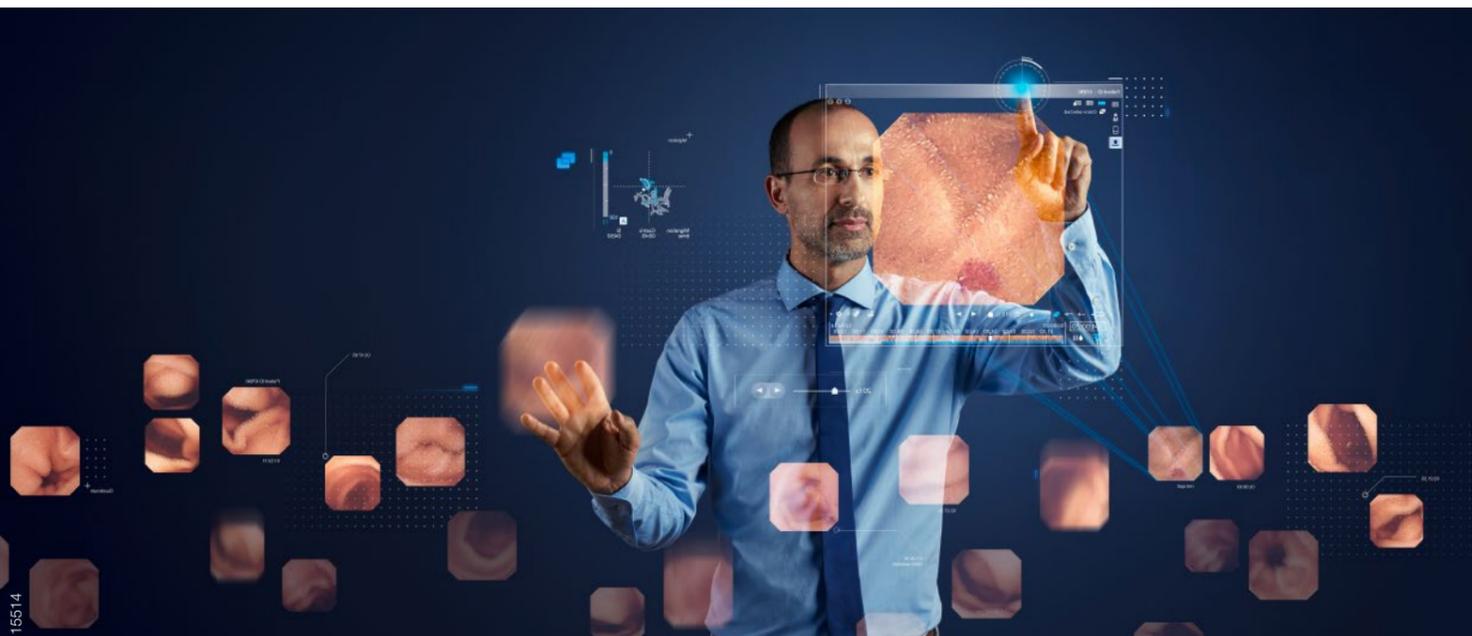


Feature-rich and highly intuitive, Olympus software is the advanced solution for fast, efficient analysis of small-intestine examinations.

## Trusted Usability for Streamlined Workflows



Trust Olympus to fully support you and your patients through a new all-in-one recorder, a more convenient antenna, and functional reporting features.



# HIGH-QUALITY IMAGES FOR GREATER DETAIL

## Trusted Visualization for Detailed Observations

As the undisputed leader in the field of endoscopy, Olympus is renowned for exceptionally high-quality images. This translates into easier analysis for more reliable and consistent diagnosis than ever before. You will also appreciate the expanded angle of view, which makes it less likely to miss abnormalities.

### High-Quality Images

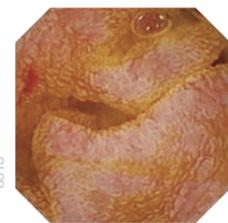
Advanced Olympus optical technology delivers high-quality images that reveal individual villi with superb clarity. Noise has been markedly reduced along with halation, optimizing brightness levels for the detailed observation of small-intestine mucosa and the identification of abnormalities. The clear visual information facilitates highly accurate diagnosis.



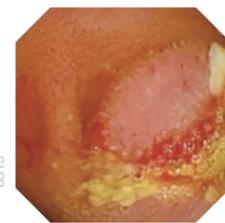
### Normal



### Observable Findings



Angioma (no bleeding)

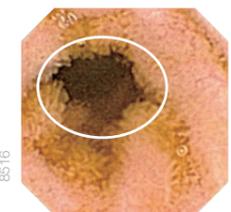


Angioma (bleeding)



Multiple inflammations with Crohn disease stenosis

### Less Noise



Previous model



EC-S10

### Less Halation



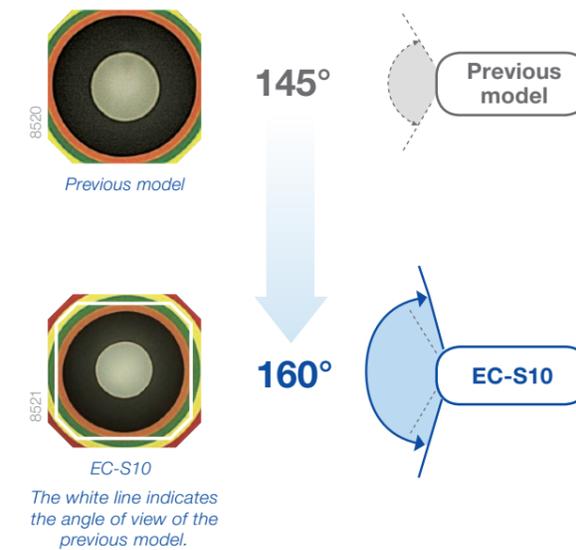
Previous model



EC-S10

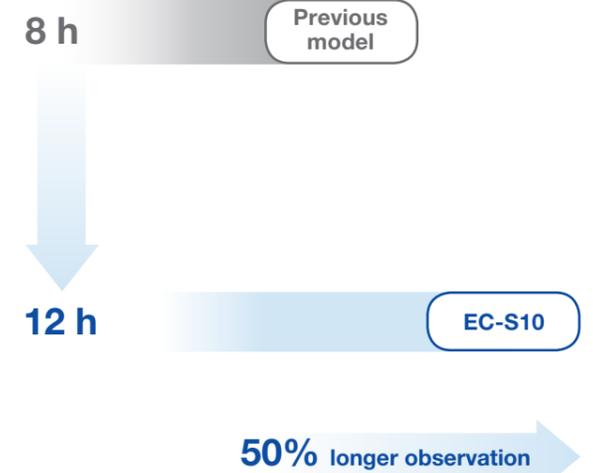
### Wide Angle of View

Another advancement made possible by renowned Olympus optical technology is the expanded angle of view: 160° as opposed to 145° on the previous model. This wider coverage offers a significantly enhanced field of observation for refined examinations.



### Longer Observation Time

Battery life has been extended from eight hours to twelve hours to considerably increase the proportion of completed small-intestine observations. The long observation time maximizes the detection rate of lesions for more reliable diagnosis.



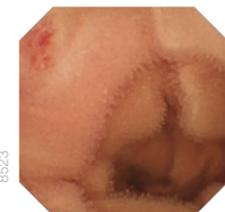
### Image Adjustment Function

Eight user-selectable sharpness settings let you optimize image enhancement in order to observe tiny mucosal architecture clearly. You can also adjust color tone (red/blue) and brightness levels for more comfortable viewing in the color of your choice.

### Structure Enhancement



Level 1



Level 3



Level 8

### Color Tone



Red 0 / Blue 0



Red -3 / Blue +3

# INTELLIGENT READING FUNCTIONS SIMPLIFY ANALYSIS

## Trusted Efficiency for Stable Operations

ENDOCAPSULE 10 SYSTEM software facilitates reading with a variety of unique functions to detect images requiring closer inspection, providing the means for the fast reviewing of results to ultimately speed up diagnosis.

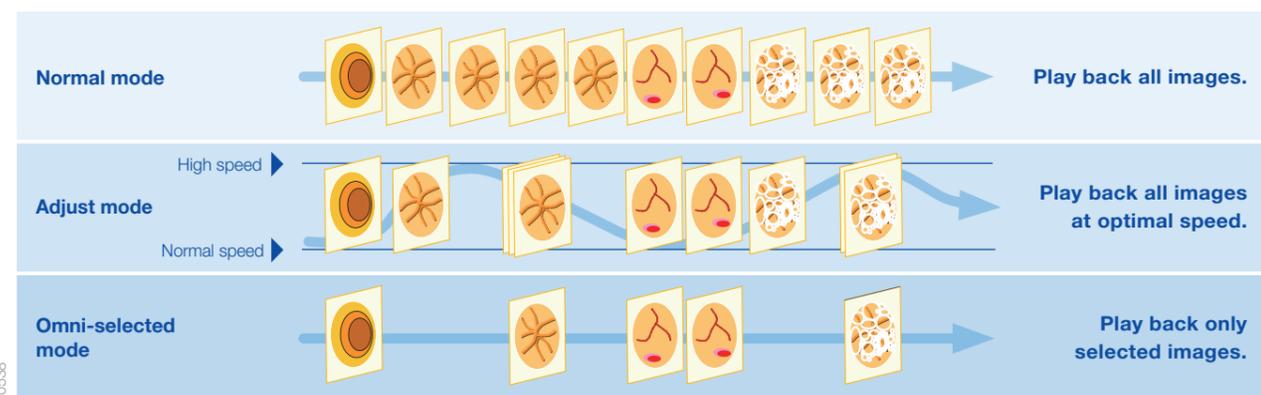


### Adjust Mode

Change playback speed depending on differences in images. In Adjust mode, images showing no change are superimposed on each other, and review speed is optimized to move quickly past images indicating no characteristic differences compared to preceding images. This mode vastly reduces playback time to increase reading effectiveness.

### Omni Mode

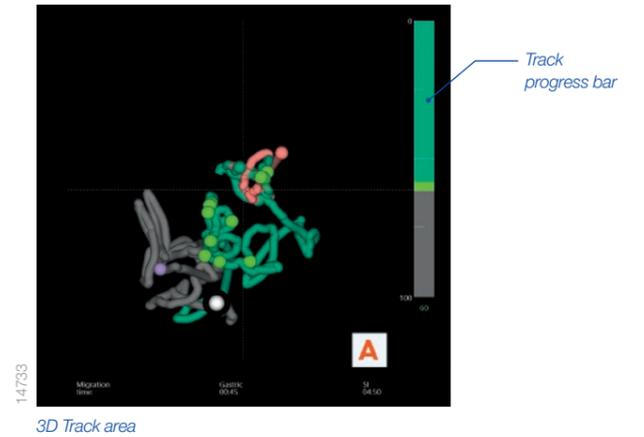
Images that overlap with previous ones are skipped, and new images are selected even when only minute changes are present. This algorithm can recognize that an image is identical, even when the capsule is displaying the same section of small intestine from a different angle. This intelligent approach helps to speed up diagnosis by analyzing a larger number of attributes than ever before.\*



\* Compared to ENDOCAPSULE 10 SYSTEM Express-selected mode

### 3D Track Function

Track the capsule as it moves through the small intestine with the 3D Track function. A high-precision antenna recognizes the detailed signals from the capsule, allowing the system to display the capsule track in 3D. The track progress bar is useful for estimating capsule location in the small intestine. It also indicates on the 3D tracking screen where each thumbnail image was captured in order to assess the locations of abnormalities. The 3D Track function operates intuitively, showing capsule location to help you decide what approach should be taken for subsequent procedures.



### Overview Function

This function displays a library of characteristic images. The new Adjacent image display and Enlarging image functions provide a quick way for further observation without having to switch to Playback view mode. In addition, the new Red color overview function gives you a quick overview only of images showing an excessive amount of red.

### Bubble and Debris Image Detection Algorithm

Bubbles and debris can sometimes adhere to the capsule and degrade image quality. The ENDOCAPSULE 10 SYSTEM automatically detects poor-quality images and displays only those that can be accurately read. This algorithm also enhances the performance of Adjust mode and the Overview function.

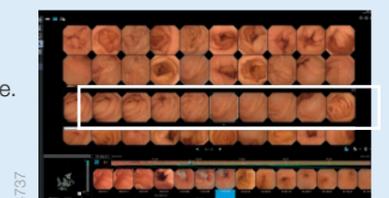
### Previous Model

Display of Overview mode of previous ENDOCAPSULE system.



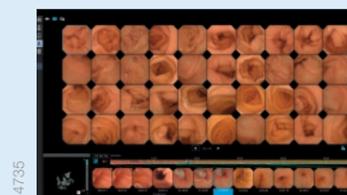
### Adjacent Image Display Function

Click selected image.



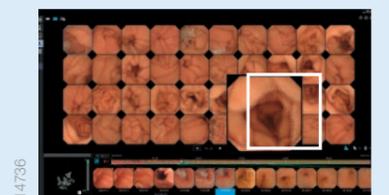
### New Model

ENDOCAPSULE 10 SYSTEM with new algorithm.



### Enlarging Image Function

Briefly place mouse over an image.



## IMPROVED DESIGN FOR MEDICAL STAFF AND PATIENTS

### Trusted Usability for Streamlined Workflows

Considering the needs of medical personnel and patients, the ENDOCAPSULE 10 SYSTEM is designed for optimal clinical performance as well as outstanding ease of use and mobility. The all-in-one recorder and belt-style antenna simplify procedures, making for a smooth and relaxed examination environment.

#### Belt-Style Antenna Unit

Preparation times are markedly reduced thanks to the slim, lightweight antenna unit, which is incorporated in the belt harness. The unit can be worn over light clothing, and offers more sensitive detection capability compared to the previous model while enhancing patient comfort.

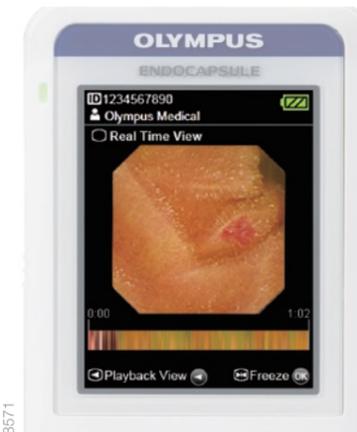
#### Smart Recorder

The recorder combines a receiver and viewer in a compact and easy-to-handle unit, allowing you to play back and capture images any time during the procedure. The recorder is rechargeable, and comes with a charging cradle. Just place the unit in the cradle to recharge.



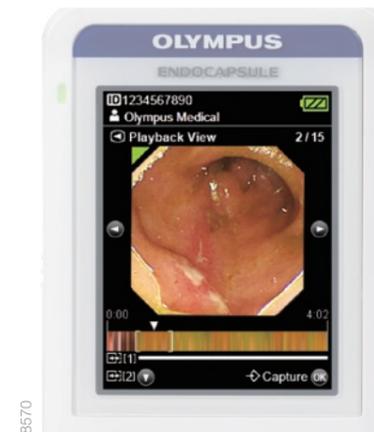
#### Real-Time View/Capture

Confirm capsule location during the entire procedure from images displayed in real time. Monitoring the capsule's progress in real time lets you uncover any anomalies, such as bleeding, and take immediate action if needed.



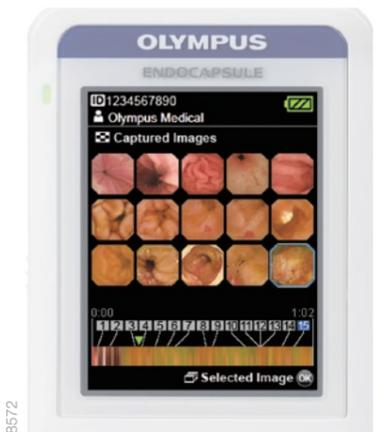
#### Playback/Capture

Check images of the small intestine as the capsule passes through it. Images of interest can be captured and then downloaded to a workstation for further review.



#### Captured Images Screen

Up to 15 captured images can be displayed as thumbnails, making it easy to quickly find suspected anomalies and further speeding up observation procedures.



#### Patient Guidance Function

Personalized instructions for each patient can be displayed by registering data. Instructions are delivered as text messages preceded by beep and vibration alerts. The messages direct patient activity, such as eating, drinking water, and returning to the hospital. Making it easy for patients to follow correct procedures helps you conduct safer, more accurate examinations.



#### Guidance Example

- 0:00 • Ingest capsule
- 0:30 • "Please come back to procedure room."
- 2:00 • "You can drink water from now."
- 4:00 • "You can take a light meal from now."
- 8:00 • "Please come back to the hospital."



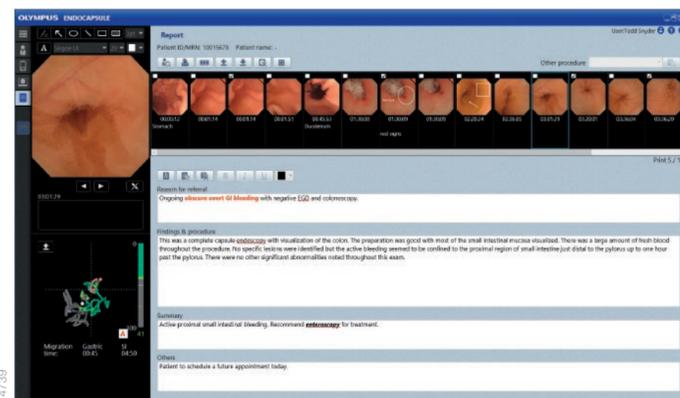
## DATA MANAGEMENT MADE EASY – EFFORTLESSLY SHARE RESULTS AND CREATE REPORTS

### Trusted Usability for Streamlined Workflows

The ENDOCAPSULE 10 SYSTEM includes several intuitive report templates to further streamline examinations, analysis, and diagnosis. Moreover, the system connects seamlessly to existing networks to facilitate the sharing of patient information when a consensus diagnosis is desired.

### Report

Fast and intuitive reporting of findings is possible. You can view and annotate images without disrupting your workflow. Repeatedly used words and phrases can be recorded in the user dictionary, which reduces the time required to compile reports.



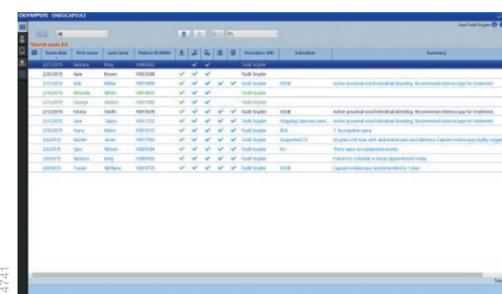
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### Report Template

Findings known from previous capsule examinations can be saved as report templates. If your report consists of a common diagnosis, a report template can be applied with just a few clicks, eliminating the need to write the report from scratch.



14741

### Examination Data Management

Each phase of a procedure is displayed in an easy-to-read format to visualize at a glance the status of individual examination procedures.

## IMPROVEMENTS AT EVERY STEP OF THE WORKFLOW

**1 Simple User Interface**  
The latest software generation means you need 30% less interaction with the system to complete the entire procedure.



13820

**4 Outstanding Image Quality and Maximum Detection**  
As you would expect from Olympus, the capsule captures images in outstanding quality, ensuring maximum detection.

**5 Patient-Friendly Procedure**  
The belt-style antenna means patients can go about their normal daily lives. The recorder presents the patient with useful support messages throughout the examination.

**5 Real-Time Decision-Making**  
If necessary, patients can be monitored using the real-time view of the recorder to enable an immediate decision about the follow-on procedure.



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**8 Significantly Reducing Reading Time While Safeguarding Detection**  
Omni Mode analyzes a greater number of image attributes compared to previous algorithms, meaning you are only presented with the most important clinical data during reading.



[www.olympus.eu/capsule](http://www.olympus.eu/capsule)



**1**

Images captured by EC-10	A > < A >
Previous modes select more images	A > < A >
Omni Mode recognizes change in orientation	A

Reducing the number of images thanks to improved recognition of identity

**2**

Images captured by EC-10	A > < A > B
Previous modes select more images	A > < A > B
Omni Mode selects these images	A < B

Safeguarding detection through recognition of minute changes

13815

### Before the Procedure

### During the Procedure

### After the Procedure

**2 Quick Patient Data Entry**  
Full ENDOBASE compatibility means that you can easily register new patients using your existing Olympus IT solution.

**3 Fast Patient Setup**  
The belt-style antenna makes it easy to set the procedure up.



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**7 Complete Coverage of the Small Bowel**  
A prolonged battery life of a minimum of 12 hours considerably increases the proportion of complete examinations of the small intestine.



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**9 Plan Follow-on Procedures Effectively**  
3D tracking shows the location of the lesion within the small intestine in 3D and lets you plan the optimum approach for follow-on treatment.



3D tracking area

Colors identify anatomical areas

Tracking progress bar

13813

**10 Secure Network Data Storage**  
Procedure data can be easily shared with satellite workstations attached to the hospital network.

**11 Secure On-the-Go Reporting**  
ENDOCAPSULE SOFTWARE 10 LIGHT means that you can create reports when and where it suits you, without compromising on data security.

**12 Reporting Design Exactly Matched to Your Needs**  
The reporting of findings is fast and intuitive thanks to customized report design templates. Seamless ENDOBASE integration makes reporting even faster.

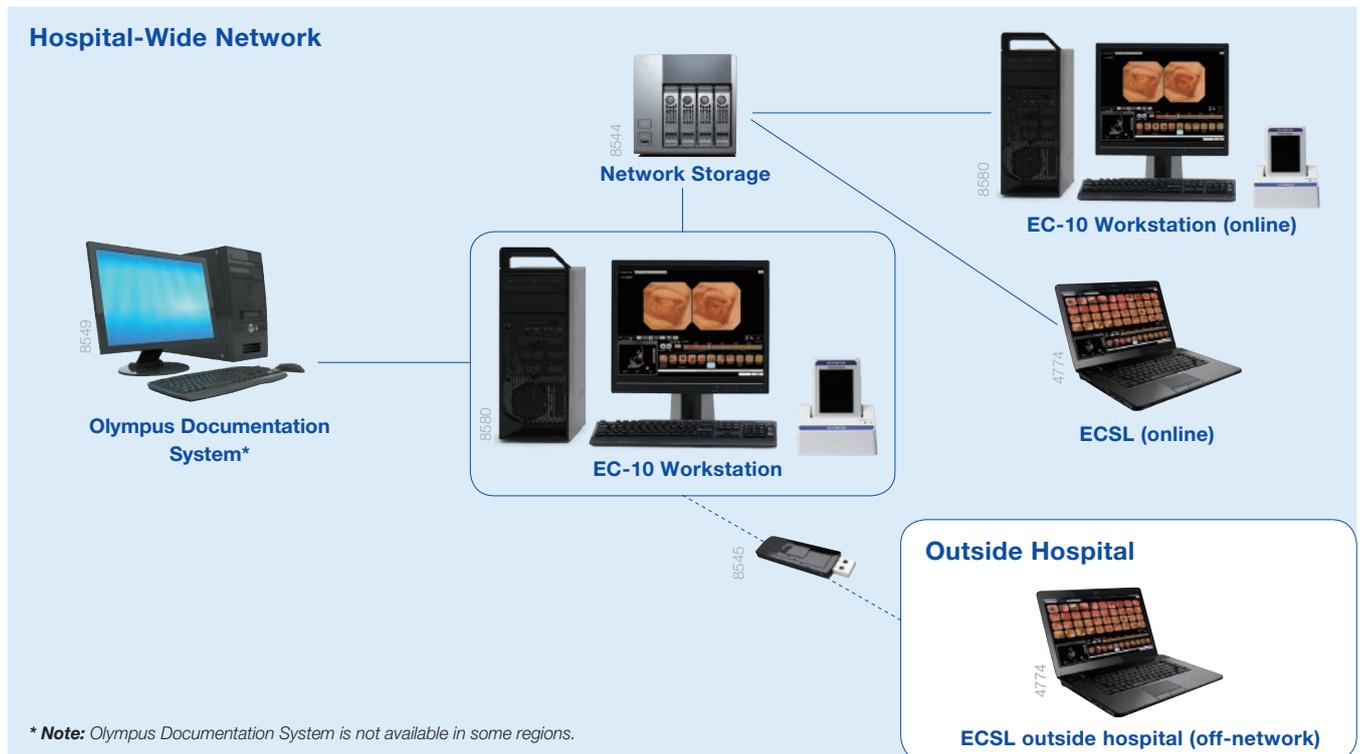
**13 Less Fatigue during Reading**  
The 16:9 HDTV software display format means you have more space to examine images and enter your findings into the system.

**14 Easy Data Analysis**  
Intelligent export functions help you to prepare and analyze data for later presentation.

## System Integration

The workstation of the ENDOCAPSULE 10 SYSTEM integrates easily into existing hospital information systems for fast and easy data sharing. All examination data for patients – including results from ENDOCAPSULE – can be managed centrally, making collaboration inside the facility easier.

**Note:** Network performance may vary depending on the network environment.



## ENDOCAPSULE SOFTWARE 10 LIGHT

For added convenience, ENDOCAPSULE SOFTWARE 10 LIGHT gives you the ability to continue post-examination procedures even without direct access to the hospital network.



## ENDOCAPSULE Atlas

Select ENDOCAPSULE Atlas from the menu to automatically open the ENDOCAPSULE Atlas website.

This gives you one-click access to a library of clinical data regarding capsule endoscopy to assist in observation in small-intestine diseases.



**Note:** Access to ENDOCAPSULE Atlas varies depending on the security policy of your network.

# SMART AND SAFE – ENDOCAPSULE 10

## Specifications

### ENDOCAPSULE Small Intestinal Capsule

#### Endoscope Set: MAJ-2027

<b>Components</b>	ENDOCAPSULE Small Intestinal Capsule Endoscope: Olympus EC-S10	5 pieces
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### ENDOCAPSULE Small Intestinal Capsule

#### Endoscope: Olympus EC-S10

<b>Optics</b>	Field of view	160 degrees
	Depth of field	0–20 mm
<b>Sampling Rate</b>		2 fps
<b>Battery Life</b>		12 hours
<b>Size</b>	Weight	3.3 g
	Dimensions	Ø 11 mm (diameter) × 26 mm (length)

Note: EC-S10 is not sold as a single product but as MAJ-2027

### ENDOCAPSULE Recorder Set: MAJ-2029

#### Components

1. ENDOCAPSULE Recorder: Olympus RE-10	1 piece
2. Battery Pack: MAJ-2030	1 piece
3. Antenna Unit: MAJ-2031	1 piece
4. Recorder Holder: MAJ-2033	1 piece
5. Cradle: MAJ-2032	1 piece
6. Antenna Unit Holder: MAJ-2034	1 piece
7. Capsule Activator: MAJ-1478	2 pieces



### ENDOCAPSULE Recorder: Olympus RE-10

<b>Battery Life</b>		Typ. 12 hours
<b>Size</b>	Weight	320 g
	Dimensions (W/H/D)	87 mm × 154 mm × 33 mm
<b>LCD Display Size</b>		3.5 inches

### Cradle: MAJ-2032

<b>Power Supply</b>		DC 6 V/2 A
<b>Size</b>	Weight	Main body: 315 g
	Dimensions (W/H/D)	142 mm × 79 mm × 85 mm

**Components** Cradle, AC adapter, AC cable, USB cable

### Battery Pack: MAJ-2030

<b>Type</b>		Lithium-ion storage cell
<b>Capacity</b>		2860 mAh
<b>Voltage</b>		3.7 V
<b>Recharging Time</b>		Approx. 2 hours
<b>Size</b>	Weight	70 g
	Dimensions (W/H/D)	70 mm × 10 mm × 55 mm (without projection parts)

### Antenna Unit Holder: MAJ-2034

<b>Size</b>	Weight	190 g
	Dimensions	Pouch: 340 mm (W) × 160 mm (H) × 15 mm (D) Long belt: 50 mm (W) × 1000 mm (L) Short belt: 50 mm (W) × 700 mm (L)

### Antenna Unit: MAJ-2031

<b>Size</b>	Weight	150 g
	Dimensions (W/H/D)	87 mm × 51 mm × 15 mm (without projection parts)

### ENDOCAPSULE SOFTWARE 10: MAJ-2188

<b>Components</b>		
ENDOCAPSULE SOFTWARE 10 (DVD-R)		1 piece

### Recorder Holder: MAJ-2033

<b>Size</b>	Weight	110 g (incl. strap)
	Dimensions (W/H/D)	Pouch: 100 mm × 175 mm × 45 mm

### ENDOCAPSULE SOFTWARE 10 LIGHT: MAJ-2189

<b>Components</b>		
ENDOCAPSULE SOFTWARE 10 LIGHT (DVD-R)		1 piece

[www.olympus.eu/capsule](http://www.olympus.eu/capsule)

Specifications, design, and accessories are subject to change without any notice or obligation on the part of the manufacturer.

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