

## 물 품 규 격 서

- ☐ 입찰공고번호 : (학)일송학원 관리국 제2025-157-1호
- ☐ 입찰건명 : 소화기내과(내시경실) Video Endoscope System 외 3종 구매
- ☐ 수요기관 : 한림대학교 강남성심병원
- ☐ 납품장소 : 수요기관 희망장소 입고도
- ☐ 물품내역 등

연번	품명(영문, 국문)	규격 및 사양	총 구매예정수량 (Q'TY)	1회 최대 발주수량	WARRANTY 기간	단위 (UNIT)
1	Video Endoscope System (내시경 시스템)	하단 참조	1	1	검수(합격)일로부터 3년 종료월 말일 까지	SET
2	Gastro Videoscope (위 내시경)	하단 참조	2	2	검수(합격)일로부터 2년 종료월 말일 까지	SET
3	치료용 Gastro Videoscope (치료용 위 내시경)	하단 참조	1	1	검수(합격)일로부터 2년 종료월 말일 까지	SET
4	Colono Videoscope (대장 내시경)	하단 참조	1	1	검수(합격)일로부터 2년 종료월 말일 까지	SET

### ☐ 공통사항

- 장비의 설치와 작동 및 교육은 무상으로 제공한다.
- 수요기관 담당자 입회 하에 계약상대자는 제품의 설치 테스트 및 시험작동을 실시하여야 한다.
- 무상 하자담보 책임기간은 품목에 따라 상기 기재된 것과 같이 물품 검수(합격)완료일로부터 3년 종료월 말일 까지 또는 2년 종료월 말일 까지 를 기본으로 하며 계약 상대방의 추가 제안에 따라 공고된 기본 무상 하자담보 책임기간을 초과하여 설정할 수 있다.
- 무상 하자담보 책임기간 중 수요기관의 사정으로 인하여 부서 및 장비의 위치가 불가피하게 이동을 필요로 할 경우 설치 시 협의 하에 무상 또는 부득이한 경우 실비 기준으로 이루어진다.
- 무상 하자담보 책임기간 중 중 공급된 장비의 부속품이 단종된 경우 수요기관이 인정하는 동등이상의 장비로 무상교체가 이루어져야한다.
- 계약상대자는 어떠한 상황에서도 애프터서비스를 위하여 전문서비스 인력을 제공하여야 하며 애프터서비스를 위하여 교체 부품을 보관하여야 한다.
- 계약상대자는 장비 납품 시 납품일을 기준하여 제품 제조년월이 6개월 이내인 장비를 납품 하고 납품장비에 해당 제조년월이 명시되어야 한다.

## <규격 · 사양 >

### A. Features

#### **[Video Endoscope System]**

##### 1. A Unified Platform with 5 LED Spectrum Technology

By integrating the LED light source with the video processor, Olympus has developed a powerful system that is much more compact and lightweight than the predecessors.

##### 2. Broad Compatibility

The System can be connected to many different types of endoscopes, providing access to a wide variety of endoscopy-supporting functions.

##### 3. Enhanced Observations

In addition to conventional white light and NBI(Narrow Band Imaging) and AFI (Auto Fluorescence Imaging) observation, the CV-1500 offers three other powerful enhanced observations to improve therapeutic capability

- TXI(Texture&Color Enhancement Imaging) optimizes the structure, color tone and brightness of mucosal surface.
- RDI(Red Dichromatic Imaging) Improves visibility of deep blood vessels and bleeding points.
- BAI-MAC(Brightness Adjustment Imaging with Maintenance of Contrast) improves brightness in darker portions.

##### 4. Intuitive, User-friendly Functions

With One-Touch Connector for quick, easy connection and no need for white balance adjustment, setup is simplified, with the aim of streamlining workflow and accelerating procedure time. Touch-sensitive panel facilitates intuitive operation, while convenient functions like Pre-freeze and MyCV mode ensure user-friendly working environment. Downtime is reduced thanks to the use of LED bulbs that last years without needing replacement.

#### **[Gastro Videoscope]**

1. The combination of HDTV image quality supports detailed observation and facilitates lesion detection.
2. Better image quality but still has slim design with 8.9mm diameter distal end and 8.9mm insertion tube.
3. Advanced NBI(Narrow Band Imaging) image enhances the visibility of mucosal and vascular patterns.
4. Extra-wide 140° field of view and extensive four-way angulation(210° up, 90° down, and 100° right/left) make more exact and fast procedures.
5. 2.8 mm diameter channel for suctioning and biopsies
6. Its Shorter bending distance of the bending section allows the scope to approach and observe the esophagus and the gastric anulus more easily.
7. Waterproof connector eliminates the need for a water-resistant cap and the associated risk of an expensive repair. Also Its management has been much easier.
8. Ergonomically designed grip enhances torque performance and scope maneuverability while easy to access control knobs improve operability.

9. Fully compatible with the CV-290, CLV-290, and CLV-290SL
10. Scope ID function retains Individual scope information in the memory chip and displays it on the monitor. Also stores settings such as Automatic White Balance to facilitate endoscopy suite management

### **[치료용 Gastro Videoscope]**

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7. Waterproof connector eliminates the need for a water-resistant cap and the associated risk of an expensive repair. Also Its management has been much easier.
8. Ergonomically designed grip enhances torque performance and scope maneuverability while easy to access control knobs improve operability.
9. Fully compatible with the CV-290, CLV-290, and CLV-290SL
10. Scope ID function retains Individual scope information in the memory chip and displays it on the monitor. Also stores settings such as Automatic White Balance to facilitate endoscopy suite management

### **[Colono Videoscope]**

1. The combination of HDTV image quality supports detailed observation and facilitates lesion detection.
2. Better image quality but still has slim design with 8.9mm diameter distal end and 8.9mm insertion tube.
3. Advanced NBI(Narrow Band Imaging) image enhances the visibility of mucosal and vascular patterns.
4. Extra-wide 170° field of view and extensive four-way angulation(180° up, 180° down, and 160° right/left) make more exact and fast procedures.
5. 3.2 mm diameter channel for suctioning and biopsies
6. Its water jet function helps to keep the mucosa clear during observation and treatment.
7. Newly developed RIT(Responsive Insertion Technology) function provides smooth and quick insertion of colonoscopy.
  - HFT(High Force Transmission) / PB(Passive Bending) / VS(Variable Stiffness)
8. Waterproof connector eliminates the need for a water-resistant cap and the associated risk of an expensive repair. Its management has been much easier.
9. Ergonomically designed grip enhances torque performance and scope maneuverability while easy to access control knobs improve operability.
10. Fully compatible with the CV-290, CLV-290, and CLV-290SL
11. Scope ID function retains Individual scope information in the memory chip and displays it on the monitor. Also stores settings such as Automatic White Balance to facilitate endoscopy suite management

## **B. Specification**

### **[Video Endoscope System]**

#### **1. Video System Center**

##### **1. Power Supply**

- 1) Related Voltage : 100–240V AV; With in  $\pm 10\%$
- 2) Frequency : 50/60 Hz; within  $\pm 3\text{Hz}$
- 3) Rated input : 600VA

##### **2. Size**

- 1) Dimensions (W × H × D) : 370 × 198 × 488 mm; 398 × 218 × 580 mm (maximum)
- 2) Weight : 19.4kg

##### **3. Classification (Medical Electrical Equipment)**

- 1) Type of protection against electric shock : Class I
- 2) Degree of protection against electric shock of applied part : Depend on applied part.(The degree of protection against electric shock of this product is BF type if the mounting)
- 3) Degree of protection against explosion The video system center should be kept away from flammable gases.

##### **4. Observation**

- 1) Analog signal output : VBS composite and Y/C; simultaneous outputs possible.
- 2) Digital signal output

12G-SDI (SMPTE ST 2082), 3G-SDI (SMPTE424M), HD-SDI (SMPTE292M), SD-SDI (SMPTE259M)

- 3) User settings : The function settings for up to 20 users can be stored.

Edges in endoscopic images are enhanced electrically to increase image sharpness.

Three enhancement mode ([1],[2],[3]) can be selected using the ENH. Switch on the front panel.

- 4) Color tone adjustment

Adjust the color tone of each endoscopic image for White light observation mode, NBI observation mode, and RDI observation mode.

- 5) Automatic gain control (AGC) :

The image can be electronically amplified when the light is inadequate due to the distal end of the endoscope being too far from the object.

- 6) Contrast

- H (High) : Darkens the dark part and brightens the bright part.
- L (Low) : Brightens the dark part and darkens the bright part.

- 7) BAI-MAC : Brightness adjustment with maintenance of contrast

- 8) Iris

The iris modes can be switched.

- Auto : The brightness is adjusted based on the brightest part of the central part and the average brightness of the periphery part.

- Peak : The brightness is adjusted based on the brightest part of the endoscopic image.
- Average : The brightness is adjusted based on the average brightness of the endoscopic image.

#### 9) Image enhancement settings

Fine patterns or edges in the endoscopic images can be enhanced electrically to increase the image sharpness.

- Enhancement type A : Emphasizes the pattern and contour of the endoscopic image.
- Enhancement type B : Emphasizes the finer parts than structure emphasis type A.

#### 10) Switching the enhancement modes

The enhancement level can be selected from 3 levels (OFF, 1, 2, and 3)

#### 11) Image size selection : The size of the endoscopic image can be selected from 2 modes. (Except SDTV)

#### 12) Electric zoom : Switch between mode 1, mode 2, and mode 3.

#### 13) PIP/POP : Switch between PIP and POP.

#### 14) Aspect ratio : Switch between 16:9 and 4:3. (Except SDTV)

#### 15) Freeze : Freeze the endoscopic image.

#### 16) Pre-freeze

The image with the least blur is selected from the images captured in the set time period before freeze operation and displayed.

#### 17) Optical-digital observation

The optical-digital observation can be performed. The endoscope compatible with the optical-digital observation is required.

- NBI observation : This observation mode uses the narrow band light.
- RDI observation : This observation mode uses the red dichromatic lights. • AFI observation : This observation mode uses the blue light.
- TXI observation : This observation mode enhances color, texture and brightness.

#### 18) Beginning and ending examination

Beginning and ending examination timing can be set interlock with the particular operation.

#### 19) Custom switch

Assign specific functions to the following buttons.

- Remote switches (Up to 5)
- Foot switches (Up to 2)
- Keyboard custom key (Up to 4) • Touch panel custom button of basic functions screen (Up to 3)
- Touch panel custom button of custom

#### 20) MyCV : mode Switch setting values of multiple functions at once.

## 2. Medical Monitor

#### 1) Panel

- \* Screen size : 31.5 inches
- \* Resolution : 3,840 \* 2,160 dots

#### 2) Size

\* Dimensions : 753.9(W) \* 476.3(H) \* 79.2(D)mm

### **3. Mobile workstation**

1) The workstation supports easy access to all devices and incorporates a number of features that enhance user comfort and safety such as the Monitor Arm, central switch and cable management system

### **4. Water Pump**

1) Dimension : 200(W) \* 173(H) \* 385(D)mm

2) Maximum flow rate

\* instrument water channel = 850ml/min

\* Auxiliary water channel = 230ml/min

3) Safety : Complies with EN/UL/IEC6060-1

### **[Gastro Videoscope]**

1. Optical system

\* Field of view : 140°

\* Direction of view : 0° (forward viewing)

\* Depth of field : 3 ~ 100mm

2. Distal end

\* Outer diameter : 8.9mm

3. Insertion tube

\* Outer diameter : 8.9mm

4. Bending section

\* Range of tip bending : Up 210° , Down 90° , Right 100° , Left 100°

5. Working length : 1,030mm

6. Total length : 1,350mm

7. Instrument channel

\* Inner diameter : 2.8mm

\* Minimum visible distance : 3mm

8. High-Frequency Compatibility : YES

9. Scope ID Function : YES

### **[치료용 Gastro Videoscope]**

1. Optical system

\* Field of view : 140°

\* Direction of view : 0° (forward viewing)

\* Depth of field : 3 ~ 100mm

2. Distal end

\* Outer diameter : 9.8mm

3. Insertion tube
  - \* Outer diameter : 9.9mm
4. Bending section
  - \* Range of tip bending : Up 210° , Down 120° , Right 100° , Left 100°
5. Working length : 1,030mm
6. Total length : 1,350mm
7. Instrument channel
  - \* Inner diameter : 3.2mm
  - \* Minimum visible distance : 3mm
8. High-Frequency Compatibility : YES
9. Scope ID Function : YES

### **[Colono Videoscope]**

1. Optical system
  - \* Field of view : 160°
  - \* Direction of view : 0° (forward viewing)
  - \* Depth of field : Normal Focus 9 ~ 100mm , Near Focus 4 ~ 9mm
2. Distal end
  - \* Outer diameter : 13.2mm
3. Insertion tube
  - \* Outer diameter : 12.8mm
4. Bending section
  - \* Range of tip bending : Up 180° , Down 180° , Right 160° , Left 160°
5. Working length : 1,330mm
6. Total length : 1,655mm
7. Instrument channel
  - \* Inner diameter : 3.7mm
  - \* Minimum visible distance : 3mm
8. High-Frequency Compatibility : YES
9. Scope ID Function : YES

### **C. Consist of(per 1Set)**

#### **[Video Endoscope System]**

- |                        |       |
|------------------------|-------|
| 1. Video System Center | 1 Set |
| 2. Medical Monitor     | 1 ea  |
| 3. Mobile workstation  | 1 ea  |
| 4. Water Pump          | 1 ea  |

**[Gastro Videoscope]**

1. Gastro Videoscope	1 Set
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**[치료용 Gastro Videoscope]**

1. Gastro Videoscope	1 Set
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**[Colono Videoscope]**

1. Colono Videoscope	1 Set
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**D. Remarks**

Warranty : 검수 완료일(합격)로부터 3년 종료 월 말일까지(단 Scope는 2년)