물 품 규 격 서 (재공고)

□ 입찰공고번호 : (학)일송학원 관리국 제2025-154-1호

□ 입찰건명 : 소화기내과(내시경실) Video Endoscope System 외 3종 구매

□ 수요기관 : 한림대학교성심병원

□ 납품장소 : 수요기관 희망장소 입고도

□ 물품내역 등

연번	품명(영문, 국문)	규격 및 사양	총 구매 예정수량 (Q'TY)	1회 최대 발주수량	Warranty 기간	단위 (Unit)
1	Video Endoscope System (내시경 시스템)	하단 참조	2	2	검수(합격)일로부터 3년 종료월 말일까지	SET
2	Gastro Videoscope (위 내시경)	하단 참조	12	12	검수(합격)일로부터 2년 종료월 말일까지	SET
3	Colono Videoscope (대장 내시경)	하단 참조	10	10	검수(합격)일로부터 2년 종료월 말일까지	SET
4	Duodeno Videoscope (십이지장 내시경)	하단 참조	2	2	검수(합격)일로부터 2년 종료월 말일까지	SET

□ 공통사항

- 1. 장비의 설치와 작동 및 교육은 무상으로 제공한다.
- 2. 수요기관 담당자 입회하에 계약상대자는 제품의 설치 테스트 및 시험작동을 실시하여야 한다.
- 3. [Video Endoscope System] 무상 하자담보 책임기간은 물품 검수(합격)일로부터 <u>3년 종료월 말일 까지</u>를 기본 원칙으로 하며 계약상대자의 추가 제안에 따라 3년을 초과하여 설정할 수 있다.
- 4. [Gastro, Colono 및 Duodeno Videoscope] 무상 하자담보 책임기간은 물품 검수 (합격)일로부터 *2년 종료월 말일 까지*를 기본 원칙으로 하며 계약상대자의 추가 제안에 따라 2년을 초과하여 설정할 수 있다.
- 5. 무상 하자담보 책임기간 중 수요기관의 사정으로 인하여 부서 및 장비의 위치가 불가피하게 이동을 필요로 할 경우 설명 및 설치가 무상으로 이루어진다.
- 6. 무상 하자담보 책임기간 중 중 공급된 장비의 부속품이 단종된 경우 수요기관이 인정하는 동등 이상의 장비로 무상 교체가 이루어져야 한다.
- 7. 계약상대자는 어떠한 상황에서나 애프터서비스를 위하여 전문서비스 인력을 제공하여야 하며 애프터서비스를 위하여 교체 부품을 보관하여야 한다.
- 8. 계약상대자는 장비 납품 시 납품일을 기준하여 제품 제조년월이 6개월 이내인 장비를 납품하고 납품장비에 해당 제조년월이 명시되어야 한다.
- 9. 기존 노후 의료장비 철거 및 회수(또는 보상판매) 조건으로 제안할 수 있다.

〈규격·사양-Video Endoscope System〉

A. Features

1. A Unified Platform with 5 LED Spectrum Technology

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

2. Broad Compatibility

This Model 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 this model offers three other powerful enhanced observations to improve theraputic 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-freez and MyCV mode ensure user-friendly working environment. Downtime is reduced thanks to the use of LED bulbs that last years without needing replacement.

B. Specifications

- 1. Video System Center CV-1500 (X1)
- 1. Power Supply
- 1) Related Voltage: 100-240V AV; With in $\pm 10\%$
- 2) Frequency: 50/60 Hz; within ±3Hz
- 3) Rated input: 600VA
- 2. Size
- 1) Dimensions (W \times H \times D) : 370 \times 198 \times 488 mm; 398 \times 218 \times 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 or 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 (OEV321UH)

- 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 (WM-NP3)

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 (OFP-2)

- 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

C. Consist of(per 1 Set)

1. Video System Center	CV-1500	1	SET
2. Medical Monitor	OEV321UH	2	EA
3. Mobile workstation	WM-NP3	1	EA
4. Water Pump	OFP-2	1	EA

D. Remarks

〈규격·사양-Gastro Videoscope〉

A. Features

- 1. The combination of HDTV image quality supports detailed observation and facilitates lesion detection.
- 2. Better image quality but still has slim design smaller compared to the previous model.
- 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-1500
- 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 facillitate endoscopy suite management
- 11. A new level of resolving power is achieved thanks to a new optical system.
- 12. Water jet, a forward water jet helps to keep the mucosal clear during observation and treatment in gi track.
- 13. Dual Focus, a unique Maker's optical innovation, allows the user to select from two focus settings.
- 14. EDOF allows precise observations through continuous broad focus and seamless magnification.

B. Specifications

- 1. Optical system
 - * Field of view : 140°
 - * Direction of view: 0° (forward viewing)
 - * Depth of field : Near : 1.5~5.5mm / Normal : 3~100mm
- 2. Distal end
 - * Outer diameter: 9.9mm
- 3. Insertion tube
 - * Outer diameter: 9.6mm
- 4. Bending section
 - * Range of tip bending: Up 210°, Down 90°

Right 100°, Left 100°

- 5. Working length : 1,030mm6. Total length : 1,350mm
- 7. Instrument channel
 - * Inner diameter : 2.8mm
 - * Minimum visible distance : 3mm
- 9. High-Frequency Compatibility: YES

10. Water jet: YES

11. Scope ID Function: YES

C. Consist of(per 1 Set)

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D. Remarks

〈규격·사양-Colono Videoscope-A〉

A. Features

- 1. Distal end is 13.2mm and insertion tube have diameters of 12.8mm
- 2. Passive Bending design with a second bending section at the proximal side of the conventional bending section that passively bends when the scope tip is lightly pressed against the colonic wall to facilitate passage through bends in the colon
- 3. High Force Transmission design with increased insertion tube recoil property to facilitate transmission of the force at the proximal side to the distal side thereby improving torque and push maneuvers to facilitate insertion itself.
- 4. The maker's signature high-quality imaging capability that clearly depicts details of mucosal and microvascular patterns on the colonic wall
- 5. 3.7 mm-diameter channel accommodates a wide range of endotherapy accessories
- 6. Extra-wide 170° (normal focus) field of view allows accurate observation of a wider area while enhanced four-way angulation (180°up/down and 160°left/right) enables entire and comprehensive examination of the colon
- 7. Ergonomically designed grip enhances torque performance and scope maneuverability while easy to access control knobs improve operability
- 8. Fully compatible with the CV-1500
- 9. 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 facillitate endoscopy suite management
- 10. Water Jet which is added in EVIS LUCERA ELITE routine colonoscope helps to keep the mucosal clear during observation and treatment.
- 11. Advanced Narrow Band ImagingTM enhances the visibility of mucosal and vascular patterns
- 12. Enhanced Responsive Insertion Technology™ helps scope to insert and move easily in human body
- 13. New waterproof one-touch connector design minimizes the risk of repair.
- 14. Dual Focus function of this model can remarkably improve image quality in normal and near focus mode.
- 15. EDOF allows precise observations through continuous broad focus and seamless magnification

B. Specifications

- 1. Optical system
 - * Field of view: Normal Focus 170°, Near Focus 160°
 - * Direction of view: Forward viewing
 - * Depth of field: Near: 1.5~5.5mm / Normal: 3~100mm
- 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: I-1,330mm
- 6. Total length: I-1,655mm

7. Instrument channel

* Inner diameter : 3.7mm

* Minimum visible distance : 3mm

9. High-Frequency Compatibility: YES

10. Scope ID Function: YES

C. Consist of(per 1 Set)

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D. Remarks

〈규격·사양-Colono Videoscope-B〉

A. Features

- 1. Distal end is 13.2mm and insertion tube have diameters of 12.8 mm
- 2. Passive Bending design with a second bending section at the proximal side of the conventional bending section that passively bends when the scope tip is lightly pressed against the colonic wall to facilitate passage through bends in the colon
- 3. High Force Transmission design with increased insertion tube recoil property to facilitate transmission of the force at the proximal side to the distal side thereby improving torque and push maneuvers to facilitate insertion itself
- 4. The maker's signature high-quality imaging capability that clearly depicts details of mucosal and microvascular patterns on the colonic wall
- 5. 3.7 mm-diameter channel accommodates a wide range of endotherapy accessories
- 6. Extra-wide 170° (normal focus) field of view allows accurate observation of a wider area while enhanced four-way angulation (180°up/down and 160°left/right) enables entire and comprehensive examination of the colon
- 7. Ergonomically designed grip enhances torque performance and scope maneuverability while easy to access control knobs improve operability
- 8. Fully compatible with the CV-1500
- 9. 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 facillitate endoscopy suite management
- 10. Water Jet which is added in EVIS LUCERA ELITE routine colonoscope helps to keep the mucosal clear during observation and treatment.
- 11. Advanced Narrow Band ImagingTM enhances the visibility of mucosal and vascular patterns
- 12. Enhanced Responsive Insertion Technology™ helps scope to insert and move easily in human body
- 13. New waterproof one-touch connector design minimizes the risk of repair.
- 14. Dual Focus function of this model can remarkably improve image quality in normal and near focus mode.
- 15. EDOF allows precise observations through continuous broad focus and seamless magnification

B. Specifications

- 1. Optical system
 - * Field of view: Normal Focus 170°, Near Focus 160°
 - * Direction of view: Forward viewing
 - * Depth of field: Near: 1.5~5.5mm / Nomal: 3~100mm
- 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: L-1680mm
- 6. Total length: L-2005mm

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 1 Set)

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D. Remarks

〈규격·사양-Duodeno Videoscope〉

A. Features

- 1. 4.2mm instrument channel for expended treatment options in the bile and pancreatic ducts.
- 2. Innovative V-Groove forceps elevator offers reliable duodenoscopic treatment capability in combination with dedicated V-System ERCP devices
- 3. Insertion tube measuring 11.3mm across with distal end diameter of 13.5mm
- 4. Extensive therapeutic capability and maneuverability with advanced distal cover design for easier cleaning.

B. Specifications

- 1. Optical system
 - * Field of view : 100°
 - * Direction of view: 15° (backward-oblique)
 - * Depth of field : $5 \sim 60 \text{mm}$
- 2. Distal end
 - * Outer diameter: 13.5mm
- 3. Insertion tube
 - * Outer diameter : 11.3mm
- 4. Bending section
 - * Range of tip bending: Up 120°, Down 90°, Right 110°, Left 90°
- 5. Working length: 1,240mm
- 6. Total length: 1,560mm
- 7. Instrument channel
 - * Inner diameter : 4.2mm

C. Consist of(per 1 Set)

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D. Remarks