#### ANX D TO

DGDP TENDER NUMBER 216.07.497.25

DATED: 15 DECEMBER 2025

# DESCRIPTION OF TECHNICAL SPECIFICATION OF VIDEO UPPER GI ENDOSCOPE MACHINE COMPLETE SET WITH STANDARD ACCESSORIES, QUANTITY-01, (DP-5)

#### (Tenderer must fill up this format without changing its basic structure)

Ser no	Description	Technical specification	To be filled up by the Manufacturer Principal	
(a)	(b)	(c)	(d)	
1.	General Specification: General			
	a. Nomenclature			
	b. Brand	To be mentioned.		
	c. Model	To be mentioned. Model should be latest.		
	d. Name of Manufacturer with Complete Address including website	To be mentioned		
	e. Name of Principal with Complete Address including website	To be mentioned.		
	f. Name of Local Agent with Complete Address	To be mentioned.		
	g. Year of Production	Not before the calendar year of contract.		
	h. Country of Origin & Manufacturer	Group-A: Bangladesh, Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Indonesia, Ireland, Japan, Luxemburg, Netherlands, Norway, Singapore, Spain, Sweden, Switzerland, Turkey, UK, USA, South Korea & Italy.		
	j. Port of shipment	Same country of manufacture for Main System. Other Items/ Equipment/ Accessories and Local supplied item to be mentioned specifically.	-	
2.	Technical Specification:			
	Following technical specification			
	a. Video System Centre (Proce			
	The following features should (1) Optical Narrow Band image between blood vessels and notes (2) Electronics to operate the close up or in distant view.	(M)		
	(3) Waterproof one touch con source and does not require a			
	<ul><li>(4) Improved image processir via enhanced color reproduct</li><li>(5) Pre-freeze function to sele</li><li>(6) Compatible with analog, F</li></ul>			
	(7) Link connection to periphe connections and accelerates			
	(8) Documentation system to			
	(9) Picture-in-Picture and inde	ex function effectively to enhance user's observation.		
	and uploaded.	tandard for data management just to get connected		
	(11) DV output to compatible (12) Incorporate Al System.			

D1 of 9 RESTRICTED

er 10		Descri	ption	Technical specification	To be filled up by the Manufacturer Principal
	b.	Technical Sp	ecification of Video S	ystem Centre (Processor)	
		Power Supply	Voltage	100-240 V AC (NTSC)/220-240 V AC (PAL); within ±10%	- 4
			Frequency	50/60 Hz; within ±1 Hz	
			Consumption electric power	150 VA (Approx)	
	- 1	Classification (medical	Type of protection against electric shock	Class I	
		electrical Equipment)	Degree of protection against electric shock of applied part		
			Degree or protection against explosion	The video system center should be kept away from flammable gases.	
		Observation	Analog HDTV signal output	Either RGB (1080/60I: NTSC)/ (1080/50I: PAL) or YPbPr (1080/60I: NTSC)/ (1080/50I: PAL) output can be selected.	
			Analog SDTV signal output	VBS composite (480/60I: NTSC)/ (576/50I: PAL), Y/C (480/60I: NTSC)/ (576/50I: PAL), and RGB (480/60I: NTSC)/ (576/50I: PAL); simultaneous outputs possible.	
			Digital signal output	HD-SDI (SMTPE 292M), SD-SDI (SMPTE 259M), DV (IEEE 1394), and DVI (WUXGA, 1080p or SXGA) can be selected.	
			White balance adjustment	White balance adjustment is possible using the white balance button on the front panel.	
			Standard color chart output	The "Color bar" or the "50% white" screen can be displayed.	
			Color tone adjustment	The following color tone adjustments are possible using the color tone level adjustment button and color tone selector button on the keyboard.  a. Red adjustment: ±8 steps  b. Blue adjustment: ±8 steps	
			Automotic gain control	c. Chroma adjustment: ±8 steps  The image can be electronically amplified when the	
			Automatic gain control (AGC)	light is inadequate due to the distal end of the endoscope being too far from the object.	
			Contrast	a. N (Normal): Normal image b. H (High): The dark areas are darker and the bright areas are brighter than in the normal image. c. L (Low): The dark areas are brighter and bright areas are darker than in the normal image.	
			Iris	The auto iris modes can be selected using the "iris mode" switch on the front panel.  a. Auto: The brightness is adjusted based on the brightest part of the central part and the average brightness of the periphery part.  b. Peak: The brightness is adjusted based on the brightest part of the endoscopic image.	
			Image enhancement	c. Average: The brightness is adjusted based on the average brightness of the endoscopic image.  Fine patterns or edges in the endoscopic images	
			setting	can be enhanced electrically to increase the image sharpness.  Either the structural enhancement or edge enhancement can be selected according to the user setup.  a Structural enhancement: Enhancement of contrast of the fine patterns in the image.  b. Edge enhancement: Enhancement of edges of	

D 2 of 9 RESTRICTED

Ser no	Description	Те	To be filled up by the Manufacturer/ Principal	
	Observation	Switching the enhancement modes	The enhancement level can be selected from 3 levels (OFF, 1, 2, and 3) using the image enhancement mode button on the front panel.	
		Image size selection	The size of the endoscopic image can be changed using the "IMAGE SIZE" key on the keyboard.	
		Freeze	An endoscopic image is frozen using an endoscope or the "FREEZE" key on the keyboard.	
		Switching the method of freezing the endoscopic image	Pre-freezing: The image with the least blur is selected from the images captured in the set time period before freeze operation and displayed.	
		Fog free function	When a compatible endoscope is connected to the video system center, the fog free function can be used.	
		Endoscope's remote switches function	The functions of the remote switches on the endoscope can be set in the user settings.	
		Reset to defaults	The following settings can be reset to their defaults using the reset button on the front panel.	
			<ul> <li>Color tone</li> <li>Iris mode</li> <li>Image enhancement mode</li> <li>Color enhancement mode</li> <li>Optical-digital observation</li> <li>Image size</li> </ul>	
			<ul> <li>Contrast</li> <li>Freeze</li> <li>Release index</li> <li>Electronic zoom</li> <li>Optical-digital observation</li> </ul>	
			* Arrow pointer • Stopwatch • Characters on screen • PIP/POP	
		Remote control	The following ancillary equipment can be controlled (specified models only).  • Monitor  • DVR  • Video printer  • Image filing system	
	Documentation	Patient data	The following data can be displayed on the monitor using the keyboard.  • Patient ID  • Patient name  • Sex  • Age  • Date of birth	
		Displaying the record state	Date of recording (time, stopwatch)     Comments  The recording state of the following ancillary equipment can be displayed on the monitor.     Portable memory and internal buffer	
			DVR     Video printer     Image filing system     D 3 of 9	0+ 050g

D 3 of 9 RESTRICTED

Ser no	Description	scription Technical specification			
(a)	(b)		(d)		
	Documentation	Displaying the image information	The following data can be displayed on the monitor.  • Structure enhancement level  • Edge enhancement level  • Zoom ratio  • Color mode  • Focus		
		Advance registration of patient data	Up to 50 patient data can be registered. • Patient ID • Patient name • Sex and age • Date of birth		
	Portable	Media	Available		
	Memory Recording format		<ul> <li>TIFF: no compression</li> <li>JPEG (1/5): approx. 1/5</li> <li>compression</li> <li>JPEG (1/10): approx. 1/10</li> <li>compression</li> </ul>		
		Number of recording images	<ul><li>TIFF: approx. 227 images</li><li>JPEG (1/5): approx. 1024 images</li><li>JPEG (1/10): approx. 2048 images</li></ul>		
	Memory Backup	User settings	Up to 20 user settings can be registered.		
	02. <b>200 M</b>	Memorization of selecting setting  Xenon Light Source – 01 No.	The flowing setting are held in memory even after the video system center is turned off.  Color tone Iris mode Enhancement Color Enhancement mode Contrast AGEC Color Mode White balance		
	02. 300 Watt Following fea				
	a. Optical Nar much greater b. Waterproof				
	c. Considerab	le reduction in operating noise.		,	
			d any complicated cable connections		
		es transmission speed.	in the second se		
		ignt adjustment to achieve the idea	al illumination for observation with		
	each scope.			,	

D 4 of 9 RESTRICTED



Description	Technica	al specification	To be filled the Manufa Principal			
Technical Specification of 300 Watt Xenon Light Source						
common opcome	oution of ood trutt Adnott Elg					
	Voltage	100-240 V AC Within ± 10%				
Power Supply	Frequency	50/60 Hz; within ±3 Hz				
_	Consumption electric power	600 VA (Approx)				
	Examination lamp	Xenon short-arc lamp (ozone-free) 300 W (Approx)				
	Average lamp life	Approximately 500 hours of continuous use (With intermittent use, the lamp life may vary slightly.)				
	Ignition method	Switching regulator				
Illumination	Brightness adjustment	Light-path diaphragm control				
	Cooling	Forced-air cooling				
	Intensity mode	Normal or high intensity				
	NBI observation/equivalent or better technology	Available				
Illumination	Color conversion	Possible using special-purpose filter				
	Emergency lamp	Halogen lamp (within mirror) 12 V, 35 W				
	Average emergency lamp life	Approximately 500 hours				
Automatic Brightness	Automatic brightness adjustment method	Servo-diaphragm method				
Adjustment	Automatic exposure	17 steps (Approx)	,			
Air Feeding	Pump	Diaphragm type pump				
	Pressure switching	4-level available (OFF, low, medium, high)				
Water Feeding	Method	Feeds water by pressurizing the detachable water container with air.				
Indicators on Front Panel	Emergency lamp	Indicates absence of emergency lamp, disconnection and use of emergency lamp				
	Optical NBI/equivalent or better technology	When the Optical NBI observation is enabled, the Optical NBI indicator lights up				
	OP	It lights up if a special-purpose filter is installed into the light source.				
Setting Memory		Settings (except filter setting) are stored even when the light source is OFF.				
Classification (medical electrical	Type of protection against electric shock	Class I				
equipment)	Degree of protection against electric shock of applied part	Depend on applied part. See also applied part (camera head or video scope).				
	Degree of protection against explosion	This instrument should be kept away from flammable gases.				

D 5 of 9 RESTRICTED



er o	Description	Technical	specification	To be filled up by the Manufacturer Principal				
	03. Upper GI Endos							
	The scope must com							
		/	- Continue observation completition					
			efinition observation capabilities.					
	b. Must have optical greater contrast be performance of optical NBI's position. Must have the so							
	HDTV image qualit	y in a slim diameter size.						
		rd water jet function is standard	d on all routine gastroscopes					
		-						
	and in between cas resistant cap and the	ses. It is fully submersible and	he effort required for setup prior to eliminates the need for a water-idental immersion.	,				
	Technical Specificat	ion Upper GI Endoscope/Gas	strointestinal Videoscope:	A Figure				
		_						
	Optical System	Field of view	140° (Approx)					
		Direction of view	Forward viewing (Approx)					
		Depth of field	2-100 mm (Approx)					
	Insertion Section	Distal end outer diameter	9.2 mm (Approx)					
		Insertion tube outer 9.2 mm (Approx)						
		diameter	1020 mm (Approv)					
	Instrument Channel	Working length Channel inner diameter	1030 mm (Approx) 2.8 mm (Approx)					
		Minimum visible distance	3.0 mm from the distal end					
		William Visible distance	(Approx)	-9				
	Bending Section	Angulation range	Up 210 °, Down 90 °, Right	=				
			100 °, Left 100° (Approx)					
	Total Length		1350mm (Approx)					
	04 32 Inch IIHD I CE	Medical Monitor – 01 No.						
	The Monitor must ha							
	a. Maximize Observa High definition image 4k up-convert function b. Advance Image Mu							
	(A.I.M.E) producer sh three dimensional tex							
	c. Versatile 4K/HD Sir cable with 12G-SDI in handle conventional 2							
	d. Multiple Images D							
	(POP) display imagendoscopy procedure		e. Convenient and Useful Output: Must be allowed to show what is on the monitor as well as PIP/POP images from multi modalities with on cable to the images exactly on the monitor as well as flipped, color a adjusted images, also PIP/POP images from multi modalities with just one cable. Also to well optimized and allow 2K/4k Compatible out					
	(POP) display imagendoscopy procedure e. Convenient and Uwell as PIP/POP imathe monitor as well as modalities with just of	es.  Iseful Output: Must be alloweges from multi modalities with a flipped, color a adjusted imagne cable. Also to well optimize	n on cable to the images exactly on ges, also PIP/POP images from multi	*				
	(POP) display imagendoscopy procedure e. Convenient and Uwell as PIP/POP imathe monitor as well as modalities with just oput to record the displayed	ls.  Iseful Output: Must be allowed ges from multi modalities with a flipped, color a adjusted imagine cable. Also to well optimized image.  In Must be Full-flat display ar	n on cable to the images exactly on ges, also PIP/POP images from multi	*				

D 6 of 9 RESTRICTED

Ser no	Description		To be filled up by the Manufacturer/ Principal		
	Technical Specif				
	Display	Display Size	e LCD Mode	31.5/IPS (Approx)	
		Resolution/	Aspect Ratio	3840 x 2160/ 16 : 9 or better	2
		Luminance	[Cd/m <sup>2</sup> ]	450 or better	
		Contrast		1000:1 or better	
		Color space	)	BT.2020/ BT.709 or better	
		Protection F	Panel	Acrylic panel	
		Angle of View		178º /178º or better	
		Numbers of colors		1.07 billion (Approx)	
		Backlight		LED	
	Functions	Resolution	Enhance	A.I.M.E	
		Technology	()		
	Multiple Image Display		ge Display	PIP/POP	
	Flip Pattern			Rotation	
		HDR		Applicable	
	Input Output	4k	In	12G-SDI x 2, Display port x 1,HDMI x1	
			Out	12G-SDI x 2	
		2K	In	3G-SDI x 1, DVI-D x 1	
		,	Out	3G-SDI X 1	
		CLONE OU		12G-SDI x1 / Any port	
	General	Power supp	ly	AC 100V- 240V, 2.0-0.7A, 50/60 Hz	
		Size	A	753.9 x 476.3 x 79.2 mm	
		Weight		11.8 Kg (Approx)	
		Remote		RS-232C connector D-sub 9 Pin	

5. Endoscopic Image Processing & Printing Software with Pc, Color Monitor and Ink Jet Printer – 01 No.

The availability of the following features must have with the Image processing and printing software:

- a. Available connectivity: Must have with S-Video and Composite Video port.
- b. **Area of use**: Only for Endoscopic procedure as well as for both Endoscopic & Fluoroscopic procedure simultaneously like ERCP procedure.
- c. Video format: Support PAL, NTSC, SECAM Video format.
- d. Capture: Video with audio in \*WMV format and only Image in JPEG format.
- e. **Filtration**: Video image can be filtrated during live procedure with brightness, contrast, hue and Saturation.
- f. Acceptability of capture card: Any capture card is supported even a TV card.

Entertains internal or external USB card.

- g. **Capture resolution**: Image capturing resolution is same as is capture card's output resolutions.
- h. Acceptability of high definition capture card: The high definition capture cards are supported.
- j. **Still image capturing during video**: Possible to capture the steel image during WMV video Capturing.

**Live report during procedure**: The report writing box will appear in the monitor during procedure

- i.e. during capturing image therefore live report can be prepared/ composed in live reporting box.
- a. **Image processing**: Image can be processed by using various user handy image editing tools, such as Text annotation, Line, Arrow, Rectangle, and Ellipse. etc.
- b. **Saving ink cost**: Image cropping reduces the cost of ink. Color can be filtered here with various color effect.

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Ser no	Description	Technical specification	To be filled up by the Manufacturer Principal						
	c. Options of Ima	ge printing: Six or four images can be printed with report text in a single	1						
	page.								
	d. <b>Use of templates</b> : Pre-stored template for quick reporting. Support all features of Word								
	pad reporting. Allo								
	e. Logo Incorpor								
	f. Options of mul	tiple capturing tools: Image can be captured by using Foot or Hand							
	Switch.								
3		otions: Exporting patients full report to a different media in JPEG format. mail or in Pen drive or CD etc.							
	h. Image in VCD consumer player.	and DVD: The captured WMV files can be written for VCD and DVD	31						
v	j. Multiple search	ning options: There are 12 different options to track and trace also to nt. All the tools can be used at a time. The search results will remain I me is unlocked.							
	the text. Here ima	nis option enables five different styles of larger images to tak print leaving ges can be set to cover entire area of a one page. The same way i for Four more options into 2,3,4 and 6 images							
		patient and Doctors: There will be database both for patient and doctors and referring physician separately).							
	I. Template editing option: Built in template editor.								
		Supports case study for the doctors.							
	n. Back up optio								
	p. Auto save opt								
	q. Few buttons w	vith vast features: Vast professional features can be enjoyed with only							
	with few Buttons.								
	r. <b>User friendly o</b> beginner to under								
	Specification of t								
	Processor	Intel Core i7 Series	1						
		Intel 310 or above Chipset	1						
	Mother Board	Mother board (Asus/Gigabyte/MSI)							
		(Built in Graphics, Sound & LAN Card)							
	RAM	8 GB 2400 MHz DDR4							
	HDD	1TB SATA3	1						
	DVD Writer	SATA2	1						
	Monitor	LCD 20" Inch Wide Screens (1600x900 Resolutions) (Approx)	-						
	Mouse	USB Optical	-						
	Keyboard	USB Standard Slim Canon G1000/1010 Inkjet	-						
	Printer Cord	-							
	Capture Card	-							
	Multi Plug	-							
	Printing Paper	A4 Size Glossy Photo Paper (1 Packet)	-						
	Capture Switch	Scope Button Digital Capture Switch or Foot Switch (USB)	-						
	Image Cable	Composite Cable (10 yards)  R – Qty:01 No. (Brand, Model , Country of Origin & Manufacturer –To							
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D 8 of 9 RESTRICTED



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	07. SYSTE	VI TROI	LLEY (LC	CAL) -	Qty: 01	No (Bran	d, Model, Cou	intry of Origin &		3,675	
	Manufacturer –To be mentioned)- A system cart/trolley with 04 shelves, power										
	socket, key board tray, monitor arm, scope and accessories holder, drives on										
	04 wheels,	local r	made of	stainles	s steel t	o be with	the system.				
	08. SUCTIO										
	One Suction										
								, Country of Orig			
		urer – I	o be men	tioned).	- UPS-OF	·F LINE-1	200VA should	be come up with	1		
	the system.	TED T	ADIE /I	OCAL)	Otv: 01 I	lo (Prop	d Model Cou	intry of Origin &	-		
	Manufacture				Qty. UTI	VO. (Diali	u, Model , Cot	initity of Origin &			
	One Compu				ne up with	the syste	em.				
3.								d separately for	full		
	range of ope							an en engle assertation y to an a			
	Ser	Name	of item	Qty	Brand	Model	Country of	Country of	Rem	narks	
							Origin	Manufacturer			
								×			
4.	Power Supp	olv		220 V	AC ±10%	. 50 Hz.					
5.	Local Train					,	i parametra de la contrata del contrata de la contrata del contrata de la contrata del contrata de la contrata de la contrata de la contrata del contrata de la contrata del contrata de la contrata del contrata de la contrata de la contrata de la contrata de la contrata del contrata del contrata del contrata de la contrata del contrata del contrata d				
	a. Operatio		ining	02x Operators for 01 week							
	b. Repair/Maintenance			Not required.							
	Training		# 100 market	3							
6.	Warranty					rs from th	ne date of issu	uance of Inspecti	ion		
				Note (I/Note).							
7.	After sales			10 (Ten) years from the date of installation.							
8.	Certificate of			FDA/CE/JIS Certificate must be submitted with offer				h a			
9.	Books and I	Publica	uon	Following books and publication in English will be supplied along with the stores free of cost.					be		
			a. Operational manual — 03 Copies (01x Original & 02x					12x			
	Photocopies)										
	b. Repair/Maint/Service manual including details circuit/ Schematic diagrams- 03 Copies (01x Original & 02x										
				1	copies)	granis— (	os copies (o	ix Original & C	/2/		
						/	Daula 1:-4	00 0			
						ogue/ivias Photocopi		– 03 Copies (0	)1X		
				d. 100	% Spare	Parts list	with price - 02	2 x Original copie	s.		
	Note: In addition to hard copy, a soft copy CD/DVD containing all Books and Publications will be supplied by the supplier free of cost.										
10.	If any other	feature	/itams no	nt lieted	ahova hi	ıt require	d for full range	of operation of	ho		
10.								ith main equipme			

D 9 of 9 RESTRICTED

