

Date: - 28th January, 2019

# Corrigendum

# For

# Three Chip High Definition Laparoscopy System (ICG Fluorescence Guided Imaging by Near Infra-Red Light) for the Department of Surgical Oncology

NIT Issue Date : 25<sup>th</sup> July, 2018

NIT No. : Admn/Tender/72/2018-AIIMS.JDH

Pre-Bid Meeting : 06<sup>th</sup> August, 2018 at 04:15 PM

Earlier Last Date of Submission : 30<sup>th</sup> January, 2019 at 03:00 PM

Extended Last Date of Submission: 14th February, 2019 at 03:00 PM

Bid opening : 15<sup>th</sup> February, 2019 at 03:15 P.M

The following revised and additional specification will be added:-

# 1. Page No. 1, 2 and annexure 1:

### For

NIT Name: - Three Chip High Definition Laparoscopy System (ICG Fluorescence Guided Imaging By Near Infra-Red Light)

### Read

NIT Name:- Laparoscopy System with 4K & ICG/ IR fluorescence guided imaging by near infra-red light)

# 2. Page No. 11, S. No. 1 Specification:

### For

Three chip high definition laparoscopy system (icg fluorescence guided imaging by near infra red light

### Read

Laparoscopy System with 4K & ICG/IR fluorescence guided imaging by near infra-red light)

# 3. Page No. 11, S. No. 1 Specifications:

### For

1	Three Chip High Definition Laparoscopy System (ICG fluorescence guided imaging by near infra-red light)	01
	The system should be truly Digital HDTV endoscopic video camera. The system should have the maximum Resolution of 1920 X 1080 pixels, progressive scan and the consistent use of 16: 9 formats for Input & Output to	

guarantee genuine HDTV.

- Camera head should be compatible for ICG HD fluorescence guided Imaging by Near Infra-Red for Intraoperative perfusion assessment of tissues and organs.
- ICG HD system should be easy to handle and can be used for both White light & Near Infra-Red (NIR) light.
- The system should have facility of Optical & Digital Zoom lens to enhance the quality of Image size & cross specialty usage of the camera system, regardless of the telescope used.
- USB Port for Capturing FULL HD Videos/ HD Stills in External USB drive and direct interface of USB Printer to facilitate direct printouts.
- The Individual components (Light source, camera system, telescopes and fibre optic cable) are perfectly aligned to ICG HD system.
- System should have facility of controlling additional equipments like light source/ insufflators and recording device from the camera head.
- System should have facility to offer various visualization modes for surgery and diagnosis by shifting the color spectrum like BLUE & GREEN light for recognition of the finest tissue structures and their differentiation.
- Parallel live display of visualization modes besides white light mode (picture-in-picture).

# **Technical Specifications:**

Image sensor: 3X1/3" CCD-Chip.

Pixels 1920 x 1080

AGC: Microprocessor controlled

Lens: Integrated Optical Zoom

Control buttons: 3 (2 of them freely programmable).

Video output: 2 x DVI-D output, 1 x 3G-SDI output, 3 x camera input for communication with compatible camera modules, LAN

connection, 4 x USB connection (2 x front, 2 x back).

Input: Keyboard input for character generator. 5- pole DIN socket.

Certified to IEC 601-1, 601-2-18, CSA 22.2 No. 601, UL2601 and CE according to MDD, protection class 1/CF

### Read

1	Laparoscopy System with 4K & ICG/IR fluorescence guided imaging by near infra-red light)	01
1	The Camera system should be 4K & ICG Full HD endoscopic video camera system -2 No's which should be provided	
	A) 4K Video processor with 4K camera head	

# Should have following

- a) Pixels 3840 X 2160 Pixels
- b) AGC: Microprocessor controlled
- c) Color Spa Compatible to BT 709 & BT.2020 emulation
- d) Video processor should be Full 4K

### 4K camera Head Specifications

- a) Pixels: 3840 X 2160 Pixels
- b) AGC: Microprocessor controlled
- c) Lens: Integrated Zoom Lens f = 18 mm or more
- d) Color Spa Compatible to BT 709 & BT.2020 emulation
- e) Should be light in weight
- f) Should have 2 or more programmable buttons
- g) Color Spa Compatible to BT 709 & BT.2020 emulation

### B) ICG/IR Video Processor with full HD Camera head:

- a) Should be 3-chip FULL HD Camera Head for ICG application
- b) The system should have facility for Optical Contrast Differentiation System and it Should have special filter for observation of capillary vessels and fine patterns in the superficial layer of mucosa for early detection of lesions
- c) The camera head should have facility of Optical & Digital Zoom lens to enhance the quality of Image size & cross specialty usage of the camera system, regardless of the telescope used.
- d) USB Port for Capturing FULL HD Videos / HD Stills in External USB drive and direct interface of USB Printer to facilitate direct printouts.
- e) Should have facility of PIP/POP
- f) Processor should have all necessary HD outputs

### **Technical Specifications for ICG Camera Head**

a) Image sensor : 3X1/3" CCD/CMOS -Chip.

b) Pixels : 1920 x 1080

c) AGC: : Microprocessor controlled

d) Lens: : Optical Zoom

e) Control buttons: : 3 (2 of them freely programmable).

# 4. Page No. 12, S. No. 3 High Definition Medical Grade Monitor: For

2	High Definition Medical Grade Monitor	02
	The monitor should have:	
	HDTV display in original 16: 9 HDTV format.	
	• 1080 p/ 50 & 1080 p/60 displays possible.	
	LED crystal display.	
	Max. Resolution of 1920X1080.	
	• Screen diagonal – 26".	
	Desk top with pedestal.	
	Should have the facility of PIP mode.	
	• Video Inputs: 2* DVI-D, 2* 3G SDI, 1* S Video, Composite 1*	
	RGB/VGA, 1* RS 232, 1* RJ 45 Interface.	
	• Output: 1* DVI, 1* 3G SDI, 1* S-Video	
	Accessories External 24VDC Power Supply, Mains Cord, Pedestal.	
	• Certified to : FN 60601-1 protection class IPX 1	

# **High Definition Medical Grade Monitor**

- The monitor should have:
- HDTV display in original 16: 9 HDTV format.
- 1080 p/ 50 & 1080 p/60 displays possible.
- LED crystal display.
- Max. Resolution of 1920X1080.
- Screen diagonal 26".
- Desk top with pedestal.
- Should have the facility of PIP mode.
- Video Inputs: 2\* DVI-D, 2\* 3G SDI, 1\* S Video, Composite 1\* RGB/VGA, 1\* RS 232, 1\* RJ 45 Interface.
- Output: 1\* DVI, 1\* 3G SDI, 1\* S-Video
- Accessories External 24VDC Power Supply, Mains Cord, Pedestal.
- Certified to: EN 60601-1, protection class IPX 1

### Read

2	50 Inch or more 4K Medical Grade Monitor	1
	Compatible Monitor with all processor capable of displaying: <ul> <li>a) 4K</li> <li>b) ICG application</li> </ul>	

# 5. Page No. 12, S. No. 4 Technical Specification:

For

3	Xenon Light Source with ICG HD fluorescence mode.	01
	Lamp type:- Xenon 15V, 300 Watt	
	Color Temperatures 6000K	
	• Light Outlets – 1	
	• Light Intensity Adjustment: - Continuously adjustable, either via a membrane keyboard.	
	• Facility of switching between white light and Near Infra Red light (NIR)	
	for ICG HD use by footswitch.	
	• Certified To :- IEC 601-1 & UL 544 CE According to MDD, protection	
	class 1/CF	

# Read

3	Xen	on 300 watt Light source for ICG/IR application and second light source of	02
	xen	on/LED Light Source for white light application.	
			01
			Eac
	A)	<b>Xenon Light source for ICG Application</b> :	h
	Sho	uld be compatible with Fluorescence Imaging for ICG application only	
	a)	Color Temperatures 5800-6000K	
	b)	Light Outlets – 1	
	c)	Light Intensity Adjustment:- Continuously adjustable	
	d)	Facility of switching between white light and Near Infra Red light (NIR) for	
		ICG HD use.	
	e)	To be provided with spare lamp- 3 Nos	
	<b>D</b> ) (	Second I talk account to be second at a 200 and Variable II ED Pale account	
		Second Light source to be quoted: 300 watt Xenon/ LED light source	
	equ	ivalent to 300 watt xenon to should be quoted as secondary light source for	
	whi	te light application only	

# 6. Page No. 12, S. No. 5 Technical Specification:

# For

4	Insufflator	01
	☐ Flow rate 35- 45 Liter/mints	
	High flow with LCD display	
	Microprocessor controlled & Software driven for upgradeability	
	Soft approach pressure control for safe recovery of abdominal pressure	
	Should have Neonatal mode & visual and audible alarms with min 0.1 L flow rate	
	Internal leakage detection capability	
	Integrated Gas heating	
	Having internal venting system for safety	
	Should have video on screen display	
	Unit should include heated tubing, hose & yoke	
	Should be able select either central supply (4.5 kg/cm2) input pressure from central supply as well as direct connection to high pressure co2 cylinder and should indicate the right inlet pressure of co2 gas supply of front panel of machine. Attachments Maintenance free DC brushless motor	

# Read

4	Insufflator	01
	a) Flow rate 30 Litre/mints or more	
	b) High flow with LCD display	
	c) Microprocessor controlled & Software driven for upgradeability	
	d) Soft approach pressure control for safe recovery of abdominal pressure	
	e) Should have Neonatal mode & visual and audible alarms with min $0.1\ L$ flow rate	
	f) Internal leakage detection capability	
	g) Integrated/external Gas heating	
	h) Having internal venting system for safety	
	i) Unit should include heated tubing, hose & yoke	

# 7. Page No. 13, S. No. 6 Fibre optic cable:

# For

5	F	iber optic cable	01
	•	High light transmission for optimal ICG HD fluorescence Imaging.	
	•	Extremely heat resistance.	
	•	Should be supplied with Diameter >3.5mm, Length 300 cm.	

# Read

5	Fibe	er optic cable	02
	0)	High light transmission for antimal ICC UD fluoressance Imaging	
	a)	High light transmission for optimal ICG HD fluorescence Imaging.	
	b)	Extremely heat resistance.	
	c)	Should be supplied with Diameter 4 mm or more length 300 cm.	

# 8. Page No. 13, S. No. 7 Rigid Telescope:

# For

6	Rigid Telescope 0 Degree & 30 degree	01 Each
	<ul> <li>Straight forward telescope 0 degree, enlarged view, 10mm, length 31cm, autoclavable, compatible with ICG Fluorescence guided imaging by Near Infra Red (NIR) light and white light, fiber optic light transmission incorporated.</li> <li>Straight forward telescope 30 degree, enlarged view, 10mm, length 31cm, autoclavable, compatible with ICG Fluorescence guided imaging by Near Infra Red (NIR) light and white light, fiber optic light transmission incorporated.</li> </ul>	
	<b>Special Note</b> : The Individual components (Light source, camera system, telescopes and fibre optic cable) should be perfectly aligned to ICG HD system.	

# Read

6	TELESCOPES	
	Compatible Telescopes with the above system should be quoted with Dimensions as below:	01 Each
	<ul> <li>a) ICG Telescopes: 10mm 0 Degree and 30 Degree with 300 cm or more working length, enlarged view, autoclavable compatible – Each Qty-1 Nos</li> <li>b) Full HD 5mm 0 Degree and 30 Degree with 300 cm or more working length, enlarged view, autoclavable compatible – 1 No each</li> </ul>	
	<b>Special Note</b> : 4K telescopes 10 mm 30 & 0 Degree & 5mm 30 degree to be quoted as <b>optional</b>	

# 9. Page No. 13, Addition of following specifications:

# Read

<u>7</u>		IMAGE/VIDEO RECORDING SYSTEM	01
		State of the art user friendly Medical grade system (certified to be used in OT) should be offered with following features:-	
	a)	Use should have full control of the system from sterile/ non sterile field via buttons/ touch screen.	
		Parallel (synchronic or independent) recording of two image sources.	
	c)	Still images and video with audio in HD.	
	d)	Internal memory 500GB or more along with 2 Nos. of external hard disk of 1TB each / 2TB.	
	e)	Recording and playback of 2D/3D/4K video content.	
	f)	Viewable diagonal (inches) 7" or more.	

# 10. Page No. 13, Addition of following specifications:

8	Imported Endoscopic Trolley	01
	Endoscopic Trolley Comaptible with the above system from the same manufacturer should be provided	
	Complete System should be either US FDA or European CE approved (with 4 digit notified body number)	