



बी.पी. कोइराला मेमोरियल क्यान्सर अस्पताल



भरतपुर, चितवन

दररेट सहितको प्रस्ताव पेश गर्ने सम्बन्धी सुचना

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यस अस्पतालको लागि आवश्यक पर्ने तपसिल बमोजिमको अत्याधुनिक उपकरणहरु बोलपत्रको माध्यमबाट खरिद गर्नुपर्ने भएकोले लागत अनुमान तयार गर्ने प्रयोजनको लागि इच्छुक कम्पनि/फर्मले योग्यता तथा आधिकारीक सम्बन्धी आवश्यक कागजात सलमन गरि दररेट सहितको प्रस्ताव ५ (पाँच) दिनभित्र यस अस्पतालमा सोझै वा ईमेल मार्फत directorbpkmch@gmail.com / bpkmchprocurement@gmail.com पठाउनुहुन अनुरोध छ । थप जानकारीको लागि अस्पतालमा सम्पर्क गर्न सकिने छ ।

तपशिल

1. 4K Tower With ICG for Laproscopy

(Technical Specification यसैसाथ संलग्न गरिएको छ ।)

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Technical Specification for 4K Tower with ICG for Laparoscopy

**B.P. Koirala Memorial Cancer Hospital,
Bharatpur, Chitwan**

SN	Technical Specifications	Qty	Bidder's Offer	Remarks
1	Description of Function			
	A 4K surgical imaging system optimizes light, color, and resolution. The result is four times the resolution, two times the color range, and clearer images in all light conditions compared to HD systems. This system is used when operating on small blood vessels using minuscule sutures to see an image clearly enough to make out the individual objects in the scope of vision. 4K system allows surgeons to clearly see inside a patient, ensuring that they place their tools in the intended areas efficiently.			
2	Operational Requirements:			
	a. 4K Tower System for			
	• Laparoscopy			
	4K System for Laparoscopy			
	The 4K system requires the following equipment:			
	• 4K Processor with ICG	1		
	• 4K Camera Head with ICG	1		
	• LED light source with Fiber optic cable for ICG	1		
	• 4K Monitor	1		
	• Telescope	1		
	• Insufflator	1		
	• Irrigation System	1		
	• The trolley from the same manufacturer	1		
	• Instrument set	1		
3	System Requirement:			
3.1	The supplier must provide the following equipment with the following specifications: 4K System for Laparoscopy			
3.2	4K Processor with ICG The supplier must provide a 4K processor with the following requirements:			
	• It should have automatic light source control			
	• It should have natural color settings			
	• The system should also have different visualization technologies for easy tissue differentiation in 2D and preferably should have the facility to upgrade it to 3D, 4K, and 4K-3D			

	ICG in the future. The supplier should provide brochures highlighted of all these technologies.			
	<ul style="list-style-type: none"> • The camera system should be compatible with a 4K camera head 			
	<ul style="list-style-type: none"> • The system should have near-infrared (NIR)/ Indocyanine green (ICG) fluorescence application which should be USFDA certified 			
	<ul style="list-style-type: none"> • The processor should be able to process the innovative visualization technologies for homogenous illumination and contrast enhancement 			
	<ul style="list-style-type: none"> • It should have multiple source management which should allow simultaneous control, display, and documentation of image data from two connected image sources 			
	<ul style="list-style-type: none"> • It should have an innovative design for parallel display of standard images and image-enhanced technology 			
	<ul style="list-style-type: none"> • It should have intuitive menu navigation for easier access 			
	<ul style="list-style-type: none"> • It should have the facility to save individual presents 			
	<ul style="list-style-type: none"> • Recording in pen drive from processor Video Full HD and Still images 			
	<ul style="list-style-type: none"> • Video Outputs: DVI-D, DP, 12G-SDI 			
	<ul style="list-style-type: none"> • It should have multiple link inputs 			
	<ul style="list-style-type: none"> • It should have 4 USB interfaces 			
3.3	4K Camera Head with ICG			
	<ul style="list-style-type: none"> • The supplier should provide a 4K camera head along with the required processor. The Camera head should be a digital chip camera head for 4K UHD with the following specifications: 			
	<ul style="list-style-type: none"> • The camera head should be able to switch between the two modes with the buttons present in the camera head 			
	<ul style="list-style-type: none"> • It should have approx. 3840 (H) x 2160 (V) pixels. 			
	<ul style="list-style-type: none"> • It should perform both white light and Near Infrared application 			
	<ul style="list-style-type: none"> • It should support 16:9 input format and should allow image display on wide monitors without the need for conversion 			
	<ul style="list-style-type: none"> • It should have a progressive scanning method 			
	<ul style="list-style-type: none"> • Its focal length should be at least 17mm 			

	<ul style="list-style-type: none"> • The Camera head should have multiple programmable buttons 			
	<ul style="list-style-type: none"> • Integrated camera cable (3 m) with special plug for CCU. 			
	<p>Overlay:</p> <ul style="list-style-type: none"> • White light image with superimposed display of NIR/ICG fluorescence. • Possible to select the preferred color for NIR/ICG imaging: • Either blue or green 			
	<p>Monochromatic:</p> <ul style="list-style-type: none"> • NIR/ICG fluorescence signal in white. Background in black for maximum contrast 			
	<p>Intensity Map:</p> <ul style="list-style-type: none"> • White light image with superimposed display of NIR/ICG fluorescence. NIR/ICG signal display will appear in different colors depending on the strength of the detected NIR signal. 			
	<ul style="list-style-type: none"> • Image display in 16:9 format with 3840 x 2160 pixels and progressive scan. 			
	<ul style="list-style-type: none"> • Programmable image refresh rate 50 or 60 Hz. 			
	<ul style="list-style-type: none"> • The camera head should be digital through and through: This system allows the optical image to be converted into a digital image at the earliest possible stage: Directly in the CMOS sensor chip. 			
	<ul style="list-style-type: none"> • It should have at least 1.5 X digital zoom 			
	<ul style="list-style-type: none"> • The 4K Camera Head with ICG should be FDA approved 			
3.4	LED Light Source for ICG			
	<ul style="list-style-type: none"> • The light source should be an LED white light/fluorescence cold light source with a light connection for use with suitable endoscopes, with an integrated high-performance LED module having high light intensity and minimal energy consumption and suitable for white light and should have the following specifications: 			
	<ul style="list-style-type: none"> • The Lamp type should be High-performance LEDs, white light LED as well as should be suitable for fluorescence application in near-infrared 			
	<ul style="list-style-type: none"> • The light source should have high-performing LEDS that are active individually and simultaneously 			
	<ul style="list-style-type: none"> • The Color temperature(approx.) should be White light 5700 K. 			

	<ul style="list-style-type: none"> • The Light intensity adjustment should be Continuously manual or via a communication channel 			
	<ul style="list-style-type: none"> • Extremely long average LED lamp life of 30,000 hours. 			
	<ul style="list-style-type: none"> • Natural color rendition with pure white and near-infrared 			
	<ul style="list-style-type: none"> • Very high energy efficiency with the latest LED technology. 			
	<ul style="list-style-type: none"> • It should have an intuitive and user-friendly interface 			
	<ul style="list-style-type: none"> • Standby button with memory function (remembers last brightness level selected). 			
	<ul style="list-style-type: none"> • Light intensity can be manually fine-tuned in multiple steps. 			
3.5	4K Monitor			
	<ul style="list-style-type: none"> • The supplier should provide a monitor from the principal company which should be all in one Medical Grade Monitor capable of displaying: 			
	<ul style="list-style-type: none"> • 2D in 4K resolution 			
	<ul style="list-style-type: none"> • Approx 32“size 			
	<ul style="list-style-type: none"> • 170-degree angle of view 			
3.6	Trolley The supplier should provide a trolley of same manufacturer along with the system			
3.7	Telescopes The supplier should provide the following rigid scopes:			
	<ul style="list-style-type: none"> • 30 Deg 31 cm length 10mm diameter telescope with ICG 			
3.8	Insufflator			
	The insufflator should be an electronic carbon dioxide insufflator with the following specifications:			
	<ul style="list-style-type: none"> • It should have an innovative sensitive mode for sensitive areas such as pediatric applications with safety limits in the pressure up to approx. maximum of 15 mmHg and flow ranges to approx. Maximum 15l/ min 			
	<ul style="list-style-type: none"> • It should have a high flow mode with flow performance of up to approx.50 l/min. 			
	<ul style="list-style-type: none"> • It should also have an individually programmable procedure list for starting devices with personal presets. 			
	<ul style="list-style-type: none"> • It should be easy and intuitive to use with a user-friendly color touch screen for easy and precise 			

	<p>setting of set values for pressure and flow and of insufflation mode, as well as for the clear display of corresponding set values and actual values.</p> <ul style="list-style-type: none"> • It should have optical and acoustic alarm signals in the event of patient overpressure. • It should be a fully automatic, electronically controlled gas refill. 			
	<ul style="list-style-type: none"> • It should also have a safety system for constant monitoring of intra-abdominal pressure; any overpressure is reduced immediately. • It should be applicable for use in Laparoscopy, in Thoracoscopy, in Proctology (for Transanal Endoscopic Operations) and for endoscopy of the upper and lower gastrointestinal tract, as well as in Cardiac Surgery (open or endoscopically assisted cardiac surgery to assure an optimal air extrusion and minimizing the risk of air microemboli and for decreasing rate of contamination and minimizing the risk of postoperative wound infection – for minimally invasive cardiac surgery, e. g. mitral valve surgery) and in Vascular Surgery (endoscopic vessel harvesting). 			
3.9	Irrigation System			
	<ul style="list-style-type: none"> • The supplier should also provide an irrigation system of same manufacturer along with the system for laparoscopy • The irrigation pump should be a roller pump system that can be used for laparoscopy and should also have the facility to upgrade to other surgical departments upon need as well 			
4	Accessories, Spare Parts and Consumables			
4.1	One set of the standard maintenance accessories, for example, cleaning brushes, rubber seal, cleaning cap, cleaning adapter should be available.			
4.2	<p>Instruments: 1 set The instruments should be of the same company as the main system: Laparoscopy</p> <ul style="list-style-type: none"> • Maryland dissecting forceps • Bowel Grasping forceps • Grasping forceps • Laparoscopic Grasping forceps Fenestrated curved Fundus Grasper • Unipolar curved right angle dissecting and grasping forceps 			

	<ul style="list-style-type: none"> • Claw Forceps • Grasping forceps- Allis • Scissors curved Unipolar • L hook HF • Spatula/ Blunt HF dissector • Clip Applicator 300-320 • Unipolar HF cable • Trocar and Cannula 11mm • Trocar and Cannula 6mm • Reducer 11/5 • Nathanson Liver retractor • Suction Irrigation Cannula • Injection needle • Fan retractor • Needle Holder 			
5	Operating Environment			
5.1	Power supply: 220– 240VAC, 50Hzfitted with Appropriate plug. The power cable must be atleast3 meters in length.			
6	Standards & Safety Requirements			
6.1	All the major equipment and accessories should be from the same manufacturer and should be European CE and USFDA certified			
7	Training:			
7.1	The Supplier shall conduct onsite user training for this equipment to enable operators to use the equipment properly.			
7.2	The Supplier shall conduct onsite technical training to Biomedical Engineer/ technician for basic operation and maintenance.			
7.3	The supplier shall conduct training to a Clinician and a Biomedical Engineer for proper use and handling in abroad for at least a week. All the financial liabilites to be borne by the bidder.			
8	Warranty			
8.1	Comprehensive warranty period for entire system shall be 5 years after acceptance of the goods.			
9	Maintenance Service During Warranty Period			
9.1	Planned Preventive maintenance (PPM) shall be performed at least 3 times a year or as per manufacturer’s protocol and corrective maintenance services during warranty period shall be included.			
10	Installation and Commissioning			

10.1	It shall be installed and commissioned by the Supplier at the final destination(s) by qualified and trained Engineer. The certificate of trained Engineer must be submitted.			
11	Documentation			
11.1	It must be supplied with detailed user manual and Service Manual in the English language.			
11.2	Inspection and calibration Certificate should be provided.			
11.3	Must submit the list of major spare parts and cosumables along with parts number and costing			
11.4	Bidder must submit AMC and CMC proposal for five years after the expiry of warranty period.			
Note	Bidder must completely fill the Technical Specification Form (TSF). Only Yes/no/all complies should not be written. Page number in the original catalogue of all the required parameters must be clearly mentioned and specification be highlighted in the catalogue. Failure in doing so may lead to rejection of bid from technical committee.			