JAMMU AND KASHMIR MEDICAL SUPPLIES CORPORATION LTD.

(Public Sector Undertaking of the Government of Jammu and Kashmir)

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JKMSCL

AMMENDMENT/CORRIGENDUM

Subject: E-bid for the finalization of Rate Contract for the procurement of **"3D FI Camera Control Unit (CCU)"** under NIT No. JKMSCL/Mach/2023/575 dated 09.02.2023 ...amendment thereof.

In continuation to the Rate Contract issued by Jammu and Kashmir Medical Supplies Corporation J&K, vide No. JKMSCL/GM(Adm)/2025/13289-303 dated 18.02.2025 for the item **"3D FI Camera Control Unit (CCU)"** in favour of M/S S R Technomed, Bakshi Nagar Jammu, **Please read the amendments in terms technical specifications of the Rate Contract** the rate contract in accordance to the records:

Annexure to Rate contract no. JKMSCL/GM(Adm)/2025/13289-303 dated 18.02.2025.

TECHNICAL SPECIFICATION FOR 3D FICAMERA CONTROL UNIT (CCU)

- 3D camera platform that works with 3D or 2D camera heads
- Camera heads are hot pluggable (change of camera head during surgery)
- Display of color bars on monitor if no camera head connected to CCU
- CCU detects the connected camera head and automatically provides the respective camera settings
- 4 preinstalled standard profiles (LAP General Surgery, LAP Uro, LAP Gyn, Cardio/Thoracic)
- Within each profile the following settings can be modified
    - Brightness (-5 to +5 / increments of: 1)
    - Digital zoom (zoom factors 1.0, 1.2, 1.4, 1.6 and 1.8)
    - Contrast (-5 to +5 / increments of: 1)
    - Edge enhancement (-5 to +5 / increments of: 1)
    - Image rotation 180° (on/off) — only for 30° camera head
    - Toggle 2D/3D (on/off)
    - Toggle Visual white light /fluorescence imaging light
- 4 effects and 3 fluorescent imaging modes can be added to the set profile (Red Enhancement, Smoke Reduction, PoP, status indicators on screen)
    - Optional enhanced viewing mode with red enhancement algorithm (intensifies red colors for better visual distinction of different structures)
    - Optional enhanced viewing mode with smoke reduction algorithm (clearer picture in smoky environment)
    - Picture out of Picture (PoP) for split screen function shows original image and image with effect next to each other
    - Status indicators on screen: currently activated image settings are displayed on the screen in the status area (top right)
- Combination mode of red enhancement and smoke reduction
- Favorites: for each profile the CCU offers a pre-defined selection of 10 functions as favorites for quick access
- 3 freely programmable user profiles can be created in addition to the four preinstalled standard profiles
- Current image settings and status indicators are shown on the screen in the form of symbols and messages
- Preset functions of 4 remote control buttons on the camera head or CCU front in the live mode: menu, white balance, image rotation, digital zoom, light source on/off, record still image/start or stop video)

- Remote control buttons on camera head or CCU front can be assigned with a maximum of 8 functions as per customer needs (only in user profiles)
- If 3D display fails, the operation can be continued in 2D
- White balance function button on CCU front and camera head
- Automatic light intensity control in combination with LED light source (MIS-BUS)
- Gain function: always on
- Unit is stackable
- Multilingual user menu: 21 languages selectable
- Connectors on backside
  - 2 x 3D via 3G HD-SDI (1080p)
  - 2 x 3D via DVI-D (1080p)
  - 2 x 2D via DVI-D (1080p)
  - 1 x 2D via HD-SDI (1080i)
  - Connector for equipotential cable
  - Mains power switch
  - MIS-BUS
  - 2 x 3.5mm jack (remote out)
  - lx LAN Ethernet, galvanically isloated (service
  - 1 USB (service dongle)Wipe disinfection proof
- Maximum power consumption: 120 VA
- Mains supply: 100 - 240 VAC, 50/60 Hz
- Dimensions (w x h x d): 330 x 146 x 353 mm
- Weight: 10.2 kg
- Operating volume: 41 dB(A)
- Protection class: I
- Application part Type CF defibrillation safe
- IEC/DIN EN 60601-1-2 Class A
- Standard conformity IEC/DIN EN 60601-1
- Classification acc. to 93/42/EEC: I

TENDER SPECIFICATION FOR 3D FI CAMERA HEAD WITH ENDOSCOPE AND LIGHT CABLE

- Sensor resolution: native Full HD (1920 x 1080 pixel)
- Image sensors: 2 x 1/3" CMOS
- Scan mode: Progressive Scan (1080 p 50/60 signal)
- Minimum light sensitivity: 0,6 Lux @ f = 1.4
- Minimum shutter speed 1/100,000 sec.
- Signal-to-noise-ratio: 38 dB (acc. to norm ISO 15739)
- Stereo endoscope with rod lens system
- Sterile handling via single use sterile camera drape
- 4 remote control buttons on camera head
- Visual indication of active fluorescence mode via colored LED display in camera head
- Fluorescence modes can be displayed in 2D and 3D
- Camera head can be wipe disinfected
- Function assignment for remote control buttons on camera head identical to function assignment on 3D Camera Control Unit
- Endoscope with outer shaft diameter of 10 mm (including sterile camera drape)
- Automatic brightness adjustment
- Integrated electronically controlled heating at distal endoscope tip to provide controlled anti fog function
- Aperture angle at endoscope tip: 72°
- Depth of field: 20 - 220 mm
- Light cable integrated in video cable (mono cable)
- Endoscope with 0°/30° viewing direction
- 1.8 times digital zoom
- Endoscope working length: 315 mm
- Focal length: 4,6 mm
- Dimensions (w x h x d): 57 mm x 47 mm x 490 mm
- Weight of camera head and endoscope without cable: 538g
- Cable length: approx. 4.1 m
- Application part Type CF defibrillation safe
- Standard conformity acc. to IEC/DIN EN 60601-1
- EMC acc. to IEC/DIN/EN 60601-1-2
- CISPR 11: Class A
- Protection class against falling water: IPX7
- Classification acc. to 93/42/EEC: IIa

TENDER SPECIFICATION FOR LED/LASER LIGHT SOURCE

- Average lifetime of LED module (white light) approx. 30,000 working hours
- Average lifetime of laser module (NIR light) approx. 10,000 working hours
- Monochrome LC display with 2,4 "/ 6 cm diagonal size to indicate operating status (standby), light output, auto light output control, light cable connection and light cable test result
- Front panel with LC display Color temperature of LED module approx. 5665 K (+6,3%)
- Color Rendering Index: 90
- Light flux of LED module: 3,000 lumen (+3,6%)
- Light intensity control via rotation knob in steps of 5% (0-100%)
- Laser module specification for NIR applications:
  - Imaging agent: indocyanine green
  - Laser class (acc. to IEC 60825-1): Class 1 M
  - Laser type: Continuous Wave
  - Laser center wavelength: 805nm (+5/-10)
  - Laser spectral width (FWHM): 3nm
  - Embedded laser: class IV, NIR, 8W
  - Laser aperture: endoscope tip
- Automatic light intensity control via camera control unit (MIS-BUS)
- Deactivation of automatic light output mode by manual control of light intensity rotating knob
- BUS interface — function control (light source on/standby) via camera head of connected Aesculap camera
- Multi light cable connector for Aesculap/Storz, Olympus and Wolf light cables with an outer diameter of 3.5/4.8mm
- Built-in anti-glare protection (if light cable is not connected to light source)
- Automatic dimming of light output when removing the light cable from the receptacle
- Integrated light output measuring control (measures light transmission of connected 4.8 mm light cable and displays result on LCD)
- Orange LED indicator light to show the active laser module
- Two 3.5 mm jack inputs on the rear of the unit for connecting foot switches
- Device is stackable
- Wipe disinfection proof
- Maintenance-free
- Mains supply: 100 - 240 VAC, 50/60 Hz
- Maximum power consumption: 144 W (0.6A @ 240V)
- Power consumption in standby: 5 W
- Operating volume: 43 dB(A)
- Dimensions (w x h x d): 330 x 146 x 362 mm
- Weight: 9.0 kg
- Application part Type CF defibrillation safe
- Standard conformity acc. to IEC 60601-1
- EMC acc. to IEC 60601-1-2
- CISPR11: Class A
- Protection class against falling water: IP21
- Classification acc. to MDR 2017/745: IIa

SPECIFICATION FOR 3D FULL HD LCD MONITOR

- Medicallyapprovedcolor monitor
- Viewable diagonal (inches): 31.5
- Maximum monitor resolution : 1920 x 1080 pixel (Full HD)
- Color LCD panel type with IPS technology
- Front panel protection glass (hardness 9H)
- Optical panel bonding for reduction of light reflections
- Closed housing without ventilation slots and rounded corners
- Display mode selection: 3D/2D
- LED backlight
- Xpol® filterpolarizationsystem
- Aspectratio: 16:9
- Supports major 3D image input formats (side by side, line by line, top and bottom, simultaneous)

- Display direction (normal/90°/180°/270°/mirror)
- Key lock (on/off) prevents unintended inputs
- Video inputs
  - 2x 3G-SDI
  - 2x DVI-D (with HDCP)
  - 1x RGB
  - 1x S-Video
  - 1x Video
  - D-Sub 15pin (mini)
- Video outputs
  - 2x 3G-SDI
  - 1x DVI-D
  - 1x S-Video
  - 1x Video
- Other outputs/connectors
  - GPI input output (D-SUB 9 pin)
  - RS232C output (D-SUB 9 pin)
  - Connector forequipotentialcable
- OSD On-Screen Display
- Parallel display of two input images (two modes, PIP, POP – switching of display size possible)
- Gamma configuration function (1.8 to 2.6, DICOM, original)
- Configuration of Color, Tint, Brightness, Picture, Backlight, RGB (0 to 100) and Sharpness (0 to 20)
- Color temperature configuration between 6500K/9300K
- Direct control of input switching (function buttons can be registered to input switching)
- Reset function to activate factory settings
- Power save mode
- Function keys on monitor bottom front
- 4 defined function keys (preset, input, menu, 3D/2D)
- 4 user-definedfunctionkeys
- Status display via LED
- Menu-driven monitor functions (such as language, color, brightness)
- Noise reduction (off, light, middle, heavy)
- Multilingual user menu: 9 (German, English, French, Italian, Spanish, Japanese, Swedish, Chinese simplified, Chinese traditional)
- User settings: 10
- Change of display direction (2D mode: rotation/mirroring 180°, 3D mode: 180° rotation)
- Parallax adjustment function (3D display only)
- Monitor fixation on wall, cart or extension arm possible
- VESA standard 100 and 200 (100 x 100 mm, 200 x 200 mm)
- Detachable cableconnectioncover
- Maximum monitor resolution: 1920 x 1080 pixel (Full HD)
- Viewing angle horizontal/vertical: 178°
- Contrastratio: 1400:1 (typ.)
- Max. brightness: 650 cd/m² (typ.)
- Reaction time (typ.): 16 ms (on/off)
- Display colors: 10-bit (SDI): 1.07 billion (maximum), 8-bit: 16.7 mio.
- Dimensions (w x h x d): 760 x 463 x 96 mm
- Weight: 10.2 kg

- Heat emission: 20,2°C
- Max. power consumption: 97W
- Power consumption in standby: 30W
- Operating volume: <10 dB
- External power supply: I/P 100-240VAC, 50/60 Hz, 24VDC, 3.7A
- Dimensions external power supply (w x h x d): 160 x 37 x 64 mm
- Weight external power supply: 0.7 kg
- Protection class against falling water: IP45 (front), IP32 (rear)
- Protection class against electric shock: I

Compliant with medical safety standards ANSI/AAMI ES60601-1, CSA-C22.2, No.601-1 and EN 60601-1

SPECIFICATION FOR 2D CAMERA HEAD 3CMOS HEAD WITH ZOOM COUPLER

- Sensor resolution: native Full HD (1920 x 1080 pixel)
- Image sensor: 3 x 1/3" CMOS
- Scan mode: Progressive Scan (1080 p 50/60 signal)
- Focallength: 14 to 28 mm
- Shutterspeed: 1/60 to 1/60,000 s
- Minimum light sensitivity: 1.0 Lux @ f = 1.4
- Signal-to-noise-ratio: > 50 dB
- Camera head can be disinfected by wiping or immersion
- Camera head can be cleaned with alkaline und thermally disinfected
- Camera head can be connected to 2D and 3D camera platform
- Length of camera cable: 3.5 m
- 4 remote control buttons on camera head, can be configured to control image display, record images/video and to navigate and change the settings in the configuration menu of the camera control unit
- Function assignment of remote control buttons on camera head identical to function assignment on camera control unit
- Remote control buttons on camera head can be freely programmed with a maximum of 8 functions
- Preset functions of 4 remote control buttons on the camera head in the live mode: menu, white balance, digital zoom, light source on/off, record still image/start or stop video)
- 2 times optical zoom and 1.8 times digital zoom
- Automatic brightness adjustment
- Dimensions (w x h x d): 46 mm x 47 mm x 188 mm
- Weight without cable: approx. 380 g
- Applied part Type CF defibrillation safe
- Standard conformity acc. to IEC/DIN EN 60601-1
- Protection class against falling water: IPX 7
- EMC acc. to IEC/DIN/EN 60601-1-2
- Classification acc. to 93/42/EEC: I

SPECIFICATION FOR 2D/3D DOCUMENTATION SYSTEM

- System: Intel® i-6500 processor with 8GB RAM
- Patient data and worklist transfer and export of still/moving images via DICOM from PACS server
- Patient datatransferfrom KIS system via HL7 standard
- Direct storage of patient data, still and moving images into the electronic patient record
- „3 step concept" (input of patient data – record still/moving images – archive data)

- Intermediate storage of data on local HDD, followed by data transfer to CD/DVD, USB storage media or network
- Burning on the fly (storage of 2D/3D still/moving images in real time during surgery)
- Patient input mask (ID number, name, first name, date of birth, surgeon, indication, remarks)
- Record and playback of 2D/3D still/moving images in 16:9 format
- Conversion of 3D video data in bottom-top format (to view Eddy 3D video content on consumer 3D TV sets)
- 4 selectable video compression rates
- Still images can be generated during video live recording
- Freeze function of recorded 2D/3D still images (will be shown on primary monitor for max. 2 seconds)
- Simultaneous connection of 2 camera systems (either 2 x 2D cameras or 1 x 2D and 1 x 3D camera)
- Automatic detection of connected and active camera system
- If 2D camera is connected the recorded data will be automatically stored in 2D
- If 3D camera is connected user needs to specify if data should be stored in 2D or 3D quality
- User can record still/moving images either from the camera head, the CCU, via a foot control or a separate touch screen monitor
- Still/moving images will be permanently linked to patient data
- Still/moving images can be added with comments
- Security backup (recorded data is always stored on internal hard disc in case no other storage media is connected to the documentation system)
- OR report of recorded data can either be printed or exported as PDF
- Data preview for OR report available
- 1080p50/60 video signal format for 2D and 3D recordings
- Recording available with pre-recording function on internal hard disc (max. of 2 minute video material can be stored) for still images (2D/3D) and moving images
- Recording of 2D moving images in DICOM 3.0 format (MPEG-2 or MPEG-4 AVC/H.264 format)
- Recording of 3D moving images in DICOM 3.0 format (MVC format)
- HL7 interface (KIS connectivity)
- Data storage into network via WLAN (WLAN dongle required as accessory)
- Recording button on CCU front membrane supports recording of still and moving images
- Supports external USB storage devices (such as Bluray)
- Storage of Eddy log files on USB stick (e.g. for IT and technical service purposes)
- Implementation of generic printer driver (including network printers)
- Software update possible (via update DVD)
- Eddy viewer (image viewing software) compatible with Windows and OS X operating system (for Intel processors)
- Delete wizard for handling the data on the internal hard disc
- „Data Express" – a quick way to end the documentation (export function, OR report printing and data deletion can be bypassed)
- Encryption of patient data and safe "transport mode" (in case of service the patient data is secured)
- DICOM configuration wizard: user-friendly DICOM configuration
- Storage Commitment: Acknowledgement of data storage
- Storage capacity of internal hard disc (HDD): 1 TB
- Storage capacity of system hard disc (SSD): 16 GB
- Data storage possible on internal hard disc, CD/DVD, USB or server
- Compatibility to various servers (LAN, HL7, PACS – DICOM 3.0)
- Double Layer DVD drive with slot in mechanics
- Data storage on
  - DVD+R (speed 8x)
  - DVD+R DL (speed 6x)
  - DVD-R (speed 8x)
  - DVD-R DL (speed 6x)
  - DVD+RW (speed 4x)

- o DVD-RW (speed 4x)
- o DVD-RAM (speed 3x)
- o CD-R (speed 24x)
- o CD-RW HS (speed 10x)
- o CD-RW MS (speed 10x)
- Operating system: Windows 8.1 Embedded Industry Pro (64Bit version)
- Operating system and operating software on write-protected SSD hard drive
- Video inputs   2 x 3G-SDI for 3D camera system

    1 x 3G-SDI for 2D camera system

    Video outputs   1 x Display port (3D monitor)

    1 x DVI-I (operating monitor)

    1 x 3G-SDI (2D)

- Others   1 x RJ45 (Ethernet 10/100/1000 mbit/s network connection)

    2 x USB 3.0 (front side)

    4 x USB 3.0 (back side)

    4 x USB 2.0 (back side)

    1 x potential equilization

    1 x remote for 2D (3.5 mm jack - mono)

    1 x remote for 3D (3.5 mm jack - mono)

- Multiple 2D/3D monitors can be connected with CCU
- Wipedisinfectionproof
- Unit is stackable
- Maximum power consumption: 180 VA
- Mainssupply: 100 - 240 VAC, 50/60 Hz
- Dimensions (w x h x d): 330 x 146 x 353 mm
- Weight: 8.1 kg
- Classification acc. to 93/42/EEC: I
- Standard conformity acc. to EN 60601-1 safety class 1, EN 60601-1-2, EN 62304
- CISPR 11: Class B

TECHNICAL SPECIFICATIONS ENDO CART

1. Voltage   Without isolating transformer: 100VACto 240VAC
                                      With isolating transformer: 230 V AC

2. Maximum power input   10 A at 220 V to 240 V
                                      16 Aat 100Vto 130V

3. Device protection   T10 AH / 250 V
   - Time-Current characteristic   Time lag (T)
   - Breaking capacity   H (1 500 A)
   - Construction   5 mm x 20 mm
4. Multi-socket with cold device bus, 2 x 6 sockets IEC320
5. Dimensions (W x H x D)   703 mm x 1 506 mm x 663 mm
6. Footprint (W x H)   450 mm x 485 mm
7. Weight (unloaded)
   - Without isolating transformer   55 kg
   - With isolating transformer   75 kg
8. Maximum load per shelf   40 kg
9. Maximum permissible total load   210 kg

10. Conforming to standard

IECIDIN EN 60601-1
IECIDIN EN 60601-1-2
EN 14971

˙ TECHNICAL SPECIFICATIONS ISOLATION TRANSFORMER

Maximum rower consumption	2 200VA [Nominal voltage 230V)
Protection against water penetration	IP20
Input fuse [primary)	1 x 20 A
Output fuse (secondary)	2 x 10 A f T10 AH I 250V
Temperature protection	120 "C
Monitoring relay	
Alarm threshold for "Isolation resistance low"	50 k o

SPECIFICATION FOR 2D FULL HD LCD MONITOR WITH TOUCH TECHNOLOGY

- Medically approved color monitor
- Display with TFT technology and LED backlight
- Viewable diagonal (inches): 21.5
- LCD panel with antireflective protective glass Panel with touch function
- Aspect ratio: 16:9
- Maximum monitor resolution: 1920 x 1080 pixel (Full HD) Multilingual user menu (6 languages)
- Menu navigation via On Screen Display
- Menu-driven monitor functions (such as language, source, contrast, brightness, color mode, color)
- Color adjustment: red, green, blue
- Color mode: cool, neutral, warm, user
- Reset function to activate factory settings
- Input: DVI-D, VGA, HDMI, Display Port, USB
- Pixel pitch: horizontal 0.2475mm x vertical 0.2475mm
- Display area: horizontal 475mm x vertical 267mm Display colors: 16.7 mio. Contrast ratio: 1000: 1
- Max. Brightness: 250 cd/m2
- Viewing angle horizontal/vertical: 178°
- Dimensions (w x h x d) 537 x 59 x 329 mm
- External power supply: I/P 100-250 VAC, 1.5-0.75A, 50/60Hz; 0/P 24 VDC, 2.3A
- Monitor fixation on wall, cart or extension arm possible
- VESA 100 standard
- Weight: 5.5 kg
- Max. Power consumption: 48 W
- Power consumption in power saving mode: < 5 W
- Heat emission: 22 W
- Operating volume: 0,3 dB(A)
- Standard conformity: IEC/EN 60601-1 3rd; IEC/EN 60601-1-2, CE, UL60601, FCC
- Classification acc. to 93/42/EEC: I

TECHNICAL SPECIFICATIONS INSUFFLATOR

Mains voltage range	AC 100-240 V		
Supply frequency range	50/60 Hz		
Fuse designation	2x T 4 A H, 250 V, UL-recognized		
Power consumption	Currrent (A)	Power consumption V)	
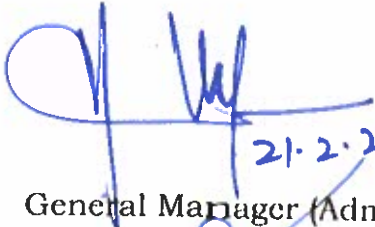
Normal operation 100 V AC/60 Hz	1,05	105
• Normal operation 240 V AC/50 Hz	0,50	120
Max. power consumption	120 VA	
• Protection class (I, II, III)	I	
Application part type (B, BF, CF)	CF	
Protection type (IP-Code)	IP21	
Classification (I, IIa, IIb, III)	IIa	
Operating conditions:	15-37 °C	
	20-90 % rel. humidity, non condensing	
	700-1060 hPa air pressure	
	3000 m/9843 ft max. altitude above sea level for device Use	
Storage and transportation conditions:	-20 bis +60 °C	
	10-95 %	rel. humidity, non-condensing
	500-1060 hPa	air pressure
	50 dB	
Maximum device noise emission heat emission	43 °C	
Inlet pressure range	Max. inlet pressure: 80 bar/1160,3 psi	
	Min. inlet pressure for house gas: 2,7 bar/39,2 psi	
Max.	75 mmHg (1 mmHg = 1,33 mbar = 133 Pa)	
Max. gas flow	50 l/min	
Max. suction	12 l/min	
Adjustable pressure range	1-30 mmHg	
Pressure display resolution	1 mmHg	
Dimensions (Width x Height x Depth)	330 mm x 200 mm x 400 mm	
Weight	12 kg	
Interfaces/connections:	Memory stick interface (USB Typ A)	
	Service interface (Mini-USB)	
	Mains power connection (IEC-60320-1 C14)	
Standards	IEC 60601-1:1988 + A1:1991 + A2:1995 (Edition 2.0)	
	IEC 60601-1:2005 + CORR. 1:2006 + CORR. 2:2007 + A1:2012 (Ed. 3.1)	
	EN 60601-1:2006/A1:2013 (Edition 3.1)	
	EN 60601-1-2:2007/AC:2010 (Edition 3)	
	IEC 60601-1-2:2014 (Edition 4)	

IEC 60601-1-6:2010 (Edition 3) + A1:2013

CISPR 11 class B

Rest all the terms & conditions of the rate contract, specifications and CMC rates shall remains the same.

Issued with the approval of Managing Director, JKMSCL

Issued with the approval of TIA.

General Manager (Adm),
JKMSCL.

No.: JKMSCL/ORD/2025/ 13564 - 68   Dated: 21   .02.2025.

Copy for information to the:-

1. Financial Advisor/CAO JKMSCL.
2. General Manager-(P&S), JKMSCL.
3. Assistant Programmer, JKMSCL to upload the order on web portal.
4. PA to the Managing Director, JKMSCL for the information of Managing Director.
5. M/S SR Technomed, Jammu for inf.
6. File