

## **Specifications of Pediatric Videoendourology Set**

A 4K Ultra High-Definition Laparoscopic Imaging system will consist of the following items:  
All items should be Medical Grade. The complete Optical Chain should be 4K for Optimized imaging  
All quoted items should be US FDA approved and of the same parent company except 4K medical grade monitor, 4k recorder, pendrive and portable hard disk, UPS

### **1. Full 4K High-Definition Video Image processor: 1**

A full 4K high-definition pressure should provide 3840 x 2160 or higher. Should also provide 2 x 4K Output for monitor & recorder. It should also have HD output. Silicone Keyboard, DVI-D or HDMI Connecting Cable or equivalent, length 300 cm, Mains Cord, length 300 cm, SDI-Cable, 300 cm, Connecting Cable, length 100 cm. Three DVI-D or HDMI cables of 300cm should be provided, corresponding to the outputs available in the system.

### **2. Light source: 1**

Cold Light Fountain Power LED 175 , high-performance LED and one light outlet, power supply 110 - 240 VAC, 50/60 Hz including: 400 A Mains Cord Connecting Cable OR 300 W Xenon light source with 10 xenon bulbs extra.

### **3. Full 4K Camera head: 1**

Should have either one chip or 3 chip camera and both CMOS or X-mor-R technology sensors are eligible, providing high sensitivity and less noise for clear image.

Should provide On-touch / Auto Focus Function **or manual**.

Should provide Electronic Zoom (button controlled) / Manual/ **optical zoom**.

Should be able to disinfect /**or autoclavable**.

### **4. 4K Medical Grade Monitor:[ Need not be from same make but from highly reputed company only if not from parent company] 1**

31inch or more UHD LCD/LED backlit monitor with ultra-definition resolution 3840x2160.

Monitor should have 16:9 aspect ratio.

Should have multi-image display format.

Should have various input/output terminals, compatible with the camera system.

Monitor should preferably run-on AC (with or without DC adapter) 100V – 240V, 50/60Hz

### **5. Ultra / 4K Telescope: 1**

5.5 mm / 5 mm – DOV 30 degree, Working Length: between 29 cm to 33 cm.

Completely distortion free. Autoclavable

Homogenous Light distribution in the peripheral region.

Eyepiece type connection – for uniform compatibility.

Large field of view and depth of focus.

Fully Autoclavable type.

### **6. Light Guide Cable, must be Autoclavable: 1**

Universal, compatible with adaptors

High Resistance protection tube.

Reduced diameter with high fiber density.  
Small bending radius for comfortable use.  
3 Meter in length.

More than 4.5 mm in diameter.

**7. Ureterorenoscope**

**1**

Semirigid ureteroscope with 6 - 7 Fr at distal tip , length more than 30 cm, autoclavable, with angled eyepiece, fiber optic light transmission incorporated, 2 lateral irrigation ports and 1 working channel for use with instruments of 4 Fr. It should include accessories like Ureterorenoscope Insertion Aid, Instrument Port with Sealing System and Quick Release Lock, LUER-Lock Tube Connector, male, LUER-Lock Tube Connector, with stopcock Seal, package of 10, Flow Control Stopcock

**8. Portable Hard disk 1 TB -----**

**1**

**9. Pen drive (Type C) 32 GB---**

**5**

**10. 4K Image and video recorder**

**1**

Still images and videos in 2D or 4K.

Playback of 2D and 4K content.

**11. UPS**

**General Specifications:**

1. It should adhere to International Safety standard of USFDA certificate except items No. 8,9,10,11.

2. It Should provide 3 years warranty. CMC to be fixed as per MCGM norms of 5 % per year plus GST, which will be processed after purchase.

3. It Should provide technical support and required spares and consumables for 7 years after the warranty is over.

4. Training to MEC engineers.

5. Product Literature in original along with that of accessories and indigenous components.

**6. Power Supply**

Power input to be 100-240VAC, 50Hz fitted with Indian power-plug

Suitable UPS for the complete system for 60 minutes.

7. Principal manufacturer must have registered service centre in India. After sales service must be provided in the city of installation. In situations requiring service/repair of the unit

outside the city of installation, the expenditure on account of this will have to be borne by the supplier .

8. ACCESSORIES: - All possible accessories of the equipment should be quoted. The specific accessory and its quantity will be decided on the basis of actual requirement including the optional one.
9. The system should be capable of accepting standard accessories of major international brands, which should be specified and for which suitable adaptor, if required, is to be provided
10. List of users of quoted model with performance certificate from major hospitals.
11. The codes and rates of all relevant individual accessories should be quoted separately with clear mention of period of validity of 8 years.
12. Date of delivery must be mentioned in the offer letter. If that date cannot be adhered to, then penalty as per MCGM terms will be applied. Offer letter must mention manufacturer, make and model number of each item.
13. Standby system must be provided in case of breakdown of system during warranty or CMC period.
14. Undertaking to be provided that quoted price is not more than that provided to any government or private hospital.
15. Payment terms of 50% at time of delivery and 50% one month after installation.
16. Tropicalization: Operating Temp. Up to 40Deg.C:  
Storage Temp.: Up to 60Deg.C:  
Relative Humidity Up to 90% non-condensing.

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