



Running Contract Details	
Equipment Name	Anesthesia work station Model C
Running Contract Valid Till	19-08-2021
Tender Ref No	KMSCL/EP/T333/2C/2019(R)
Tendered Quantity	50
Supplier Name	M/s Wipro GE Healthcare Pvt Ltd
GST No	29AAACW1685J1ZW
Installation & Delivery Period	8 Week(s)
Up-time / PM vist	95% & 4 Visits per year
Warranty period	3 Years

Supplier`s Details		
Address	Contact Details	
No. 4 Kadugodi Industrial Area Whitefield Bangalore 560067	Contact Person	Mr. John Tenny
	Phone	080-28452923
	Mobile No	9895895006
	Email	tenny.john@ge.com

Item-wise Price Details				
#	Item Details	Unit Rate (Incl.all taxes & charges)	Service Charges (Through KMSCL)	Grand Total
1	Anesthesia work station Model C <i>Model & Make : Ge Aisys Cs2-Work Station / Ge Healthcare / Wipro Healthcare</i>	2862250.72 Incl.GST :12%	211090.99	3073341.71
2	Iso Flurane Vaporizer	160500.48 Incl.GST :12%	11836.91	172337.39
3	Sevo Flurane Vaporizer	171200.96 Incl.GST :12%	12626.07	183827.03
4	DesFlurane Vaporizer	203300.16 Incl.GST :12%	14993.39	218293.55
5	Patient Monitor <i>Model & Make : B850 with B105</i>	1345749.44 Incl.GST :12%	99249.02	1444998.46
6	Cost for upgrading SpHb in patient monitor	299999.84 Incl.GST :12%	22124.99	322124.83
7	Cost for upgrading SpOC in patient monitor	214999.99 Incl.GST :12%	15856.25	230856.24

Item-wise Price Details			
	5258001.59	387777.62	5645779.21

Annual / Comprehensive Maintenance Charges (Exl.Tax)							
Rate	4 th Year	5 th Year	6 th Year	7 th Year	8 th Year	9 th Year	10 th Year
Anesthesia work station Model C							
Labour	75,000.00	78,750.00	82,690.00	86,825.00	91,166.00	95,800.00	1,00,590.00
Comprehensive	1,45,000.00	1,52,250.00	1,59,862.00	1,67,855.00	1,76,247.00	1,85,059.00	1,94,311.00

Other terms & conditions

1. The supplier shall execute an agreement with the purchaser as per tender conditions (agreement format is given in the tender document).
2. The supplier shall submit performance security amounting to 5% of the value of the supply order.
3. The labour & comprehensive charges of equipment after the completion of warranty period is finalized by KMSCL as mentioned above.
4. Since discount rate is not applicable for equipment under Running Contract of KMSCL, purchase/supply order can be issued directly to supplier at the given rate with tax & other charges (exclusive of KMSCL service charges).
5. If purchase/supply order is issued directly to the supplier, KMSCL service charge need not be paid. But the copy of the said order may be forwarded to KMSCL for information.

Technical Specification

Equipment :Anesthesia work station Model C

SL. NO. TECHNICAL SPECIFICATION

- 1 Should be three gas integrated Anesthesia workstation for surgical workplaces
 - 2 Should offer high quality ventilator with single user interface of 15" color touch screen display.
 - 3 Single user interface should control and display all parameter including control of modes, display of cylinder pressures etc.
 - 4 The machine should be suitable for low & minimal flow Anaesthesia application.
 - 5 Machine should be capable of adjusting fresh gas flows and agent concentrations automatically to achieve set target of FIO₂/ ETO₂, FI agent /ET agent (Automated End tidal Target control).
 - 6 The machine should have automatic calculations and presetting of patient specific ventilation settings via ideal body weight, age and height.
 - 7 Machine should have automatic self-test and user check list. In case of emergency it should be possible to bypass self-test completely.
- It should have a complete System leak test.
- 8 It should have configurable screen layouts for individual screen setups

9 It should have Nitrous oxide free operation configurable

10 Anaesthesia machine should be equipped with integrated auxiliary O₂.

11 Anaesthesia machine should be equipped with integrated AGSS compatible to support existing hospital passive/active Scavenging system.

12 Anaesthesia machine & modern electronic vaporizer should be manufactured by the same company. It should be Fast and instant agent delivery with no warm up time.

13 Workstation should be European CE and FDA approved and confirms to EN 6061-2-13, requirement for safety and essential performance of Anaesthesia system

14 It should have uninterruptable power supply for all system components for typical 90 minutes with continuous battery monitoring

15 Gas delivery system

a) Unit should have primary connection for central gas supply for Air, O₂ & N₂O with onscreen display of pressure at source

b) Should provide an additional 15" slave display .

c) It should have anytime facility for manual ventilation possible at least with fresh gas O₂ delivery.

d) Machine should have electronic fresh gas mixture & monitoring system with automatic switch over to alternate O₂ in case of system failure.

e) It should always be ready to use with quick emergency startup with anaesthesia functionality.

f) Audio/Visual alarm for failure of oxygen

g) Control of minimum 25% oxygen in fresh gas flow >1L/Min and at least 250 ml of oxygen concentration for minimal flow application (fresh gas flow < 1L/min)

h) Integrated O₂ flush with self-returning valve.

i) O₂ safety flow adjustable from 0-10 liters /min for emergency backup use incase of electronic failure.

j) It should have the indicator to show the efficiency of fresh gas setting while used in low flow and minimal flow setting.

k) Machine should also have an independent electronically switched common gas outlet for connection to Bains or Magill circuit.

l) Fresh gas flow settings from "off" , 0.2 to 15 L/Min

m) It should have an option /mode to show the efficiency of fresh gas flow setting while used in low and minimal flow that will prevent any fresh gas deficit or chance of getting hypoxic mixture during minimal flow.

16 Breathing system

a) Compact autoclavable breathing system with total circuit volume less than 2.7 liters suitable for minimal flow anaesthesia (excluding patient hoses) for fast response to change in fresh gas composition.

b) APL Valve with direct setting of release pressure during bag mode.

c) Should have sample gas return option into the breathing system/Scavenging

17 Integrated Ventilator

a) Electronically controlled Electrically/Pneumatically driven latest ventilator.

b) Ventilator suitable for Adult/Children without changing of bellow

c) Automatic breathing circuit compliance correction

d) Spont. Breathing

e) Manual Ventilation

f) Volume Controlled mode

g) Pressure controlled ventilation

h) SIMV in VCV and PCV

i) Pressure support, PS with CPAP, PS with SIMV in VCV /PCV, Apnea back up & spirometry.

j) Auto flow/PRVC/PCV VG or equivalent -Delivering set tidal volume at minimum airway pressure. Lung recruitment & pause gas facility

k) Tidal volume adjustable range 20ml -1500 ml

l) PEEP : OFF, 4 to 30 cmH₂O electronically adjustable

18 Ventilator monitoring

a) Monitoring of Volume, pressure and Oxygen with Waveform display with colour selectable for Airway pressure, Insp/Exp Flow, Volume (with loops), O₂, CO₂ and primary anaesthetic Agent

b) Should monitor patient compliance

c) Should display ETCO₂, O₂ as well as anaesthetic agent and automatic identification of agent

d) Tabular and graphical trend display of all measured parameters.

e) The machine should display fresh gas and agent consumption details.

19 Alarms

a) The machine should have Adjustable alarm limits for all the parameters with auto set alarm function

b) The machine should have automatic display of MAC values

c) It should have automatic activation of low agent alarm

d) Should have alarm for blocked sample gas line / water trap

e) System leak indication alarm.

20 Interface

a) The system should have one number of RS232 connectivity port /USB port for interface to patient monitor /HIS for automatic data acquisition

b) USB output

c) Ethernet

21 Scope of supply

a) Adult/Pediatric Autoclavable patient tubing's

b) Vaporizer for Isoflurane & Sevoflurane and optional future availability of upgrading to Desflurane (all Vaporizer should be

manufactured by the same company as that of Workstation) - unit price to be quoted in the price bid separately)

c) Central gas supply hoses color coded

d) Instructions for use

e) Water trap – 10 no's

f) Flow sensor – 4 no's

22 Specification for IT enabled Patient Monitor for OT (Should be manufactured by the same company & should have the capability to be integrated with anaesthesia workstation)

1 Should be suitable for adult, pediatric neonatal patients monitoring in fixed environment.

2 Should have 17" and above Touchscreen display with large fonts and provide access to minimum 14 and above waveforms with ergonomic representation of multifunctionality.

3 Monitor should be IT enabled for single point access to web based applications (like cath Lab, X-ray, HIS and more).

4 Should have event recall minimum up to 150 events, graphical and tabular trends, drug dose calculations, alarm logs, Oxygen/ventilation & Hemodynamic calculations as standard.

5 Should have minimum ECG, NIBP, SpO2, 2 IBPs, 2 Temperature, BIS/Entropy, NMT as standard. All other parameters should be through upgrades as pods/modules and software.

6 Should have Arrhythmia detection including life threatening arrhythmias such as VTACH , ASYST, VFIB as standard feature

7 Should have non-volatile graphic and tabular trending of all monitored parameters as standard for minimum 72 hrs.

8 Should have manual as well as automatic setting of screen format with selectable parameter priority & color selection for parameter on screen.

9 Should have excellent cable management with as minimum as possible cables at monitor & patient end for maximum comfort to patient as well as user.

10 Should have Defibrillator and ESU protection as standard

11 Facility to upgrade to automatic electronic charting and data management solution with data archival facility for patient monitor and ventilator data. Charts should be seen on patient monitor screen itself.

12 Should have manual as well as automatic setting of screen format.

13 Touchscreen, Rotary knob & keyboard mouse interface.

14 Should have touchscreen technology enables crystal clear screen for better readability as used for display of HIS, LIS & PACS images.

15 Large fonts and provide access to up to 14 waveforms

16 Up to 72 hours of real time trend and patient information at the bedside as standard

17 Should have following parameters

a. ECG

i. 5 lead ECG monitoring with three leads of ECG waveform simultaneously monitoring.

- ii. Should display 12 leads of ECG monitoring
- iii. Range 15 to 300bpm
- iv. Should display 12 leads of ECG by connecting 10 ECG lead wires as standard feature with max. lead positions as per standard lead placement
- b. Respiration
- c. SpO2- Should display digital value and Plethysmograph
- d. NIBP
 - i. By oscillometric principle of measurement with step wise deflation.
 - ii. Suitable for adult, pediatric , neonatal patients
- e. IBPs - Simultaneous monitoring of 2 IBP's should be standard - Range: 50 to 400mmHg
- f. Temperature - two temperature one core and second skin simultaneous monitoring. - Range: 5 to 45 Deg C

18 Demonstration of quoted model with all required capabilities is a must

19 Following upgrades should be offered – (Quote unit prices in price bid)

1. EEG & Additional pressure (IBP)
2. Monitor should have the capability to have independently configurable slave display.
3. Monitor Mounts for Anesthesia as applicable depending on department to be used

20 Should have an additional transport monitor /Module manufactured by the same company with battery backup of 180min, and shall allow transport with all hemodynamic parameters . Main vital sign monitor connected to the machine should be able to use at the same time for next patient.

21 The transport monitor/Module shall be protected against the ingress of water with a rating of IPX4/IP21.

22 23. Standard Scope of supply must include:

- i. Main unit – 1no
- ii. 5/12 lead ECG Cable – 1 no
- iii. SpO2 finger sensor with extension cable – adult and paediatric -1 no each
- iv. Skin temperature Probe – 1 no
- v. Rectal / Esophageal temperature probe – 1 no
- vi. NIBP Hose – 1 no
- vii. Adult & Pediatric Cuff and cuff for obese patient – 1 each
- viii. IBP reusable cable for 2 IBP and 10 pcs disposable transducers
- ix. Instruction Manual
- x. Compatible Monitor Mount for Anesthesia Workstation.

