

Amendment-IX**Ref.: IFB No. HSCC/SJH/Medical Equipment/2015 Dated 10.04.2015**

Sub.: Procurement of Medical Equipment for New Emergency Block & Super-Specialty Block at Safderjung Hospital, New Delhi.

This is in continuation of earlier Amendment dt. 01.06.2015. Following are the Amendments to be read in conjunction with earlier Amendment dt. 01.06.2015:**To be read as:****Specification for Tender****ITEM NO.1 Central Monitoring Station(CMS) 8 No. With Bed Side Monitors(125 N0.) for ICU (Super Speciality Block).** Specifications are the same as of item no.4 Central Monitoring Station (CMS) 5 no. With Bed Side Monitors (68 Nos.) for ICU(Emergency Block) except the following amendments and list of accessories.

Sr.No.	Specification lines as per Tender	Amended Changes
	Point 3.7 Facility to monitor and display ECG, Respiration, NIBP, SPO ₂ , CO ₂ with capnography, Temp and 2 channel IBP with thermal 3 channel recorder, NMT integrated/standalone	Facility to monitor and display ECG, Respiration, NIBP, SPO ₂ , CO ₂ with capnography, Temp. And 2 channel IBP with thermal 3 channel recorder

**List of spares & accessories for multiparameter patient monitor for Central Monitoring Station(CMS) 8 No. With Bed Side Monitors(125 N0.) for ICU (Super Speciality Block)
Item No.1 of the tender**

	No.of Monitors +Central Stations	125 + 8
Modules	ECG	Total 125 (1 per monitor)
	SpO ₂	Total 125 (1 per monitor)
	NIBP	Total 125 (1 per monitor)
	End tidal CO ₂	Total 125 (1 per monitor)
	Two Temperature	Total 125 (1 per monitor)
	Two IBP	Total 125 (1 per monitor)
	Cardiac output module	Total 25
	Thermal recorder	Total 12
Accessories	ECG Module	5 lead ECG Sets – total 250 (2 sets per monitor)
	SpO ₂ Probe complete set	250 adult – (2 per monitor) 24 pediatric 14 neonatal

	NIBP cuff complete set	250 adult – (2 per monitor) 24 pediatric 14 neonatal
	End tidal CO ₂	(1) Adult & Pediatric accessory kit total 125 adult kit & 40 pediatric kits. (2)Disposables – 50 tubings per monitor
	IBP Disposable pressure transducer	10 per monitor total 1250 2 cable per monitor
	Two Temperature	One Rectal & one skin probe per monitor (Total 125 rectal & 125 skin probes)
	cardiac output accessories	5 per module, total 125 sets
	Thermal recorder paper rolls	10 per module (total 120)

Specification for Tender

ITEM NO.2 Central Monitoring Station(CMS) 2 No. With Bed Side Monitors 12Nos.for Heart Command Centre (Super Speciality Block). Specifications are the same as of item no.4 Central Monitoring Station (CMS) 5 no. With Bed Side Monitors (68 Nos.) for ICU(Emergency Block) except the following amendments and list of accessories.

Sr.No.	Specification lines as per Tender	Amended Changes
	Point 3.7 Facility to monitor and display ECG, Respiration, NIBP, SPO ₂ , CO ₂ with capnography, Temp and 2 channel IBP with thermal 3 channel recorder, NMT integrated/standalone	Facility to monitor and display ECG, Respiration, NIBP, SPO ₂ , CO ₂ with capnography, Temp. And 2 channel IBP with thermal 3 channel recorder

List of spares & accessories for multiparameter patient monitor for Central Monitoring Station(CMS) 2 No. With Bed Side Monitors 12Nos.for Heart Command Centre (Super Speciality Block)

Item No.2 of the tender

	No.of Monitors +Central Stations	12 + 2
Modules	ECG	Total 12 (1 per monitor)
	SpO ₂	Total 12 (1 per monitor)
	NIBP	Total 12 (1 per monitor)
	End tidal CO ₂	Total 12 (1 per monitor)
	Two Temperature	Total 12 (1 per monitor)
	Two IBP	Total 12 (1 per monitor)
	Thermal recorder	Total 2
Accessories	ECG Module	5 lead ECG Sets – total 24 (2 sets per monitor)
	SpO ₂ Probe complete	24 adult – (2 per monitor)

	set	3 pediatric 3 neonatal
	NIBP cuff complete set	24 adult – (2 per monitor) 3 pediatric 3 neonatal
	End tidal CO₂	(1) Adult & Pediatric accessory kit total 12 adult kit & 4 pediatric kits. (2)Disposables – 50 tubings per monitor
	IBP Disposable pressure transducer	10 per monitor total 120 2 cable per monitor
	Two Temperature	One Rectal & one skin probe per monitor (Total 12 rectal & 12 skin probes)
	Thermal recorder paper rolls	10 per module (total 120)

Specification for Tender

ITEM NO.3 Central Monitoring Station(CMS) 2 No. With Bed Side Monitors 20 Nos. for Cardiology (Super Speciality Block). Specifications are the same as of item no.4 Central Monitoring Station (CMS) 5 no. With Bed Side Monitors (68 Nos.) for ICU(Emergency Block) except the following amendments and list of accessories.

Sr.No.	Specification lines as per Tender	Amended Changes
	Point 3.7 Facility to monitor and display ECG, Respiration, NIBP, SPO ₂ , CO ₂ with capnography, Temp and 2 channel IBP with thermal 3 channel recorder, NMT integrated/standalone	Facility to monitor and display ECG, Respiration, NIBP, SPO ₂ , CO ₂ with capnography, Temp. And 2 channel IBP with thermal 3 channel recorder

List of spares & accessories for multiparameter patient monitor for Central Monitoring Station(CMS) 2 No. With Bed Side Monitors 20 Nos.for Cardiology (Super Speciality Block).

Item No.3 of the tender

	No.of Monitors +Central Stations	20 + 8
Modules	ECG	Total 20 (1 per monitor)
	SpO ₂	Total 20 (1 per monitor)
	NIBP	Total20(1 per monitor)
	End tidal CO ₂	Total 20 (1 per monitor)
	Two Temperature	Total 20 (1 per monitor)
	Two IBP	Total 20 (1 per monitor)
	Thermal recorder	Total 2
Accessories	ECG Module	5 lead ECG Sets – total 40 (2 sets per monitor)
	SpO ₂ Probe complete set	40 adult – (2 per monitor) 3 pediatric

		3 neonatal
	NIBP cuff complete set	40 adult – (2 per monitor) 3 pediatric 3 neonatal
	End tidal CO ₂	(1) Adult & Pediatric accessory kit total 20 adult kit & 4 pediatric kits. (2)Disposables – 50 tubings per monitor
	IBP Disposable pressure transducer	10 per monitor total 200 2 cable per monitor
	Two Temperature	One Rectal & one skin probe per monitor (Total 20 rectal & 20 skin probes)
	Thermal recorder paper rolls	10 per module (total 200)

ITEM NO. 4 CENTRAL MONITORING STATIONS 5NOS. FOR CONNECTING 68 MODULAR MONITORS FOR ICU :

Sr. No.	Specification Lines as per Tender	Amended changes
1	Point 2.2 Capability of storage of patient data and printing of patient reports through in-built thermal recorder	Capability of storage of patient data and printing of patient reports through modular thermal recorder
2	Point 3.1 Minimum 17 inches multi colored TFT/LCD display touch screen with rotary knob.	Minimum 17 inches multi colored TFT/LCD display touch screen.
3	Point 3.9 EtCO ₂ – main stream /side stream. Display both inspired and expired values, showing capnography.	EtCO ₂ – Side stream. Display both inspired and expired values, showing capnography.
4	Point 3.15 TFT/LCD Slave monitors – 21 inches – Optional for Central Monitoring Station.	Point 3.15 to be deleted.

5	Point 3.16 The monitors should have monitor-to-monitor overview facility and data transfer over the network.	The monitors should have monitor-to-monitor overview facility.
6	Point 3.18 Central Station to have capability to display maximum up to 32 beds	Central Station to have capability to display maximum up to 16 beds

List of spares & accessories for multparameter patient monitor for ICU of the New Emergency Block :-

	Area – Six ICU	ICU – Six
	NMT	12 (2 Per ICU)
	No of Monitors + Central Station	68+5
Modules	ECG	68- (1 per monitor)
	SpO ₂	68-(1 per monitor)
	NBIP	68-(1 per monitor)
	End tidal CO ₂	68-(1 per monitor)
	Two Temperature	68-(1 per monitor)
	Two IBP	68-(1 per monitor)
	cardiac output module	12 (2 per ICU)
	Thermal recorder	12 (2 Per ICU)
Accessories	ECG Module	5 lead ECG Sets – total 136 (2 sets per monitor)
	SpO ₂ Prob complete set	92 adult – (2 per monitor for adult ICU) 22 pediatric – (2 per monitor for PICU) 22 neonatal – (2per monitor for N ICU)
	NIBP cuff complete set	92 adult – (2 per monitor for adult ICU) 22 pediatric – (2 per monitor for PICU) 22 neonatal – (2 per monitor for NICU)
	End tidal CO₂	(1) Adult & Pediatric accessory kit 2 each with each monitor i .e total 92 adult kit & 44 pediatric kits. (2)Disposables – 50 tubings per monitor
	IBP Disposable pressure transducer	100 per monitor 2 cable per monitor
	Two Temperature	Two Rectal & skin probes per monitor (Total 136 rectal & 136 skin probes)
	cardiac output accessories	5 per module, total 60 sets
	Thermal recorder paper rolls	10 per module (total 120)

ITEM NO. 5: ICU Ventilator

Sr. No.	Specification Lines as per Tender	Amended changes
1	Point 1.1 Should have stand alone compressor of same make, price should be quoted separately.	Should have stand alone compressor of same make. Total 10 (Ten)
2	Point 1.2 Star External Medical air compressor it should automatically have high peak flow for higher NIV perform deliver accurate tidal volume	Point 1.2 Star to be deleted
3	Point 2.E Advanced mode like PRVC/APV/Automode/Autoflow/ASV, BIAP/Bivent	Advanced mode like PRVC/APV/Automode/Autoflow/ASV, BIPAP/Bivent
4	Point 2. G Non- invasive ventilation with accessories viz mask and circuit and price quoted separately.	Non- invasive ventilation with accessories viz mask and circuit.
5	Point 3.a Tidal volume: minimum 50 ml-1500ml or more in volume control. Tilting facility for flexibility.	Tidal volume: minimum 20 ml-1500ml or more in volume control.
6	Point 3 f Inspiratory time	Inspiratory plateau upto 60% of inspiratory time
7	Point 3.i Inspiratory and expiratory flow or pressure trigger sensitivity.	Flow and pressure trigger sensitivity.

8	Point 6 b Plaetau	Plateau airway pressure
9	Point 6 i	FiO₂ (oxygen sensor should be permanent paramagnetic type).
10	Point 7 Ventilator should have synchronized in built in/ line ultrasonic nebulizer should give less than or equal to 3 micron particle size.	Ventilator should have inline ultrasonic nebulizer and give less than or equal to 3 micron particle size
11	Point 8 Complied trend analysis at least for 72 hours for all measured parameters.	Compiled trend analysis at least for 24 hours for all measured parameters.
12	Point 15 Should be supplied with two no. Reusable Silicon adult the 1 no Pediatrics tubing / circuit, Two nos of Reusable Flow Sensors and Two nos of Oxygen sensors with each machine.	Point 15 a Should be supplied with two No. reusable silicon adult and one No. pediatric tubing / circuit Two nos of reusable flow sensors with each machine. Point 15 b Disposable circuits adult 20 & paediatric 10 per ventilator. Point 15 c HME filters 50 per ventilator. Point 15 d Noninvasive reusable face mask with retaining head straps, two each of all sizes – large, medium and small per ventilator. Point 15 e Noninvasive disposable face masks with retaining head straps five each of all three sizes – large,

		<p>medium and small, per ventilator.</p> <p>Point 15 f</p> <p>One test lung with each ventilator.</p>
13	<p>Point 16</p> <p>Should be US F.D.A approved product</p>	<p>Should be US F.D.A / European CE approved product</p>
14	<p>Point 19</p>	<p><u>Point 19 General Conditions:-</u></p> <p>a) User list with satisfactory performance to be provided of last three years from major hospital.</p> <p>b) Demonstration of Equipment is must</p> <p>c) Cost of individual spares and accessories to be quoted separately</p> <p>d) Comparative compliance statement to be provided, mentioning page and para in the catalogue.</p> <p>e) Undertaking that Local after sales Service will be provided round the clock</p> <p>f) Undertaking from Principal that after sales service, spares & accessories will be provided for minimum 10 years after installation.</p> <p>g) Warranty for minimum Two years and CMC as per rules.</p> <p>h) Service and user manual in English</p> <p>i) Oxygen paramagnetic sensor (permanent) should be covered under warranty.</p> <p>j) Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.</p>
15	<p>Point 20</p>	<p>Environmental factors: No interference with use of electrocautry.</p> <p>a) the unit shall be capable of being stored continuously in ambient temperature of 0 – 50 deg C and relative humidity of 15-90%</p> <p>b) the unit shall be capable of operating</p>

		continuously in ambient temperature of 10-40 deg and relative humidity of 15-90%. c) shall meet IEC – 60601-1-2:2001 general Requirements of Safety for Electromagnetic Compatibility.
16	Point 21	Power Supply a) Power input to be 220-240 VAC, 50Hz fitted with Indian plug. b) shall meet the safety requirements as per IEC 60601 -2-27:1994-medical electrical equipment – part2:Particular requirements for the safety of electrocardiographic monitoring equipment.

ITEM NO. 6 : DEFIBRILLATOR-CUM-MONITOR WITH EXTERNAL PACING

Sr. No.	Specification Lines as per Tender	Amended changes
1	Should have facility to do ECG monitoring, transcutaneous pacing, defibrillation, synchronized cardioversion with CPR feedback to measure chest compression rate & depth in real time & should also provide on screen on visual feedback/metronome	Should have facility to do ECG monitoring, transcutaneous pacing, defibrillation, synchronized cardioversion with CPR feedback to measure chest compression rate & depth in real time & should also provide on screen on visual feedback or audible feedback.
2	Must be capable of monitoring ECG through ECG cables, multi function electrodes- pads & external paddles through multi function single cable.	Must be capable of monitoring ECG through ECG cables, multi function electrodes - pads & external paddles.
3	Facility for increase/ decrease energy selection on paddles as well as on the unit. Should have ECG print out facility.	Facility for increase/ decrease energy selection on the unit. Should have ECG print out facility.
4	Machine should be compact & portable with in-built rechargeable battery for at least three hours of continuous ECG monitoring & should be weighing less than 10 kg with battery & paddles.	Machine should be compact & portable with in-built rechargeable battery for at least one hour of continuous ECG monitoring & should be weighing less than 10 kg with battery & paddles.

5	Should have facility for external non-invasive pacing with 40 msec pulse width.	Should have facility for external non-invasive pacing.
6	Reusable CPR feedback sensor/or similar product – 5 nos.	Reusable CPR feedback sensor/or similar product – 5 nos per monitor.

ITEM NO. 8 : SYRINGE INFUSION PUMP

Sr. No.	Specification Lines as per Tender	Amended changes
1	Point 3.1 Flow rate programmable from 0.1 to 1200 ml/hr or more in steps of 0.1 ml/hr with user selectable flow set rate option	Flow rate programmable from 0.1 to 999 ml/hr or more in steps of 0.1 ml/hr with user selectable flow set rate option
2	Point 3.5 Selectable Occlusion pressure trigger three levels selectable	Occlusion pressure trigger three levels
3	Point 4.2 Mounting device/ Docking Station for two or four pumps as per requirement so as to enable to power up to 2-4 pumps with one power cord when mounted on IV pole. – 01	Mounting device for two pumps with one power cord, tube mounted on IV pole / bed rail. Total docking station 136 (for 272 pumps).

4	<p>Point 5.2</p> <p>The unit shall be capable of operating continuously in ambient Temperature of 10-40d relative humidity of 15-90%</p>	<p>The unit shall be capable of operating continuously in ambient Temperature of 10-40C relative humidity of 15-90%</p>
5	<p>Point 5.3</p> <p>The unit shall be capable of being stored continuously in ambient temperature of 0-50 relative humidity 15-90%</p>	<p>The unit shall be capable of being stored continuously in ambient temperature of 0-50C relative humidity 15-90%</p>

ITEM NO. 9 : MULTIPARA MONITOR (RESP., TEMP., PULSE, SPO2) FOR EXAMINATION, RESUSCITATION & WARDS

Sr. No.	Specification Lines as per Tender	Amended changes
1	<p>Point 2.1</p> <p>Monitor should be lightweight and should monitor vital parameters of patients</p>	<p>Monitor should be lightweight and should monitor vital parameters of patients. It should be multimodular of latest technology.</p>
2	<p>Point 2.2</p> <p>Capability of storage of patient data and printing of patient reports through in-built thermal recorder.</p>	<p>Capability of storage of patient data and printing of patient reports through modular/standalone thermal recorder.</p>
3	<p>Point 3.2</p> <p>Mini 15”inch or more multi colour touch screen TFT display</p>	<p>Mini 15”inch or more multi colour touch screen TFT / LCD display.</p>
4	<p>Point 3.3</p> <p>Monitoring parameters: - ECG (3 and 5 lead) , respiration, NIBP, SpO2, temperature IBPDual, CO, ETCO₂(side stream)should quote price separately.</p>	<p>Monitoring parameters: - ECG (3 and 5 lead) , respiration, NIBP, SpO2, temperature IBP Dual and ETCO₂ (side stream).</p>

5	Point 3.10 Should be compatible for side stream ETCO ₂ monitor (Should quote price separately with accessories).	Point 3.10 to be deleted
6	Point 4.6 Inbuilt Dual channel recorder –01	Modular/standalone recorder - 01
7	Point 4.9 ETCO ₂ monitor with accessories for 25 monitor (resus Area)	ETCO ₂ Module with accessories for 25 monitor (resus Area)
8	Point 4.10 CO monitor with accessories for only 5 monitor for 50 patient	Point 4.10 to be deleted
9	Point 6.2 Resettable over current breaker/fuse shall be fitted for protection	Point 6.2 to be deleted
10	Point 6.3 Suitable UPS with maintenance free batteries for minimum one hour back up should be supplied with the system.	Point 6.3 to be deleted

ITEM NO. 10 : ANESTHESIA WORK STATION

Sr. No.	Specification Lines as per Tender	Amended changes
1	Point 2 a Anaesthesia Workstation complete with Anaesthesia gas delivery system.;Circle absorber system.;Precision vaporiser for halothane,isoflurane and Sevoflurane ;Anaesthesia ventilator. Monitoring system to monitor Anaesthetic gases,ECG, EtCO ₂ , Pulse Oximeter and airway pressure,NIBP, IBP (No as required) , rectal/ & skin	Anaesthesia Workstation complete with Anaesthesia gas delivery system.;Circle absorber system.;Precision vaporiser for halothane,isoflurane and Sevoflurane ;Anaesthesia ventilator. Monitoring system to monitor Anaesthetic gases,ECG, EtCO ₂ , Pulse Oximeter and airway pressure,NIBP, IBP (two in number) , rectal and skin temperature, invasive cardiac output, depth of anaesthesia and NMT.

	temperature.	
2	Point 3.5 1 c Automatic identification and measurement of anesthetic agents, EtCO2, O2 and N2O and MAC value. FiO2 measurement.	Automatic identification and measurement of anesthetic agents, EtCO2, O2 and N2O and MAC value. FiO2 measurement. To be available either on machine or monitor. It should have a paramagnetic O2 Sensor.
3	Point 3.5 1 d Depth of Anesthesia Monitoring module - one per monitor with 50 sensors with each monitor	Depth of Anesthesia Monitoring module - one per monitor with 100 sensors with each monitor
4	Point 3.5 1 f Cardiac Output measurement facility by thermo dilution technology with all accessories- one set for three monitors.	Cardiac Output measurement facility by thermo dilution technology with all accessories- one set for three monitors (total six modules with accessories).
5	Point 3.5 1 i Should include inbuilt Anaesthesia record keeping software facility in all OT monitor to document anesthesia event using standardized menu based entries.	Point 3.5 1 i to be deleted
6	Point 3.6 3.6 Centralised Monitoring and Networking: Web Browsing feature for browsing near real time waveforms and graphical & numerical trend upto 24hrs remotely through telephone dial in facility. Compatible with HIS system of the Hospital.	3.6 Centralised Monitoring and Networking: –Upgradable to anaesthesia record keeping and compatible with HIS system of hospital.

7	Point 4 System Configuration Accessories, spares and consumables.	System Configuration Accessories, spares and consumables per work station.
8	Point 4.7 Vaporiser Isoflurane -01 & vaporiser desflurane 01	Vaporiser Isoflurane -01
9	Point 4.8 Adult and Paediatric autoclavable silicone breathing circuits -02 ea	Adult and Paediatric autoclavable silicone breathing circuits -02 each
10	Point 4.9 Reusable IBP Transducer -04. Reusable IBP cables -04. Disposable Transducers- 100	Disposable IBP Transducer Kit – 100 per monitor
11	Point 4.10 Disposable domes-100	Point 4.10 to be deleted
12	Point 4.14 Depth of Anaesthesia Sensors-100 adults and 100 paed	Depth of Anesthesia Sensors-100 adults
13	Point 4.15 Accessories for Cardiac Output module- 01 set (only in 6 monitor)	Accessories for Cardiac Output module- 01 set (only in 6 monitor) i.e total six in number
14	Point 4.18 Disposable Adult & Paediatric circuits- 50 ea	Disposable Adult & Paediatric circuits- 50 each
16	Point 7.1 Should be U.SFDA or European CE approved product.	Should be USFDA and European CE approved product.

17	Point 7.7 Back to back warranty to be taken by the supplier from the principal to supply spared for a minimum period 10 years.	Back to back warranty to be taken by the supplier from the principal to supply spares for a minimum period 10 years.
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ITEM NO. 12 : SPECIFICATIONS OF AUTOMATED EXTERNAL DEFIBRILLATOR (AED)

Sr. No.	Specification Lines as per Tender	Amended changes
1	Point Warranty of AED unit should be minimum five years, shelf life for defibrillation electrode pad should be minimum five years (if un-used) and stand-by life of disposable battery should be five years or minimum 200 shocks.	Warranty of AED unit should be minimum five years, shelf life for defibrillation electrode pad should be minimum one year (if un-used) and stand-by life of disposable battery should be five years or minimum 200 shocks.

The date of submission of bids of Items No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 & 16 is 26.6.2015.

Regarding Items No. 19, 20, 24, 30, 31, 35, 37, 38 & 39 there is no change in the specifications. The date of submission of bids of Items No. 19, 20, 24, 30, 31, 35, 37, 38 & 39 is 29.6.2015.

No queries will be entertained after this as it is final.

Amendment to be issued will be uploaded on websites www.tenderwizard.com/HSCC & www.hsccltd.com.

All other tender terms and conditions remain unchanged.

**Medical Superintendent
Safderjung Hospital & VMMC,
New Delhi.**