

571

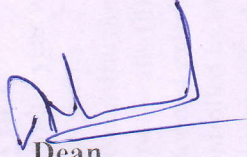
NO.CPRGHKK/STORE/MACHQC/ /18-19
Office of the Dean,
Chhatrapati Pramila Raje General Hospital,
Kolhapur
Dt. 17/01/2019

Subject : Quotation for Purchase of Machinery and Equipments.
Reference : As per Hon. Dean's approved note Dated :06/01/2019

We are inviting the quotations as per two envelope system for the following machinery and equipments required at different departments of this hospital. Quotations should be in the prescribed form and as per Terms and condition available at Store Department of this hospital. Prescribed format and terms and conditions will be made available on written demand on letter head of Manufacturer / Distributors interested in submitting the quotation. This quotation procedure is subject to permission from Govt. of Maharashtra and availability of administrative approval.

Period of collecting prescribed form and terms and conditions of quotation. :- Date : 17/01/2019 to 24/01/2019 up to 1 p.m.

Last date of Submitting Quotation :- Date: 25/01/2019 up to 05.00 p.m.


Dean,
C.P.R. General Hospital,
Kolhapur.

Encl.: List and Specifications of Machinery and Equipments.

C.P.R. General Hospital, Kolhapur
List and Specification for Machinery and Equipments

Specification No.	Particulars	Approx Qty. Rqd.	Specification
D1-5	Bacteriological Laboratory Incubator with Digital Temperature Control	1	<ul style="list-style-type: none"> • SIZE 24×24×24 inches • Double walled construction inner chamber made of mild steel/stainless steel. • Gap between two walls filled with glass wool insulation • Inner glass door and exterior metal door with magnetic gasket and lock. • Lock temp controlled by electronic digital temp controller cum indicator • Temperature range: 5⁰C above ambient to 60⁰C • Accuracy +/- 0.5⁰C • Temp over shoot high and low temperature alarm.
D1-6	Drug Trolley	6	Fully SS tubular frame with three shelves with compartments having rail on 3 slides, Mounted on 4 di rubber castors for easily mobility.
D1-7	Hot Air Oven with Digital Display	1	<ul style="list-style-type: none"> • Minimum chamber size L×B×H = 450×450×450 mm with stainless steel holes • Double walled chamber- inner stainless steel SS 304 grade & powder coated outer surface & outside mild steel sheet painted with attractive stove enamel with adjustable wire mesh Nichol plated trays • Trays - 2 • Temperature 50-200° C with sensitivity & +/- 1° C • Operated on 230 Volts, 50 Hz, single phase supply • Should have three heating elements on 3 sides of equipment for uniform temp on all shelves • Should have air circulating fan. • Shall provide with a variable microprocessor based digital temp. controller with digital display & thermometer should be provided separate
D1-8	Crash Cart	3	Fully SS tubular frame with three shelves with compartments having rail on 3 slides, Mounted on 4 dis swilled castors, 2 nos 3 drawer alkon modular systems (SS oxygen gas cylinder trolley, one set of telescopic IV rod extra).
D1-9	E.C.G.Machine	1	<ul style="list-style-type: none"> • Twelve Channel ECG machine User friendly • Modes: Manual/Auto/RR rhythm/storage • Paper Size: 215 mm • With accurate interpretation • 7'' colour LCD with 12 lead display • Alphanumeric keyboard • 250 patient memory • Lead off indicator • Built in ECG simulator • Auto base line correction • Built in Li-ion battery • High resolution thermal printer •

D1-10	Vertical Autoclave Double Drum	1	<ul style="list-style-type: none"> • Vertical model • Double walled construction • Size 14" × 24" • Double safety valve on lid • Inner chamber, outer chamber and door lid made of SS 304 • Operating temp 121°C • Pressure gauge: 0 to 30 psi • Operating pressure 15 to 18 psi • Power input 220/240 volts AC, 50 Hz, single or three phase connection • Temp controller and timer • Radial locking system with pedal lifting device • Fitted with jointless silicon gasket • 1 no water level indicator, 1 no pressure gauge, 1 no water drain valve, 1 no vacuum breaker, 2 nos spring loaded safety valve and heating element • Additional <ul style="list-style-type: none"> ➤ heating coils : 2 nos of 2 kw. ISI mark ➤ 2 gaskets, 1 basket
D1-11	Suction Machine	5	<ul style="list-style-type: none"> • Compact design facility • Rugged oil free motor suctioning • Negative pressure adjustable to highest – lowest • Suction level controller knob provided • Maximum battery back up • Compact and portable
D1-12	Pulse Oxymeter	2	<ol style="list-style-type: none"> 1. It should provide Spo2 and Pulse rate measurements of any patient ranging from Adult and Neonates. 2. Option of display plethysmograph or Values in extra Big Digits. 3. Performance in Low Perfusion & Artifacts. 4. Audible Pitch change with change in % SpO2 5. Non-volatile memory for storing Graphical & Tabular trends with alarm status for min.24 Hours 6. Serial interface for connecting printer / PC for printing Spo2 and PR values every 1 Min, 5min, 15min, 30min 7. compatible to connect CMS software. 8. Long battery operation using power saving mode 9. Real time clock display
D1-13	E.C.G. Machine	1	<ol style="list-style-type: none"> 1. It should be portable, light weight 2. The machine should be able to operate on AC mains (120-240 volts) 50-60Hz 3. It should have facility for auto measurement of parameters 4. The machine should be able to record all standard and chest leads with simultaneous acquisition of 12 leads on a single sheet of paper measuring 25-30 cm X 19321 cms on its own without help of another computer printer. 5. Should have auto power shut off facility when not in use 6. LCD display of ECG real time 3,6,6+6 channels 7. Full alphanumeric keyboard

			8. Dual power supply : mains and rechargeable internal battery 9. Memory of the last ECG recording and printing of additional copies. 10. Time and date display facility has to be present with this eqpt. Unit should be provided with all standard accessories. 11. The battery back up of the machine should be of at least 2hrs/50 ECG to produce. 12. The equipment should be US FDA/CE/BIS approved/ISO13485 product.												
D1-14	Central O2 System Extension Accessories	1	<ul style="list-style-type: none"> • Jumbo cylinder (46.7 ltr) - 3 nos • Suction regulator with jar 600 ml - 10 nos • BPC flow meter with Humidifier & FA valve - 20 nos • Non pinchable pipe 8 mm- 55 mtr • Non Pinchable pipe 6 mm- 60 mtr 												
D1-15	Central Temperature Monitoring System	1	<ul style="list-style-type: none"> • Compatible with 2G/3G/4G GSM Network • All communication between BOT & SAT is wireless on iCue • Proprietary Wireless iCue Protocol (Patent Applied) • Easy to setup and sync with SATs • Supports up to maximum 40 SATs* • Connect with SATs up to 150 meters (Line of Sight) • Antenna: Internal Omni directional wireless antenna for connectivity with SATs • External GSM antenna for 2G/3G connectivity • Operating Temperature rating: 10°C ~ 50°C • Operating Voltage: 160-240 V A/C, 50/60 Hz, Single Phase • Built-in UPS with 24 hours backup • Built-in buzzer for Alerting • Bundled with whitelisted IOT SIM for optimal security • ABS Plastic Body • For Indoor Use Only • Made in India • 24 Monitoring SATs, 12 Alerting SATs and 4 Smart Plugs <p>Default Parameters.:</p> <table border="1"> <tr> <td colspan="2">BOT</td> </tr> <tr> <td>Default Buzzer Time</td> <td>10 secs</td> </tr> <tr> <td>Battery backup time</td> <td>24 hours</td> </tr> <tr> <td>Pairing time with SAT</td> <td>10 secs</td> </tr> <tr> <td>Wireless Range (Line of Sight)</td> <td>150 meters</td> </tr> <tr> <td>LED Indication</td> <td>Power/ Network /connectivity</td> </tr> </table>	BOT		Default Buzzer Time	10 secs	Battery backup time	24 hours	Pairing time with SAT	10 secs	Wireless Range (Line of Sight)	150 meters	LED Indication	Power/ Network /connectivity
BOT															
Default Buzzer Time	10 secs														
Battery backup time	24 hours														
Pairing time with SAT	10 secs														
Wireless Range (Line of Sight)	150 meters														
LED Indication	Power/ Network /connectivity														
D1-15	Suction Machine	7	<ul style="list-style-type: none"> * Compact design * Shock proof body * Noiseless technology * Motor 1/6 hp compressor. 												

			<ul style="list-style-type: none"> * Suction Capacity : 650 -700 mm /hg * Jar 2* 1.5 glass capacity * Vacuum gauze 2.0Inch * 0.760 mm/hg calibration * Power 200/240 Volts * 1440 rpm ,50 cycles * Single phase 																											
D1-16	Multipara Monitor	2	<ol style="list-style-type: none"> 1. Minimum 5 parameter with ECG, NIBP, SPO2, Respiration, &Temperature. 2. Maximum inch TFT LCD display 3. Work better in low perfusion cases 4. Maximum graphical & numerical trend facility and ST trends 5. Connectivity to central monitor through wireless/ internate 6. Maximum battery back up. 																											
D1-17	Refrigerator	5	<ul style="list-style-type: none"> • Double door refrigerator, frost free • 300-335 lit capacity with stabilizer • Temperature control system • Five star rating • LED Light, min 3 shelves 																											
D1-18	Syringe Pump	10	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">1</td> <td style="width: 45%;">Display</td> <td style="width: 50%;">Color LCD Display 3"</td> </tr> <tr> <td>2</td> <td>Battery</td> <td>Rechargeable Li-ion</td> </tr> <tr> <td>3</td> <td>Weight</td> <td>2.5 to 3 kg</td> </tr> <tr> <td>4</td> <td>Operating Conditions</td> <td>Ambient temperature 5°C -40°C Relative humidity (RH) : >80% Power Supply : AC220 V ± 22V, 2A, 50Hz ±1Hz Atmospheric pressure:860 -1060 hpa</td> </tr> <tr> <td>5</td> <td>Types of Infusion</td> <td>Continuous Flow Volume & Time Controlled Infusion Intermittent Mode ml/hr</td> </tr> <tr> <td>6</td> <td>Flow rate range</td> <td>5ml syringe : 1-150 ml/hr 10ml syringe : 0.1-300 ml/hr 20ml syringe : 0.1-600 ml/hr 30ml Syringe : 0.1-900 ml/hr 50ml Syringe : 0.1-1200ml/hr</td> </tr> <tr> <td>7</td> <td>Types of Syringe</td> <td>Syringe Sizes 5/10/20/30/50 ml</td> </tr> <tr> <td>8</td> <td>Bolus Infusion</td> <td>5 ml syringe : 150 ml/hr 10 ml syringe : 150-300 ml/hr 20 ml syringe : 150-600 ml/hr 30/50 ml syringe : 150-800 ml/hr</td> </tr> <tr> <td>9</td> <td>Volume Range</td> <td>0.1 ml to 999 ml</td> </tr> </table>	1	Display	Color LCD Display 3"	2	Battery	Rechargeable Li-ion	3	Weight	2.5 to 3 kg	4	Operating Conditions	Ambient temperature 5°C -40°C Relative humidity (RH) : >80% Power Supply : AC220 V ± 22V, 2A, 50Hz ±1Hz Atmospheric pressure:860 -1060 hpa	5	Types of Infusion	Continuous Flow Volume & Time Controlled Infusion Intermittent Mode ml/hr	6	Flow rate range	5ml syringe : 1-150 ml/hr 10ml syringe : 0.1-300 ml/hr 20ml syringe : 0.1-600 ml/hr 30ml Syringe : 0.1-900 ml/hr 50ml Syringe : 0.1-1200ml/hr	7	Types of Syringe	Syringe Sizes 5/10/20/30/50 ml	8	Bolus Infusion	5 ml syringe : 150 ml/hr 10 ml syringe : 150-300 ml/hr 20 ml syringe : 150-600 ml/hr 30/50 ml syringe : 150-800 ml/hr	9	Volume Range	0.1 ml to 999 ml
1	Display	Color LCD Display 3"																												
2	Battery	Rechargeable Li-ion																												
3	Weight	2.5 to 3 kg																												
4	Operating Conditions	Ambient temperature 5°C -40°C Relative humidity (RH) : >80% Power Supply : AC220 V ± 22V, 2A, 50Hz ±1Hz Atmospheric pressure:860 -1060 hpa																												
5	Types of Infusion	Continuous Flow Volume & Time Controlled Infusion Intermittent Mode ml/hr																												
6	Flow rate range	5ml syringe : 1-150 ml/hr 10ml syringe : 0.1-300 ml/hr 20ml syringe : 0.1-600 ml/hr 30ml Syringe : 0.1-900 ml/hr 50ml Syringe : 0.1-1200ml/hr																												
7	Types of Syringe	Syringe Sizes 5/10/20/30/50 ml																												
8	Bolus Infusion	5 ml syringe : 150 ml/hr 10 ml syringe : 150-300 ml/hr 20 ml syringe : 150-600 ml/hr 30/50 ml syringe : 150-800 ml/hr																												
9	Volume Range	0.1 ml to 999 ml																												

			10	Accuracy	±3% (capacity>2.0ml, flow rate >0.1ml, after prefilling)																																																																					
			11	KVO Function	Availability																																																																					
			12	Audible and flashing alarm	Empty of syringe, Occlusio, Near empty of syringe, End of infusion, AC-Power-Failed, Battery low alarm.																																																																					
			13	Memory	The syringe pump stores all the setup parameters and data of the last infusion.																																																																					
			14	Communication	RS 230 port for data transfer																																																																					
			15	Safety Classification	Class-II and internal battery Type BF																																																																					
			16	Standard Accessories	Main Unit : 1 Unit Power cord : 1 Nos User Manual : 1 Nos Syringe : 10 Nos Warranty card : 1 Nos.																																																																					
D1-19	Central Suction Machine (M.O.T.)	1	1. Vacuum Compressor open type. 2. Electrical Motor, 3ph, 440 Volts, 5 Hp 3. Foundation, Belt, Pulley 4. DOL Starter, MCB as per reqd 5. Auto Cut off/in swich 6. Noise less Cyliner 7. Required Accessories As per site requirements. 8. COMPLETE INSTALATION, TESTING AND Commissioning 9. Two Years Warranty																																																																							
D1-20	Syringe Pump	10	<table border="1"> <tr> <td>1</td> <td>Microprocessor controlled syringe pump should be ICE & CE approved</td> <td></td> </tr> <tr> <td>2</td> <td>Manufacturer should bear ISO certification</td> <td></td> </tr> <tr> <td>3</td> <td>Rated voltage: 220-240 V AC, 50/60 Hz</td> <td></td> </tr> <tr> <td>4</td> <td>Battery back-up for at least > 6 Hrs</td> <td></td> </tr> <tr> <td>5</td> <td>Normal Flow Range:</td> <td></td> </tr> <tr> <td></td> <td>a) Syringe Capacity 10 ml</td> <td>Flow Rate: 0.1 – 300 ml/hr</td> </tr> <tr> <td></td> <td>b) Syringe Capacity 20 ml</td> <td>Flow Rate: 0.1 – 500 ml/hr</td> </tr> <tr> <td></td> <td>c) Syringe Capacity 30 ml</td> <td>Flow Rate: 0.1 – 700 ml/hr</td> </tr> <tr> <td></td> <td>d) Syringe Capacity 50/60 ml</td> <td>Flow Rate: 0.1 – 999.9 ml/hr</td> </tr> <tr> <td>6</td> <td>Bolus Flow Rate Range:</td> <td></td> </tr> <tr> <td></td> <td>a) Syringe Capacity 10 ml</td> <td>Flow Rate: 300 ml/hr</td> </tr> <tr> <td></td> <td>b) Syringe Capacity 20 ml</td> <td>Flow Rate: 500 ml/hr</td> </tr> <tr> <td></td> <td>c) Syringe Capacity 30 ml</td> <td>Flow Rate: 700 ml/hr</td> </tr> <tr> <td></td> <td>d) Syringe Capacity 50/60 ml</td> <td>Flow Rate: 1000 ml/hr</td> </tr> <tr> <td>7</td> <td>Should have KVO</td> <td></td> </tr> <tr> <td>8</td> <td>Should have anti bolus system</td> <td></td> </tr> <tr> <td>9</td> <td>Should have programmable occlusion pressure:</td> <td></td> </tr> <tr> <td></td> <td></td> <td>a) Low</td> </tr> <tr> <td></td> <td></td> <td>b) Medium</td> </tr> <tr> <td></td> <td></td> <td>c) High</td> </tr> <tr> <td>10</td> <td>Should have following Audio-Visual Alarms:</td> <td></td> </tr> <tr> <td></td> <td></td> <td>a) Near End (pre alarm before end of infusion)</td> </tr> <tr> <td></td> <td></td> <td>b) End of Infusion</td> </tr> </table>			1	Microprocessor controlled syringe pump should be ICE & CE approved		2	Manufacturer should bear ISO certification		3	Rated voltage: 220-240 V AC, 50/60 Hz		4	Battery back-up for at least > 6 Hrs		5	Normal Flow Range:			a) Syringe Capacity 10 ml	Flow Rate: 0.1 – 300 ml/hr		b) Syringe Capacity 20 ml	Flow Rate: 0.1 – 500 ml/hr		c) Syringe Capacity 30 ml	Flow Rate: 0.1 – 700 ml/hr		d) Syringe Capacity 50/60 ml	Flow Rate: 0.1 – 999.9 ml/hr	6	Bolus Flow Rate Range:			a) Syringe Capacity 10 ml	Flow Rate: 300 ml/hr		b) Syringe Capacity 20 ml	Flow Rate: 500 ml/hr		c) Syringe Capacity 30 ml	Flow Rate: 700 ml/hr		d) Syringe Capacity 50/60 ml	Flow Rate: 1000 ml/hr	7	Should have KVO		8	Should have anti bolus system		9	Should have programmable occlusion pressure:				a) Low			b) Medium			c) High	10	Should have following Audio-Visual Alarms:				a) Near End (pre alarm before end of infusion)			b) End of Infusion
1	Microprocessor controlled syringe pump should be ICE & CE approved																																																																									
2	Manufacturer should bear ISO certification																																																																									
3	Rated voltage: 220-240 V AC, 50/60 Hz																																																																									
4	Battery back-up for at least > 6 Hrs																																																																									
5	Normal Flow Range:																																																																									
	a) Syringe Capacity 10 ml	Flow Rate: 0.1 – 300 ml/hr																																																																								
	b) Syringe Capacity 20 ml	Flow Rate: 0.1 – 500 ml/hr																																																																								
	c) Syringe Capacity 30 ml	Flow Rate: 0.1 – 700 ml/hr																																																																								
	d) Syringe Capacity 50/60 ml	Flow Rate: 0.1 – 999.9 ml/hr																																																																								
6	Bolus Flow Rate Range:																																																																									
	a) Syringe Capacity 10 ml	Flow Rate: 300 ml/hr																																																																								
	b) Syringe Capacity 20 ml	Flow Rate: 500 ml/hr																																																																								
	c) Syringe Capacity 30 ml	Flow Rate: 700 ml/hr																																																																								
	d) Syringe Capacity 50/60 ml	Flow Rate: 1000 ml/hr																																																																								
7	Should have KVO																																																																									
8	Should have anti bolus system																																																																									
9	Should have programmable occlusion pressure:																																																																									
		a) Low																																																																								
		b) Medium																																																																								
		c) High																																																																								
10	Should have following Audio-Visual Alarms:																																																																									
		a) Near End (pre alarm before end of infusion)																																																																								
		b) End of Infusion																																																																								

				c) KVO/KOR
				d) Occlusion
				e) Syringe not installed or dislocated
				f) PM line disconnection
				h) Drive Disengaged
				i) Syringe Empty
				j) AC Power failure or Mains disconnection
				k) Low Battery (pre-Alarm before fullbattery discharge
				l) System/internal function error
		11	Drive/mechanical accuracy should be +/- 1%	
		12	Machine should be able to get configured in standby mode	
		13	Scope of supply should include	a) Basic Unit (220-240V AC)
				b) Power cord
				c) Fuse – 20 in no.
		14	Bidder should submit point wise compliance statement	
D1-21	Central Suction Machine (G.O.T.)	1	1. Vaccume compressor open type. 2. Electrical Motor, 3 ph, 440 Volts, 5 Hp. 3. Foundation, Belt, Pulley 4. DOL Starter, MCB as per required 5. Auto Cut Off / IN Switch 6. Noise less Cylinder 7. Required Accessories as per Site Requirements 8. Complete Installation, Testing and commissioning 9. Foundation.	
D1-22	Central Suction Machine (C.V.T.C.)	1	1. Vacuum Compressor open type 2. Electrical Motor, 3ph, 440 Volts, 5 Hp 3. Foundation, Belt Pulley 4. DOL Starter, MCB as per reqd 5. Auto Cut off/on swich 6. Noise less Cylincer 7. Required Accerssories As per site requirements. 8. Complete Installation, Testing and Commissioning	
D1-23	All In One Printer	14	Functions <ul style="list-style-type: none"> Black-and-white printing, black-and-white copying, black-and-white and colour scanning Print speed black : <p style="margin-left: 40px;">Normal: Up to 14 ppm</p> Duty cycle (monthly, A4) <p style="margin-left: 40px;">Up to 5000 pages</p> Recommended monthly page volume <p style="margin-left: 40px;">250 to 2000</p> Print technology <ul style="list-style-type: none"> Monochrome Laser Print quality black (best) <ul style="list-style-type: none"> Up to 600 x 600 dpi 	

			<p>Print Resolution Technologies 1200 dpi effective output quality (600 x 600 dpi (REt) and FastRes 1200 technology)</p> <p>Print languages</p> <ul style="list-style-type: none"> • Host-based <p>Display : 2-in LCD, text</p> <p>Processor speed : 230 MHz</p> <p>Connectivity, standard</p> <ul style="list-style-type: none"> • Hi-Speed USB (compatible with USB 2.0 specifications) <p>Network ready None</p> <p>Minimum system requirements</p> <ul style="list-style-type: none"> • Microsoft® Windows® 2000, XP, Server 2003: Pentium® II processor, 233 MHz • 64 MB RAM • 35 MB available hard disk space • SVGA 800 x 600 16-bit colour monitor • USB port • CD-ROM drive • Mac OS X v10.3 and higher • G3, G4, or G5 PowerPC processor • 128 MB RAM • 30 to 50 MB available hard disk space • USB port • CD-ROM drive <p>Minimum dimensions (W x D x H) 437 x 363 x 308 mm</p>
D1-24	Central Suction Machine (M.I.C.U.)	1	<ol style="list-style-type: none"> 1. Vacuum compressor open type. 2. Electrical motor, 3ph, 440Volts 5 Hp. 3. Foundation, Belt, Pulley. 4. DOL starter, MCB as per reqd. 5. Auto cut off / IN switch. 6. Noise less cylinder. 7. Required accessories as per site requirements. 8. Complete installation testing and commissioning.
D1-25	Multipara Monitor	2	<ol style="list-style-type: none"> 1. High resolution 12.1 inch TFT colour display 2. Standard configuration of ECG, Masimo SpO2 sensor, NIBP, Resp & Temp 3. Pitch tone variation for SpO2 monitoring 4. Arrhythmia and ST analysis 5. Pace maker detection 6. Intelligent alarms 7. Control over waveform parameters

D1-25	Central Suction Machine (Pediatric)	1	<ol style="list-style-type: none"> Vacuum compressor open type. Electrical Motor 3 ph. 440 Volts. 5 Hp Foundation , Belt , Pulley DOL Starter , MCB as per reqd Auto Cutt Off/ IN Swich Noise less Cylinder 7Required Accessories As pwr Site Requirements Vccum Tank Complete Installation, Testing & Commissioning 																		
D1-26	Nasal Endoscope 4 mm 0 Degree	1	Sinuscope – 4mm, 0, degree, 105 degree wide angle approximate length 185mm, autoclavable, High speed rod lens, O ring illumination, high depth of focus, low vignetting high magnification, stainless steel, sapphire glass cover, laser welded Joints. Glass cone to the cable ent to control heat.																		
D1-27	4 mm 30 Degree	1	Sinuscope – 4mm, 30, degree, 105 degree wide angle approximate length 185mm, autoclavable, High speed rod lens, C ring illumination, high depth of focus, low vignetting high magnification, stainless steel, sapphire glass cover, laser welded Joints. Glass cone to the cable ent to control heat.																		
D3-1	Ophthalmic O.T. Table With Surgeons Chair	3	<ul style="list-style-type: none"> Fluidly motorized Operation Table with feature-empowered design. Motorized vertical height adjustment enables the ophthalmologist to perform from a convenient, comfortable standing or sitting position Optimally Positioned head rest with manually controlled up & down motion option allows the surgeon easy access to the patient, while offering the patient comfortable head positioning.Plus, there is ample leg room and sufficient space for equipment pedals. Spacious, Autistic Polyurethane cushions offer patients excellent comfort and are easy to clean & maintain Adjustable wrist support offers surgeons convenient stability during operations Built-in trendelenberg(head low) & reverse trendelenberg(head up) positions ensures safety during emergencies <table border="1"> <tr> <td>Height range min./max.</td> <td>650 mm/950 mm ± 10%</td> </tr> <tr> <td>Lifting speed</td> <td>8 mm/s ± 10%</td> </tr> <tr> <td>Total length</td> <td>1900mm ± 10%</td> </tr> <tr> <td>Total width</td> <td>600 mm ± 10%</td> </tr> <tr> <td>Base size</td> <td>825mm/ 520mm ± 10%</td> </tr> <tr> <td>Input tension</td> <td>110 V 50/60 Hz. ± 10%</td> </tr> <tr> <td>Weight capacity</td> <td>200 kgs. ± 10%</td> </tr> <tr> <td>Gross Weight</td> <td>120 kgs ± 10%</td> </tr> <tr> <td>Bed Tilting</td> <td>20⁰ both side</td> </tr> </table>	Height range min./max.	650 mm/950 mm ± 10%	Lifting speed	8 mm/s ± 10%	Total length	1900mm ± 10%	Total width	600 mm ± 10%	Base size	825mm/ 520mm ± 10%	Input tension	110 V 50/60 Hz. ± 10%	Weight capacity	200 kgs. ± 10%	Gross Weight	120 kgs ± 10%	Bed Tilting	20 ⁰ both side
Height range min./max.	650 mm/950 mm ± 10%																				
Lifting speed	8 mm/s ± 10%																				
Total length	1900mm ± 10%																				
Total width	600 mm ± 10%																				
Base size	825mm/ 520mm ± 10%																				
Input tension	110 V 50/60 Hz. ± 10%																				
Weight capacity	200 kgs. ± 10%																				
Gross Weight	120 kgs ± 10%																				
Bed Tilting	20 ⁰ both side																				
D3-2	Central Suction For NICU	1	<ol style="list-style-type: none"> Vacuum compressor open type. Electrical Motor 3 ph. 440 Volts. 3/5 Hp Foundation , Belt , Pulley DOL Starter , MCB as per reqd Auto Cutt Off/ IN Swich Noise less Cylinder 7Required Accessories As pwr Site Requirements 																		

			8. Vacuum Tank 9. Complete Installation, Testing & Commissioning 10. With Required Accessories (Suction Regulator with Bottle 10 No.) 11. 06 mm PVC Non Pinchable pipe (30mtr) 12. 10 mm PVC Non Pinchable pipe (30mtr)
D3-3	Syringe Pump	5	<ul style="list-style-type: none"> • Power Supply (I/P) : AC 220V to 240V 50Hz • Battery : 12V NiMH Battery • Battery Backup : 10hrs @ 5ml/hr Flow rate on 50ml Syringe • Power Consumption : 7 VA • Applicable Syringe : 5ml, 10ml, 20ml, 30ml, 50ml & 100ml Syringes from JMS, Braun, Dispovan, BD and Custom Programmable for any Brand of Syringe. • Automatic Syringe Detector : Available • Custom Programmable Syringe : Available • Flow Rate Range : 0.1 – 200 ml/Hr 70ml/Hr (5ml Syringe) 0.1 – 300 ml/Hr 110ml/Hr (10ml Syringe) 0.1 – 500 ml/Hr 190ml/Hr (20ml Syringe) 0.1 – 700 ml/Hr 260ml/Hr (30ml Syringe) 0.1 – 1200 ml/Hr 400ml/Hr (50ml Syringe) • Infused Volume : 0.1 – 999.9 ml • Elapsed Time : Display of Elapsed time from 00:01 to 99:59 Hrs • Modes : Drug Library mode, Flow Rate only, Flow Rate & Target volume, Flow Rate & Target Time Target volume and target time • Bolus : Purge Bolus & Auto Bolus • Bolus Flow Rate : 10 – 200 ml/Hr 70 ml/Hr (5ml Syringe) 10 – 300 ml/Hr 110 ml/Hr (10ml Syringe) 10 – 500 ml/Hr 190 ml/Hr (20ml Syringe) 10 – 700 ml/Hr 260 ml/Hr (30ml Syringe) 10 – 1200 ml/Hr 400 ml/Hr (50ml Syringe) • Bolus Volume : 0.1ml to 10 ml in 0.1 ml increments • Dosage Taper Up/ Down(Sequential Mode) : Available with 10 different programs • KVO : 0.1ml/Hr to 9.9ml/Hr in 0.1 ml increment • Occlusion Pressure : 10 steps selection (OFF to 9 Levels) • Alarms : tAr.1 – Target Volume reached tAr.2 – Target time reached End – End of Syringe occL – Occlusion OFF – Battery discharged AL 1 – Syringe holder disturbed during infusion AL 2 – Syringe Disengaged while running AL 3 – Motor unable to drive AL 4 – Mains to Battery F/R High reduce F/R 200 AL 5 – AC Power over limit AL 6 – AC Voltage below 215 AL 9 – Syringe not engage

			<ul style="list-style-type: none"> • Audio/Visual Indication : Target reached (time or volume), End of syringe, Occlusion, Battery discharged, Motor unable to drive, Syringe not engaged, Near Empty, Battery low, Operation on mains / battery • Display : Four 7 segment Display • PCA (Optional) : PCA dose can be preset from 0.1 to 10ml. Minimum locking time interval between two doses, Time interval from 0 -24Hrs in steps of 1 min, Delivered and non delivered doses display • Accuracy : Mechanical Accuracy $\pm 1\%$; Including Syringe $\pm 3\%$ • Safety Testing : EN 60601-1, EN 60601-1-2, EN 60601-1-6, EN 60601-1-8, EN 60601-2-24 • Certification : ISO 9001:2008; ISO 13485:2003; CE • Dimension : 170 x 107 x 135 (L x B x W) • Space Occupied : 2.4 ltrs • Weight : 1.75kg 																																				
D3-4	Non Invasive Ventilator Portable	2	<table border="1"> <tr> <td>Dimensions</td> <td>18 cm L x 14 cm W x 10 cm H (7" L x 5.5" W x 4" H)</td> </tr> <tr> <td>Starting ramp</td> <td>4 to EPAPmin</td> </tr> <tr> <td>Pressure range</td> <td>EPAP 4 - 25 cm H₂O; IPAP 4 - 25 cm H₂O; CPAP 4 - 20 cm H₂O</td> </tr> <tr> <td>Flex pressure relief</td> <td>0 to 30 (S-mode)</td> </tr> <tr> <td>Breath rate</td> <td>0 - 30 beats p r minute</td> </tr> <tr> <td>Ramp time</td> <td>0 to 45 min (5-min increments) min</td> </tr> <tr> <td>Warranty</td> <td>Two years (US only)</td> </tr> <tr> <td>Weight without humidifier</td> <td>1.36 (3) kg (lbs)</td> </tr> <tr> <td>On-board data storage capacity (minimum)</td> <td>up to 3 mon</td> </tr> <tr> <td>Electrical requirements</td> <td>100-240 (50/60) VAC (Hz)</td> </tr> <tr> <td>Filters</td> <td>Foam and optional ultra-fine</td> </tr> <tr> <td>Device setup</td> <td>LCD/control wheel/push button</td> </tr> <tr> <td>Data storage capacity Display (minimum)</td> <td>Compliance VIC, 1-, 7- and 30-day averages</td> </tr> <tr> <td>Data storage capacity SD Card (minimum)</td> <td><gt;1 yr</td> </tr> <tr> <td>Compliance meter</td> <td>Breathing detection</td> </tr> <tr> <td>Altitude compensation</td> <td>Automatic</td> </tr> <tr> <td>Humidification</td> <td>Integrates with System One 60 Series humidifier and System One 60 Series Heated Tube humidifier</td> </tr> <tr> <td>Miscellaneous</td> <td>Lighted LEDs</td> </tr> </table> <p>General system Modes : CPAP, S, S/T, PC, T Flex comfort : Bi-Flex</p> <p>Comfort features Patterns of use : Standard Advanced event detection* : Standard Reimbursement : RAD with backup rate</p>	Dimensions	18 cm L x 14 cm W x 10 cm H (7" L x 5.5" W x 4" H)	Starting ramp	4 to EPAPmin	Pressure range	EPAP 4 - 25 cm H ₂ O; IPAP 4 - 25 cm H ₂ O; CPAP 4 - 20 cm H ₂ O	Flex pressure relief	0 to 30 (S-mode)	Breath rate	0 - 30 beats p r minute	Ramp time	0 to 45 min (5-min increments) min	Warranty	Two years (US only)	Weight without humidifier	1.36 (3) kg (lbs)	On-board data storage capacity (minimum)	up to 3 mon	Electrical requirements	100-240 (50/60) VAC (Hz)	Filters	Foam and optional ultra-fine	Device setup	LCD/control wheel/push button	Data storage capacity Display (minimum)	Compliance VIC, 1-, 7- and 30-day averages	Data storage capacity SD Card (minimum)	<gt;1 yr	Compliance meter	Breathing detection	Altitude compensation	Automatic	Humidification	Integrates with System One 60 Series humidifier and System One 60 Series Heated Tube humidifier	Miscellaneous	Lighted LEDs
Dimensions	18 cm L x 14 cm W x 10 cm H (7" L x 5.5" W x 4" H)																																						
Starting ramp	4 to EPAPmin																																						
Pressure range	EPAP 4 - 25 cm H ₂ O; IPAP 4 - 25 cm H ₂ O; CPAP 4 - 20 cm H ₂ O																																						
Flex pressure relief	0 to 30 (S-mode)																																						
Breath rate	0 - 30 beats p r minute																																						
Ramp time	0 to 45 min (5-min increments) min																																						
Warranty	Two years (US only)																																						
Weight without humidifier	1.36 (3) kg (lbs)																																						
On-board data storage capacity (minimum)	up to 3 mon																																						
Electrical requirements	100-240 (50/60) VAC (Hz)																																						
Filters	Foam and optional ultra-fine																																						
Device setup	LCD/control wheel/push button																																						
Data storage capacity Display (minimum)	Compliance VIC, 1-, 7- and 30-day averages																																						
Data storage capacity SD Card (minimum)	<gt;1 yr																																						
Compliance meter	Breathing detection																																						
Altitude compensation	Automatic																																						
Humidification	Integrates with System One 60 Series humidifier and System One 60 Series Heated Tube humidifier																																						
Miscellaneous	Lighted LEDs																																						
D3-5	Fully Automatic	1	<u>Working Parameters :</u>																																				

	Vertical Autoclave		<p>Chamber Working Pressure : 1.2 Kg/Cm² Chamber Working Temperature : 121° C Material Specification : ISI Mark</p> <ol style="list-style-type: none"> 1) S. S. 304 Quality chamber, Jacket & Lid. 2) S. S. 304 Quality, Outer cover. Shall be fitted with :- <ol style="list-style-type: none"> 1.1) Safety valves – 2 No' 1.2) Steam Release cock 1.3) Air valve 1.4) Pressure gauge 1.5) Low water level switch to protect the heater from low water level. 1.6) Digital Temp. Indicator cum controller with adjustable timer, Period over with buzzer, plug & cord etc. 1.7) 4 Kw load water immersion type heaters made of high grade materials. 1.8) Auto Exhaust facility & Validation port. 1.9) Silicone airtight pressure proof gasket. 1.10) The door tightened by fly-nut type. 1.11) Triple wall Construction. 1.12) M. S. quality powder coated stand.
D3-6	Centrifuge Digital	2	<ul style="list-style-type: none"> • 24 to 32 tubes holders at a time • with maximum rpm 8000 • Constant voltage of 230 ± 10 volts. • 0 – 99 minutes digital timer cum indicator.
D3-7	Incubator	2	<ul style="list-style-type: none"> • SIZE : 18x18x18 inches • Double walled construction inner chamber made of stainless steel.,outer chamber MS • Gap between two walls filled with glass wool insulation • Inner glass/fibre door and exterior metal door with magnetic gasket and lock. • Minimum two adjustable shelves • Temperature should be controlled by the microprocessor based digital temperature controller with LED display along with provision for manual thermometer recording • Digital display of temperature and time • Temperature range: ambient to 80⁰C • Accuracy +/- 0.5⁰C • Power: 230 +/- 10V, 50 Hz • Temp over shoot high and low temperature alarm. • The equipment should be ISO and CE(Confirmite European) <p>General requirements: three year warranty,user manual in English to be provided, list of important spare parts and accessories ,certificate of calibration and inspection from the manufacturer, attach original manufacturer's catalogue and specification sheet , certificate of ISO and CE</p>
D3-8	Microcontroller	1	<ol style="list-style-type: none"> a. It Should be completely digital with built in user manual. b. It should have self calibrating software, it should compensate for the voltage and atmospheric pressure

	Based Tourniquet		<p>fluctuations and ensure exact set pressure in the cuff.</p> <p>c. We should be able to set pressure from 150 to 400 mm hg & timer 10 to 120 min. Device should have callibration & software for voltage fluctuation.</p> <p>d. Additional built in E-prom memory stores cycle in case of power failure and resumes when supply comes automatically.</p> <p>e. Very sensitive pressure monltoring. If pressure increases due to movement of patient, tourniquet deflate air and maintain the required pressure. If pressure decreases, tourniquet starts the compressor and maintain the pressure.</p> <p>f. WARNING ALARM – It Should give warning alarm five minutes before deflating. E.g . if we set timer for 30 min. it gives warning at 25 min. that 5 mins. Remaining. At this point if operation is still going then we can extend the timer. And if there is no need, we can manually deflate. So timer extension and manual deflate options should be available.</p> <p>g. In case of power failure it should maintain pressure</p> <p>h. CUFFS – There should be quality flexible PVC for cuffs, which should be non tearable and chemically inert. Cuffs should be electromagnetically sealed</p> <p>i. Cuff should have hard pvc sheet above the cuff inside the cover so that uniform pressure is distributed throughout the area.</p> <p>j. Three cuffs small , medium and extra large should be provided.</p> <p>k. Tubes should be designed at 10 bar pressure</p>
D3-9	Autoclave Vertical	1	<ul style="list-style-type: none"> • Vertical model • Double walled construction • Size 12inches × 20inches • Double safety valve on lid • Inner chamber, outer chamber and door lid made of SS 304 • Operating temp 121°C • Pressure gauze: 0 to 30 psi • Operating pressure 15 to 18 psi • Power input 220/240 volts AC, 50 Hz, single or three phase connection • Temp controller and timer of 1 hr • Radial locking system with pedal lifting device • Fitted with jointless silicon gasket • 1 no water level indicator, 1 no pressure gauge, 1 no water drain valve, 1 no vaccum breaker, 2 nos spring loaded safety valve and heating element • Additional <ul style="list-style-type: none"> ➤ heating coils: 2 nos of 2 kw. ISI mark ➤ 2 gaskets, 1 basket <p>General requirements: three year warranty,user manual in English to be provided, list of important spare parts and accessories ,certificate of calibration and inspection from the manufacturer, attach original manufacturer’s catalogue and specification sheet , certificate of ISO and CE</p>
D3-10	Centrifuge	2	<ul style="list-style-type: none"> • Microprocessor based table top centrifuge with LED display of speed and time 0-60 mins, digital count down timer

			<ul style="list-style-type: none"> • Brushless induction motor with frequency drive • Safety lid interlock • Step-less speed regulator with speed indicator • RPM range 4000-6000 (3000-5000g) • Tube capacity of 8 tubes 15 ml • Aerodynamic compact construction for vibration free performance • Body: strong fabricated steel and corrosion resistant • Separate control panels for: start/stop, dynamic brakes • Spare six protective fuses to be supplied • 220 V – 240 V single phase, 50 Hz with power cord and plug • The equipment should be ISO and CE(Confirmita European) certified <p>General requirements: three year warranty,user manual in English to be provided, list of important spare parts and accessories ,certificate of calibration and inspection from the manufacturer, attach original manufacturer's catalogue and specification sheet , certificate of ISO and CE</p>
D3-11	Hot Air Oven	1	<ul style="list-style-type: none"> • Minimum chamber size L×B×H = 450×450×450 mm with stainless steel holes • Double walled chamber- inner stainless steel SS 304 grade & powder coated outer surface & outside mild steel sheet painted with attractive stove enamel with adjustable wire mesh Nichol plated trays • Trays - 2 • Temperature 50-200° C with sensitivity & +/- 1° C • Operated on 230 Volts, 50 Hz, single phase supply • Should have three heating elements on 3 sides of equipment for uniform temp on all shelves • Should have air circulating fan • Shall provide with a variable microprocessor based digital temp. controller with digital display & thermometer should be provided separate
D3-12	Refrigerator 400 ltr	1	<ul style="list-style-type: none"> • Double door refrigerator, frost free • 400 lit capacity with stabilizer • Temperature control system • Five star rating • Control panel with temperature control • Adjustable (4 shelves) • LED Light and battery backup • Warranty 24 months.