

SPECIFICATION SHEET

LOT 1

(1/3)

Code No.	M-01A	Anesthesia Apparatus Type 1	Quantity:	1 unit
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Purpose :
Induction of general anesthesia

1. Composition

1-1	Composition					
	(1) Main Unit	:	1 unit	x	1	= 1 units
	(3) Vaporizer, Sevoflurane	:	1 unit	x	1	= 1 units
	(4) Anesthesia ventilator	:	1 unit	x	1	= 1 units
	(5) Anesthesia monitor	:	1 unit	x	1	= 1 units
1-2	Accessories					
	(1) Pressure tube, for O2 and N2O	:	1 set	x	1	= 1 sets
	(2) Corrugated tube for surplus gas removal connect to AGS	:	1 pc.	x	1	= 1 pcs.
	(3) Breathing circuit, reusable, adult	:	10 pc.	x	1	= 10 pcs.
	(6) Y-adapter, plastic	:	1 set	x	1	= 1 sets
	(7) Anesthesia mask, S, M, and L	:	1 set	x	1	= 1 sets
	(8) Test lung(1.5 L or more)	:	1 set	x	1	= 1 sets
	(9) Breathing bag, 3L or more	:	1 set	x	1	= 1 sets
	(10) Laryngoscope set	:	1 set	x	1	= 1 sets
	(11) Charging station for laryngoscopes	:	1 pc.	x	1	= 1 pcs.
	(12) Self-inflating bag for manual ventilation, adult (1500 mL), reusable	:	1 pc.	x	1	= 1 pcs.
	(14) Reusable silicone mask size 3	:	1 pc.	x	1	= 1 pcs.
	(15) Reusable silicone mask size 4	:	1 pc.	x	1	= 1 pcs.
	(16) Reusable silicone mask size 5	:	1 pc.	x	1	= 1 pcs.
	(17) Head strap, reusable, silicone, small	:	1 pc.	x	1	= 1 pcs.
	(18) Head strap, reusable, silicone, large	:	1 pc.	x	1	= 1 pcs.
	(19) Guedel airway, size 5	:	1 pc.	x	1	= 1 pcs.
	(20) Guedel airway, size 4	:	1 pc.	x	1	= 1 pcs.
	(21) Guedel airway, size 3	:	1 pc.	x	1	= 1 pcs.
	(22) Guedel airway, size 2	:	1 pc.	x	1	= 1 pcs.
	(23) Guedel airway, size 1.5	:	1 pc.	x	1	= 1 pcs.
	(24) Guedel airway, size 0	:	1 pc.	x	1	= 1 pcs.
	(25) Guedel airway, size 00	:	1 pc.	x	1	= 1 pcs.
	(26) Reusable CO2 absorber	:	1 pc.	x	1	= 1 pcs.
	(27) Standard configuration 115V/230V	:	1 pc.	x	1	= 1 pcs.
	(28) Patient monitor mounting kit	:	1 set	x	1	= 1 sets

Any other accessories which is required for installation and operation should be included and described on the offered specification.

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2. Specifications

2-1	Main Unit				
	(1) Gas mixing control	:	Electronic		
	(2) Flow meter	:	O2 0.3 to 40.0 L/min or wider N2O 0.5 to 20.0 L/min or wider		
	(3) Vaporizer hook	:	2pcs. or more		
	(4) Canister for CO2 absorber	:	Equipped		
	(5) Oxygen monitor	:	Paramagnetic sensor or fuel cell		
	Type	:	0 to 99% or wider		
	Measuring range	:			
2-2	Vaporizer				
	(1) Kind of agent	:	Isoflurane, Sevoflurane, Desflurane		
	(2) Type	:	Mechanical or Electronical control type		
	(3) Capacity	:	300mL or more		
2-3	Anesthesia ventilator				
	(1) Type	:	Electronically controlled type		
	(2) Operating mode	:	Volume and Pressure control, SIMV, VCV, PCV, PSV or CPAP or more		
	(3) Breathing frequency	:	4 to 90 bpm or wider		
	(4) Tidal volume	:	20 to 1900 mL or wider		
	(5) I:E ratio	:	4:1 to 1:10 or wider		
	(6) PEEP	:	0 to 30 cmH2O or wider		
2-4	Anesthesia monitor				
	(1) Parameters	:	Inspiratory concentration of O2, CO2, N2O, MAC Breathing frequency, Tidal volume Minutes volume, Peak pressure, etc.		

	(2) Size	:	10 inch or more, touch screen				
	(3) Connection	:	Input port for patient monitor				
	(4) Alarm signal output Function	:	Various signals are transferred to Patient monitor				
	Interface	:	RS-232C				
2-5	Laryngoscope						
	(1) Handle	:	Rechargeable				
	(2) Blade type	:	Macintosh				
	(3) Blade size	:	5 sizes				
2-6	Power requirement	:	AC 220V±10%, single phase, 50Hz				

3. Spare Parts
No

4. Consumables							
	4-1	Connector for catheter	:	10 pcs.	x	1	= 10 pcs.
	4-2	Breathing filter set, Adult	:	10 sets	x	1	= 10 sets

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	4-5	Water trap for Line CO2 probe	:	12 pcs.	x	1	= 12 pcs.
	4-6	Line for CO2 probe (10 pcs./box)	:	12 boxes	x	1	= 12 boxes
	4-7	Soda lime sorbent for CO2	:	2 pcs.	x	1	= 2 pcs.
	4-8	Flow sensor (5 pcs./box)	:	1 box	x	1	= 1 box
	4-9	Spare bulb for laryngoscope blade	:	2 sets	x	1	= 2 sets

5. Note
No

SPECIFICATION SHEET

(1/3)

LOT 2

Code No.	M-01B	Anesthesia Apparatus Type 2	Quantity:	1 unit
Purpose :				
Induction of general anesthesia				
1. Composition				
1-1	Composition			
(1)	Main Unit	:	1 unit	x 1 = 1 units
(2)	Vaporizer, Isoflurane	:	1 unit	x 1 = 1 units
(4)	Anesthesia ventilator	:	1 unit	x 1 = 1 units
(5)	Anesthesia gas monitor	:	1 unit	x 1 = 1 units
1-2	Accessories			
(1)	Pressure tube, for O2 and N2O	:	1 set	x 1 = 1 sets
(2)	Corrugated tube for surplus gas removal connect to AGS	:	1 pc.	x 1 = 1 pcs.
(3)	Breathing circuit, reusable, adult	:	10 pc.	x 1 = 10 pcs.
(6)	Y-adapter, plastic	:	1 set	x 1 = 1 sets
(7)	Anesthesia mask, S, M, and L	:	1 set	x 1 = 1 sets
(8)	Test lung(1.5 L or more)	:	1 set	x 1 = 1 sets
(9)	Breathing bag, 3L or more	:	1 set	x 1 = 1 sets
(10)	Laryngoscope set	:	1 set	x 1 = 1 sets
(11)	Charging station for laryngoscopes	:	1 pc.	x 1 = 1 pcs.
(12)	Self-inflating bag for manual ventilation, adult (1500 mL), reusable	:	1 pc.	x 1 = 1 pcs.
(14)	Reusable silicone mask size 3	:	1 pc.	x 1 = 1 pcs.
(15)	Reusable silicone mask size 4	:	1 pc.	x 1 = 1 pcs.
(16)	Reusable silicone mask size 5	:	1 pc.	x 1 = 1 pcs.
(17)	Head strap, reusable, silicone, small	:	1 pc.	x 1 = 1 pcs.
(18)	Head strap, reusable, silicone, large	:	1 pc.	x 1 = 1 pcs.
(19)	Guedel airway, size 5	:	1 pc.	x 1 = 1 pcs.
(20)	Guedel airway, size 4	:	1 pc.	x 1 = 1 pcs.
(21)	Guedel airway, size 3	:	1 pc.	x 1 = 1 pcs.
(22)	Guedel airway, size 2	:	1 pc.	x 1 = 1 pcs.
(23)	Guedel airway, size 1.5	:	1 pc.	x 1 = 1 pcs.
(24)	Guedel airway, size 0	:	1 pc.	x 1 = 1 pcs.
(25)	Guedel airway, size 00	:	1 pc.	x 1 = 1 pcs.
(26)	Reusable CO2 absorber	:	1 pc.	x 1 = 1 pcs.
(26)	Patient monitor mounting kit for	:	1 set	x 1 = 1 sets
Any other accessories which is required for installation and operation should be included and described on the offered specification.				

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2. Specifications				
2-1	Main Unit			
(1)	Gas mixing control	:	Analog or Electronic	
(2)	Flow meter	:	O2 0.2 to 10.0 L/min or wider	
		:	N2O 0.5 to 10.0 L/min or wider	
(3)	Vaporizer hook	:	2pcs. or more	
(4)	Canister for CO2 absorber	:	Equipped	
(5)	Oxygen monitor	:	Galvanic sensor or fuel cell	
	Type	:	0 to 99% or wider	
	Measuring range	:		
2-2	Vaporizer			
(1)	Kind of agent	:	Isoflurane, Sevoflurane	
(2)	Type	:	Mechanical or Electronic control type	
(3)	Capacity	:	300mL or more	
2-3	Anesthesia ventilator			
(1)	Type	:	Electronically controlled type	
(2)	Operating mode	:	Volume and Pressure control, PS, SIMV or more	
(3)	Breathing frequency	:	4 to 60 bpm or wider	
(4)	Tidal volume	:	20 to 1400 mL or wider	
(5)	I:E ratio	:	2:1 to 1:8 or wider	
(6)	Peep	:	0 to 20 cmH2O or wider	
2-4	Anesthesia monitor			
(1)	Parameters	:	Inspiratory concentration of O2, CO2, N2O Breathing frequency, Tidal volume Minutes volume, Peak pressure, etc.	
(2)	Size	:	10 inch or more, touch screen	
(3)	Connection	:	Input port for patient monitor	
(4)	Alarm signal output	:	Various signals are transferred to Patient monitor	
	Function	:	RS-232C	
	Interface	:		
2-5	Laryngoscope			
(1)	Handle	:	Rechargeable	
(2)	Blade type	:	Macintosh	
(3)	Blade size	:	5 sizes	
2-6	Power requirement			
		:	AC 220V±10%, single phase, 50Hz	

3. Spare Parts						
No						
4. Consumables						
4-1	Connector for catheter	:	10 pcs.	x	1	= 10 pcs.
4-2	Breathing filter set, Adult	:	10 sets	x	1	= 10 sets
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4-5	Water trap for Line CO2 probe	:	12 pcs.	x	1	= 12 pcs.
4-6	Line for CO2 probe (10 pcs./box)	:	12 boxes	x	1	= 12 boxes
4-7	Soda lime sorbent for CO2	:	2 pcs.	x	1	= 2 pcs.
4-8	Flow sensor (5 pcs./box)	:	1 box	x	1	= 1 box
4-9	Spare bulb for laryngoscope blade	:	2 sets	x	1	= 2 sets
5. Note						
No						

SPECIFICATION SHEET

(1/3)

Code No.	M-02	Ventilator for Adult	Quantity:	1 unit
Purpose :				
To assist and support patient respiration				
1. Composition				
1-1 Composition				
	(1) Main unit	:	1 unit	x 1 = 1 unit
	(2) Stand	:	1 unit	x 1 = 1 unit
	(3) External Air compressor (if necessary)	:	1 unit	x 1 = 1 unit
1-2 Accessories				
	(1) Oxygen high pressure hose	:	1 pc.	x 1 = 1 pcs.
	(2) Compressed air high pressure hose (if necessary)	:	1 pc.	x 1 = 1 pcs.
	(3) Respiratory circuit for adult, reusable	:	3 sets	x 1 = 3 sets
	(5) Circuit hanger	:	1 set	x 1 = 1 sets
	(6) Humidifier with heater	:	1 set	x 1 = 1 sets
	(7) Test lung for adult	:	1 pc.	x 1 = 1 pcs.
Any other accessories which is required for installation and operation should be included and described on the offered specification.				
2. Specifications				
2-1 Main unit				
	(1) Applicable patient	:	Adult or body weight over 5 kg	
	(2) Control principle	:	Microprocessor control, based volume and pressure limited ventilation	
	(3) Ventilation mode	:	SIMV, PS and CPAP or more	
	(4) PEEP/CPAP	:	1 to 35 cmH2O or wider	
	(5) Pressure Support	:	2 to 35 cmH2O or wider	
	(6) Respiratory rate	:	4 to 80 bpm or wider	
	(7) Tidal volume	:	150 to 2000 mL or wider	
	(8) Inspiratory time	:	0.2 to 3.0 second or wider	
	(9) I/E ratio	:	3:1 to 1:10 or wider	
	(10) Oxygen concentration	:	21 to 100%	
	(11) Alarm	:	High and low pressure, Gas supply source failure, Electrical power failure apnea or more	
	(12) Indication	:	Tidal volume, inspiration time, I/E ratio or more	
	(13) Real-time curves	:	Pressure, Flow, P/V curve or more	
	(14) Trigger Sensitivity	:	1 to 10 L/min or wider	
	(15) External gas requirement	:	Oxygen and Compressed Air (If required)	
	(16) Power requirement	:	AC 220V±10%, single phase, 50Hz	
2-2 Stand				
		:	Equipped with casters	
(2/2)				
3. Spare Parts				
No.				
4. Consumables				
	4-1 Paper for humidifier (100 pcs./pack)	:	1 pack	x 1 = 1 pack
5. Note				
No				

SPECIFICATION SHEET

LOT 4

(1/1)

Code No.	M-03	Intubation Fibrolaryngoscope	Quantity:	1 set	
Purpose :					
Intubation and Endoscopic diagnosis					
1. Composition					
1-1	Composition				
	(1)	Flexible bronchoscope for laryngoscopy	: 1 unit	x	1 = 1 unit
1-2	Accessories				
	(1)	Instruments tray	: 1 pc.	x	1 = 1 pc.
	(2)	Cleaning brush	: 1 pc.	x	1 = 1 pc.
	(3)	Cleaning brush for valves	: 1 pc.	x	1 = 1 pc.
	(4)	Cleaning kit	: 1 pc.	x	1 = 1 pc.
	(5)	Light source	: 1 pc.	x	1 = 1 pc.
Any other accessories which is required for installation and operation should be included and described on the offered specification.					
2. Specifications					
2-1	Flexible Bronchoscope:				
	(1)	Applicable patient	: Adult		
	(2)	Viewing direction	: 0°		
	(3)	Field of view	: 110° or more		
	(4)	Observation range	: 3 to 50 mm or wider		
	(5)	Distal end diameter	: 5.5 mm or less		
	(6)	Bending capability	: Up 180°/ Down 90° or more		
	(7)	Working length	: 600 mm or more		
	(9)	Forceps channel	: 2.0 mm to 2,5 mm		
	(10)	Air and water nozzle	: 1 pc.		
3. Spare Parts					
No					
4. Consumables					
	4-1	Lens cleaner	: 1 pc.	x	1 = 1 pc.
	4-2	Silicon oil	: 1 pc.	x	1 = 1 pc.
5. Note					
No					
	4-1	Lithium-ion battery	: 3 pcs.	x	2 = 6 pcs.
5. Note					
No					

SPECIFICATION SHEET

LOT 5

(1/2)

Code No.	M-04	Patient Monitor	Quantity:	1 set
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Purpose :
To monitor patients vital signs

1. Composition				
1-1	Composition			
	(1) Main Unit	:	1 unit	x 1 = 1 units
	(2) Recorder module	:	1 unit	x 1 = 1 units
1-2	Accessories			
	(3) Rechargeable battery pack	:	1 set	x 1 = 1 set
	(4) ECG connection cord	:	1 set	x 1 = 1 set
	(5) Electrode lead, for 3 electrodes	:	1 set	x 1 = 1 set
	(6) Temperature probe, catheter or rectal type, adult	:	1 set	x 1 = 1 set
	(8) Temperature probe, disk type, 10 mm dia	:	1 set	x 1 = 1 set
	(9) SpO2 connection cord	:	1 set	x 1 = 1 set
	(10) SpO2 finger probe	:	1 set	x 1 = 1 set
	(11) SpO2 multi-site probe	:	1 set	x 1 = 1 set
	(12) NIBP air hose for adult/child, 3.5m	:	1 set	x 1 = 1 set
	(13) NIBP cuff for adult	:	1 set	x 1 = 1 set
	Any other accessories which is required for installation and operation should be included and described on the offered specification.			

2. Specifications				
2-1	Main unit			
	(1) Measuring parameters	:	Arterial Pressure, Pulse, ECG, Respiration, Temperature, SpO2, Non-invasive blood pressure, CO2, Invasive blood pressure or Estimated continuous cardiac output or Estimated integrated 24 trending CO (tabular/graphical)	
	(2) Display	:	Color 10 inch or more	
	Display	:	15 or more	
	Number of waveforms	:	6.25, 12.5, 25 or 50 mm/s and more	
	Sweep speed	:	Equipped	
	Freeze function	:		
	(3) ECG	:	3-electrodes, I, II, III and more	
	ECG lead	:	0, 15 to 250 bpm or wider	
	Heart rate counting range	:		
	(4) Respiration	:	0,4 to 125 rpm or wider	
	Measuring range	:		

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	(5) Non-invasive blood pressure	:	Oscillometric method	
	Measuring method	:	30 to 280 mmHg or wider	
	Cuff pressure display range	:		
	(6) Temperature	:	0,2 to 45°C or wider	
	Measuring range	:		
	(7) SpO2	:	1 to 100% or wider	
	Measuring range	:		
	(8) IBP measuring	:	-50 to 300 mmHg or wider	
	Measuring range	:		
	(9) Carbon Dioxide	:	Semi-quantitative or Sidestream	
	Calculation method	:	0 to 100 mmHg or wider	
	Measuring range	:		
	(10) Recorder	:	Thermal type	
	Type	:	3 or more	
	Number of channels	:	AC 220V±10%, single phase, 50Hz	
2-2	Power requirement	:		

3. Spare Parts				
3-1	ECG connection cord	:	1 set	x 1 = 1 sets
3-2	Electrode lead, for 3 electrodes	:	1 set	x 1 = 1 sets
3-3	Temperature probe, catheter type, adult	:	1 set	x 1 = 1 sets
3-4	Temperature probe, catheter type, child	:	1 set	x 1 = 1 sets
3-5	Temperature probe, disk type, 10 mm dia	:	1 set	x 1 = 1 sets
3-6	SpO2 finger probe	:	1 set	x 1 = 1 sets
3-7	SpO2 multi-site probe	:	1 set	x 1 = 1 sets
3-8	SpO2 connection cord	:	1 set	x 1 = 1 sets
3-9	NIBP air hose for adult/child, 3.5m	:	1 set	x 1 = 1 sets
3-10	NIBP cuff for adult	:	1 set	x 1 = 1 sets

4. Consumables

4-1	Disposable electrode, adult, 150 pcs./set	:	6 sets	x	1	=	6 sets
4-2	Temperature insulation pad, 60 pcs./set	:	3 sets	x	1	=	3 sets
4-3	Temperature probe cover, 10 pcs./set	:	3 sets	x	1	=	3 sets
4-4	Recording paper, 10 pcs./set, 50mm x 20m	:	3 sets	x	1	=	3 sets

SPECIFICATION SHEET

LOT 6

(1/2)

Code No.	M-05	Operation Table	Quantity:	1 set
Equipment No.				
Purpose :				
Operation table for each surgery				
1. Composition				
1-1	Composition			
	(1) Main unit	:	1 unit	x 1 = 1 unit
	(3) Hand remote control unit	:	1 pc.	x 1 = 1 pcs.
1-2	Accessories			
	(1) List of accessories are shown in the table below	:	1 set	x 1 = 1 set
Any other accessories which is required for installation and operation should be included and described on the offered specification.				
2. Specifications				
2-1	Main Unit			
	(1) Table top size	:	2,030mm x 500mm or more	
	(2) Table top material	:	Radiolucent plastic plate and/or metal frame	
	(3) Table top positioning	:	1600mm or more	
	Cummulative Sliding	:	310 mm or more	
	Height adjustment (with padding)	:	620mm - 1100mm or wider	
	Trendelenburg / Reverse	:	30degree / 30degree or more	
	Lateral tilt right / left	:	20degree / 20degree or more	
	Back section up / down	:	60degree / 40degree or more, detachable	
	Head section up / down	:	45degree / 90degree or more, manual, detachable	
	Leg section up / down	:	15degree / 90degree or more, detachable, pair	
(4)	X-ray cassette tray size	:	390 x 288mm or bigger	
(6)	Maximum load	:	450kg for elevation, 250kg for all positions or more	
(7)	Return to level	:	One button return to zero level or per each position separately	
(8)	Controls	:	Flex/Reflex or more	
(9)	Mobility	:	Hand Remote control unit with or On table columns and wired hand control unit secondary switch	
(10)	Built-in battery and charger	:	4 swivel casters and electro-hydraulic 4-point base	
(11)	Power requirement	:	DC 24V	
2-2	Mayo instrument tray with stand			
	(1) Tray size	:	350(W) x 500(D) mm or more	
	(2) Lift range	:	850-1200 mm or wider	
	(3) Material	:	Stainless steel	

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3. Spare Parts	No
4. Consumables	No
5. Note	No

Nr.	Accessories for Operation Table	Q-ty
1	Arm board with mattress	2
2	Body support	2
3	Extra radiographic table top plate	1
4	Head rest with attachment	1
5	Knee rest, extension board	1
6	Levigator	1
7	Locking type arm board with pad	1
8	L-shaped screen frame with clamp	1
9	Screen frame, adjustable type with clamp	1
10	Urology tray with hose and receptacle	1
11	V-attachment	1
12	Gynecological support	1
13	Perfusion support	1

SPECIFICATION SHEET

(1/1)

Code No.	M-06	Suction Unit	Quantity:	2 sets
Purpose :				
Device for removing liquids or gases by suction				
1. Composition				
1-1	Composition			
	(1) Main unit	: 1 unit	x 2	= 2 units
1-2	Accessories			
	(1) Suction bottle	: 2 pcs.	x 2	= 4 pcs.
	(2) Suction tube	: 2 pcs.	x 2	= 4 pcs.
Any other accessories which is required for installation and operation should be included and described on the offered specification.				
2. Specifications				
2-1	Main unit			
	(1) Type	: 1 bottle type or more		
	(2) Maximum Vacuum	: 650 mmHg or more		
	(3) Flow rate	: 30 L / min or more		
	(4) Capacity of suction bottle	: Total 4 L or more, autoclavable		
	(5) Caster	: Equipped, with brakes		
2-2	Power requirement	: AC 220V±10%, single phase, 50Hz		
3. Spare Parts				
3-1	Suction bottle	: 2 pcs.	x 2	= 4 pcs.
3-2	Suction tube	: 2 pcs.	x 2	= 4 pcs.
4. Consumables				
4-1	Bacteria Filter	: 10 pcs.	x 2	= 20 pcs.
5. Note				
	No			

SPECIFICATION SHEET

(1/1)

Code No.	M-07	Electrosurgical Unit	Quantity:		2 sets
Purpose :					
Cut and coagulate by electricicity					
1. Composition					
1-1 Composition					
(1)	Main unit	:	1 unit	x	2 = 2 units
(2)	Trolley with caster	:	1 unit	x	2 = 2 units
1-2 Accessories					
(1)	Pedal foot switch	:	1 set	x	2 = 2 sets
(2)	Monopolar hand switch with cable (reusable)	:	2 sets	x	2 = 4 sets
(3)	Bipolar cable (reusable)	:	2 sets	x	2 = 4 sets
(4)	Patient plate, silicon (reusable)	:	2 sets	x	2 = 4 sets
(5)	Patient plate cable (reusable)	:	2 sets	x	2 = 4 sets
(6)	Electrode set (reusable)	:	6 sets	x	2 = 12 sets
(7)	Bipolar forceps (reusable)	:	6 sets	x	2 = 12 sets
Any other accessory which is required for installation and operation should be included and described on your offered specification					
2. Specifications					
2-1 Main unit					
(1)	Mode	:	Monopolar cutting/coagulation and bipolar		
(2)	Maximum output	:	300W or more		
	Monopolar cutting	:	200W or more		
	Monopolar coagulation	:	100W or more		
	Bipolar	:	2 or more		
(3)	Monopolar port	:	CF		
(4)	Type according to EN 60601-1	:	Standard set for 10 kinds or more		
2-2 Reusable electrode					
2-3 Foot switch					
2-4 Power requirement					
2-5 Menu Language					
3. Spare Parts					
3-1	Monopolar hand switch with cable (reusable)	:	2 sets	x	2 = 4 sets
3-2	Bipolar cable (reusable)	:	2 sets	x	2 = 4 sets
3-3	Patient plate, silicon (reusable)	:	2 sets	x	2 = 4 sets
3-4	Patient plate cable (reusable)	:	2 sets	x	2 = 4 sets
3-5	Electrode set (reusable)	:	6 sets	x	2 = 12 sets
3-6	Bipolar forceps (reusable)	:	6 sets	x	2 = 12 sets
4. Consumables					
5. Note					
No					

SPECIFICATION SHEET

(1/1)

LOT 9

Code No.	M-08	Operation Light, Ultralight	Quantity:	1 set
Equipment No.				
Purpose :				
Provides very high illumination at the operating surface				
1. Composition				
1-1	Composition			
	(1) Main unit	:	1 unit x 1	= 1 units
1-2	Accessories			
	(1) Sterilizable handle	:	1 sets x 1	= 1 sets
Any other accessories which is required for installation and operation should be included and described on the offered specification. Height of the Operation Theater: 270cm				
2. Specifications				
2-1	Main unit			
	(1) Type	:	Combination of main and satellite ceiling suspension type	
	(2) Light source	:	LED	
	(3) Light intensity at 1 m			
	Main	:	120,000 lux or more (at 1 m)	
	Satellite	:	50,000 lux or more (at 1 m)	
	(4) Color Temperature	:	4300 K ± 100 K	
	(5) Life time light source	:	40,000 hours or more	
	(6) Controls	:	On the cupola	
	(7) Movements	:	Rotation on 3 horizontal axes, Up/Down on 1 axe or more	
2-2	Power requirement	:	AC 220V±10%, 1 phase, 50Hz	
3. Spare Parts				
3-1	Sterilizable handle	:	2 sets x 1	= 2 sets
4. Consumables				
No				
5. Note				
No				

SPECIFICATION SHEET

(1/2)

LOT 10

Code No.	M-12	ECG, 12-channel	Quantity:	1 set	
Equipment No.					
Purpose :					
Record electrocardiograph 12 leads.					
1. Composition					
1-1 Composition					
(1)	Main unit	:	1 unit	x	1 = 1 units
(2)	Cart	:	1 unit	x	1 = 1 units
1-2 Accessories					
(1)	Patient cable	:	1 set	x	1 = 1 sets
(2)	Patient cable hanger	:	1 set	x	1 = 1 sets
(3)	Power cord	:	1 pc.	x	1 = 1 pcs.
(4)	Chest electrode	:	6 pcs.	x	1 = 6 pcs.
(5)	Limb electrode	:	4 pcs.	x	1 = 4 pcs.
(6)	Thermal head cleaner	:	1 pc.	x	1 = 1 pcs.
Any other accessories which is required for installation and operation should be included and described on the offered specification.					
2. Specifications					
2-1 Main unit					
(1)	No. of channel	:	12 channel		
(2)	Leads	:	Standard 12 leads		
(3)	Sensitivity	:	5/10/20 mV or more		
(4)	Time constant	:	3sec or more		
(5)	Frequency response	:	150 Hz or less		
(6)	Common mode rejection ratio	:	100dB or more		
(7)	Maximum electrode potential	:	±500mV or more		
(8)	Sampling frequency	:	4,000 samples/sec. or more		
2-2 Display					
(1)	Device	:	LCD		
(2)	Resolution	:	320 x 240 dots or more		
(3)	Representation	:	3/6/12 channels/display		
2-3 Recorder					
(1)	Method	:	Thermal dot array		
(2)	Paper speed	:	5, 10, 12.5, 25, 50 mm/sec		
(3)	Paper Size	:	210 mm		
2-4 Power requirement					
:					
AC 220V±10%, single phase, 50Hz					
3. Spare Parts					
3-1	Memory card	:	1 pc.	x	1 = 1 pcs.
3-2	Patient cable	:	1 unit	x	1 = 1 units
3-3	Chest electrode	:	6 pcs.	x	1 = 6 pcs.
3-4	Limb electrode	:	4 pcs.	x	1 = 4 pcs.
(2/2)					
4. Consumables					
4-1	Recording paper	:	30 rolls	x	1 = 30 rolls
4-2	Thermal head cleaner	:	1 pc.	x	1 = 1 pcs.
4-3	ECG cream	:	12 tubes	x	1 = 12 tubes
5. Note					
No					

SPECIFICATION SHEET

LOT 11

(1/2)

Code No.	M-13	Ultrasound Apparatus (General)	Quantity: 1 set
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Purpose :
 Ultrasonography for Adult patient

1. Composition

1-1 Composition

(1) Main unit with system control software	: 1 unit	x 1	= 1 unit
(2) Probe A	: 1 unit	x 1	= 1 unit
(3) Probe B	: 1 unit	x 1	= 1 unit
(4) Probe C	: 1 unit	x 1	= 1 unit
(5) Probe D	: 1 unit	x 1	= 1 unit
(6) B/W printer	: 1 unit	x 1	= 1 unit

1-2 Accessories

(1) Probe hanger and holder	: 1 set	x 1	= 1 set
(3) Software for measurement Cardiac measurement (LV, LA, AV, MV, PV or more) Obstetric and gynecology measurement Vascular measurement (optional)	: 1 set	x 1	= 1 set
(4) Software for DICOM (storage and transfer)	: 1 set	x 1	= 1 set

Any other accessories which is required for installation and operation should be included and described on the offered specification.

2. Specifications

2-1 Main unit

(1) Scan mode	: Linear, Convex
(2) Monitor	: LCD color 17 inch or more
(3) Viewing mode	: B-mode, M-mode, Spectrum Doppler, Color Doppler(optional), Realtime 3D (optional) or more
(4) Pulse wave Doppler frequency range	: 1 kHz or less - 10kHz or more
Continuous wave Doppler	: 4 kHz or less - 40kHz or more
(5) Color Doppler mode	: Optional
(6) Reference signal	: Equipped by cardiac unit TDI mode or more
(8) Number of active probe connector	: 3 or more
(9) Power supply	: AC 220V±10%, single phase, 50Hz

2-2 Probe A

(1) Type	: Convex for abdomen, adult
(2) B-mode	: 1.0 - 5.0 MHz or wider
(3) THI mode	: Equipped
(4) Radius of curvature	: 80 mmR or less

(2/2)

2-3 Probe B

(1) Type	: Cardiac
(2) B-mode	: 1.0 - 3.0 MHz or wider

<ul style="list-style-type: none"> (3) Modes : Flow,PW,CW or more (4) Scanning angle : 90° or more
<p>2-4 Probe C</p> <ul style="list-style-type: none"> (1) Type : Transvaginal (2) B-mode : 3.0 - 7.0 MHz or wider (3) THI mode : Equipped (4) Scanning angle : 180° or more
<p>2-5 Probe D</p> <ul style="list-style-type: none"> (1) Type : Linear for surface (2) B-mode : 3.0 - 11.0MHz or wider (3) THI mode : Equipped (4) Scanning width : 38 mm or more
<p>3. Spare Parts</p> <p>No</p>
<p>4. Consumables</p> <ul style="list-style-type: none"> 3-1 Echo gel (100g or more) : 24 tubes x 1 = 24 tubes 3-2 Printer paper (B/W) : 12 rolls x 1 = 12 rolls
<p>5. Note</p> <p>No</p>

SPECIFICATION SHEET

(1/1)

LOT 12

Code No.	M-014	Laparoscope	Quantity:	1 set
Purpose :				
Device for performic laparoscopy				
1. Composition				
1-1	Composition			
(1)	Laparoscope 30 degrees, 10 mm	:	1 unit	x
			1	=
			1 unit	
Any other accessories which is required for installation and operation should be included and described on the offered specification.				
2. Specifications				
2-1	Compatible with Videocamera GIMMI SNH 890 S.2000.81 II and light cable			
3. Spare Parts				
	No			
4. Consumables				
	No			
5. Note				
	No			

SPECIFICATION SHEET

(1/1)

LOT 13

Code No.	M-015	Urology Endoscope	Quantity:	1 set
Purpose :				
Device for performing TUR intervention				
1. Composition				
1-1	Composition			
	(1) Urologic Endoscope 12 degrees, 4mm	:	1 unit	x
	(2) Urologic Endoscope 30 degrees, 4mm	:	1 unit	x
				1
				=
				1 unit
	Any other accessories which is required for installation and operation should be included and described on the offered specification.			
2. Specifications				
2-1	Compatible with KARL STORZ Telecam SL II 20213020 and KARL STORZ Xenon Nova-175 20131520 Light source and light cable			
3. Spare Parts				
	No			
4. Consumables				
	No			
5. Note				
	No			

SPECIFICATION SHEET

(1/1)

LOT 14

Code No.	M-016	Fibrogastroduodenoscope	Quantity:	1 set
Purpose :				
Device for performing esogastroduodenoscopy				
1. Composition				
1-1	Composition			
	(1)	Fibrogastroduodenoscope	: 1 unit	x 1 = 1 unit
Any other accessories which is required for installation and operation should be included and described on the offered specification.				
2. Specifications				
2-1	Compatible with OLYMPUS CLK-4 light source			
3. Spare Parts				
No				
4. Consumables				
4-1	Loop for cauterization (multiple use)		1 piece	x 1 = 1 piece
4-2	Biopsy forceps (multiple use)		1 piece	x 1 = 1 piece
4-3	Injection needle (multiple use)		1 piece	x 1 = 1 piece
5. Note				
No				

SPECIFICATION SHEET

(1/1)

LOT 15

Code No.	M-017	Hight Pressure Steam Sterilyser	Quantity:	1 set	
Equipment No.					
Purpose :					
<p>A machine that sterilizes medical equipment/devices to cover the punctual needs of the surgical blocks of hospitals. Satured steam under pressure is the sterilizing agent. To be installed in the preoperative room.</p> <p>The supplier will provide all other additional components if required to complete the installation in the facility indicated by the end-user.</p>					
1. Composition					
1-1	Composition				
	(1) Main unit	:	1 units	x	1 = 1 units
	(4) Built-In Digital or Thermal Printer	:	1 units	x	1 = 1 units
	(5) Built-in Water Treatment System	:	1 units	x	1 = 1 units
1-2	Accessories				
	(1) Loading Baskets for Sterile Material/Instruments (according to the number of trays)	:			
2. Specifications					
2-1	Main unit				
	(1) Door type	:	1 door		
	(5) Chamber volume	:	80 to 100 l		
	(8) Chamber material	:	Stainless steel		
	(9) Sterilizing temperature	:	121 °C and 134 °C		
	(10) Safety devices	:	Equipped		
	(11) Unloaded Weight (kg)	:	up to 200 kg		
	(12) Power requirement	:	AC 230V or 400V±10%, 3 phase, 50Hz		
	(13) Adjustable feet or wheels	:			
3. Spare Parts					
3-1	Door gasket	:	1 units	x	1 = 1 units
4. Consumables					
4-1	Printer paper for built-in printer	:	6 units	x	1 = 6 units
4-2	Filter element of filter set	:	1 units	x	1 = 1 units
5. Note					

SPECIFICATION SHEET

LOT 16

(1/3)

Code No. M-018	X-ray General	Quantity: 1 sets
Purpose : To make radiography		
1. Composition		
1-1 Composition (Common use)		
(1) X-ray generator	: 1 unit	x 1 = 1 units
(2) Floor-Mounted Tube Support	: 1 unit	x 1 = 1 units
(3) X Ray tube	: 1 unit	x 1 = 1 units
(4) Bucky Table	: 1 unit	x 1 = 1 units
(5) Bucky Stand	: 1 unit	x 1 = 1 units
(6) Dry Imager	: 1 unit	x 1 = 1 units
(7) Digital radiography (FPD 14x17 inch)	: 1 unit	x 1 = 1 units
(8) PACS	1 unit	1 unit
1-2 Accessories		
(1) X-ray protective apron	: 1 set	x 1 = 1 sets
(2) Interphone with HD video camera and monitor	: 1 set	x 1 = 1 set
1-3 PACS Interconnection and Set up works* *All works for interconnection of the existing Xray devices in the institution with the PACS System will be supported by the supplier		
2. Specifications		
2-1 X-ray generator		
(1) Type	:	Inverter
(2) Capacity	:	35 kW or less
(3) X-ray tube connectable number	:	1
4 Max kV		150 kV or more
5 Min. kV		40 kV or less
6 Max mA		630 or more
7 Min mA		10 mA or less
8 AEC		Yes
9 Exposure time		0,001 sec to 10 sec
10 Number of phototimer field		4 field or more
11 DAP Meter		Yes
12 Anatomical programs		400 or more
2-2 Floor-Mounted Tube Support		
(1) Vertical travel	:	1300 mm or more
2 Longitudinal travel	:	1800 mm or more
3 Transverse travel	:	200 mm or more
4 X Ray Tube rotation on horizontal X axis		CW: 140 degree, CCW: 180 degree
5 X Ray Tube column rotationon vertycal axis		180 degree (stretcher position)
5 Illumination angle meter	:	Yes

2-3	X-Ray tube		
1	Focal spot		1/2 mm or more
2	Max anode heat capacity		140 kHU or more
3	Max X-Ray tube voltage		125 kV or more
4	Collimator		Manual
2-4	Bucky Table		
1	Floating table top		Yes (4 way floating table)
2	Table top dimensions		800x2300 mm or more
3	Table top height		700 mm or less
4	Distance between tabletop and film		75 mm or less
5	Longitudinal movement		1100 mm or more
6	Lateral movement		250 mm or more
7	Maximum load capacity		220 kg or more
8	Removable grid		Yes
2-5	Bucky Stand		
1	Vertical movement		1300 mm or more
2	Removable grid		Yes
2-6	Dry Imager		Direct thermal
(1)	Printing speed	:	80 sheets/hr. or more
(2)	Spatial resolution	:	320 DPI
(3)	Exposure resolution	:	14 bit or more
(4)	Interface	:	DICOM
5	Media outputs		One receive tray or more
6	Media inputs		Two supply cassettes or more
7	Media Sizes		8x10",11x14",14x17" or more
2-7	Digital radiography		
1	Flat panel detector size		14x17 or more
2	Scintillator	:	CSL
3	Pixel size	:	150 μ m or less
4	Bit depth	:	14 bits or more
5	Image preview	:	2 sec or less
6	Cycle time (wireless connection)	:	20 sec or less
7	Weight	:	3,8 kg or less
8	Number of exposable images	:	200 full images or more/3 h full performance or more
9	DICOM	:	MPPS,MWM,Storage,Print
10	Data interface/Detector		WIFI/Ethernet
2-8	PACS		
1	HDD		1 TB or more, RAID 10
2	Processor		Intel Quad-Core Xeon X3450 CPU(2.66GHz) or similar
3	RAM		4 GB or more
4	Software		Cine Tools, Measurements, Annotations, DICOM send, CD, administration and remote diagnosis
5	Monitor		Medical Grade, 2 MP or more, 20" or more
6	WEB or LAN Access Licenses		3 or more
2-11	Power requirement	:	AC 240V \pm 10%,two phase, 50Hz and AC 220V \pm 10%, single phase, 50Hz
2-12	X-ray protective aprons		
(1)	Lead equivalent	:	0.35 mmPb
(2)	Size	:	L
1-2(2)	Interphone with HD video camera and monitor		
(1)	HD Monitor		14 inch or more
(2)	Camera		HD resolution or higher
(3)	Interphone		Bidirectional, wall mounted, button controlled
3.	Spare Parts		
	No		
4.	Consumables		
4-1	Recording film (8 x 10 inch)	:	200 sheets
4-2	Recording film (11 x 14 inch)	:	200 sheets

4-3 Recording film (14 x 17 inch)

: 200 sheets

5. Note