LIST OF ITEMS

PUBLIC BIDDING FOR THE SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF BRAND-NEW EQUIPMENT FOR NCMH GENERAL HOSPITAL – PAVILION 7 CY 2024
IB No. E-013-2024-PB

ITEM CODE	ITEM DESCRIPTION	QTY	UOM	UNIT PRICE	TOTAL PRICE
GHE01-2024	**OPERATING ROOM TABLE FOR VARIOUS SURGICAL DISCIPLINE WITH ORTHOPEDIC TRACTION DEVICE**	1	UNIT	8,000,000.00	8,000,000.00
	DESCRIPTION OF FUNCTION				
	• It shall be battery powered and electric /electro-hydraulic operating table.				
	GENERAL DESCRIPTION				
	• Safe working load of at least 460-500 kg guaranteeing highest safety and stability.				
	• All position at least 250kg loading weight.				
	• The table top should be radiolucent material & X-Ray access				
	• With Modular design tabletop that enables it to be tailored for various surgical discipline needs.				
	• With One-button Connection Design make it easy just one click to change table components module.				
	• With a modular recognition system and Intelligent Collision Protection System to avoid table components collision during movement. It shall recognize the type of the table component and match the anti-collision data automatically.				
	• With Color-coded indication technology to show the angle and issue a timely warning when it comes to excessive Trendelenburg and reverse Trendelenburg positions.				
	• The table pad should be double layered and not soft but can be molded by the figure of the patient to deliver even counterforce and reduce the possibility of ulcer, and it should be water-proof and anti-static material and can be washed by water directly; each joint should be sealed by ultrasonic not glue and sewing.				
	• The thick of the mattress should be more than 75mm -85mm multilayer decompression pad with waterproof and seamless design				
	• With dual-joint leg plate and dual-joint head plate.				
	• With Corded hand control.				
	• With flat stainless-steel design material as the cover of the table base not metal to avoid the potential shocking by the current.				
	• With battery inside the table, which can work at least 50-80 operations for two weeks and the battery should be standard configuration.				
	• With capable of interchangeable for the leg plates and head rest for normal position and reverse position				
	• With electric longitudinal shift function not less than 330mm for free access to C-arm.				
	• With bottom base height less than 130mm				
	• The table positions memory that can save more than 15 positions, so the user can select the memorized positions for the specific surgery freely without complex adjustment.				
	• Electric-hydraulic movements including table up and down, back up and down, turn left and right,				

	Trendelenburg and reverse trendelenburg, leg plate up & down, which shall be controlled by hand control panel.				
	• Support automatic reset to zero position by pressing one button (leveling function). It also shall be with Flex, reflex position by pressing one button				
	• Support powered body elevator and flex position can reduce the pressure injury and expose the kidney area completely				
	• With at least 4 double-swivel castors that enables the user move the table longitudinally and transversally.				
	• At least 4 Castors shall be electrically locked firmly / unlocked by using the hand control.				
	• The remote hand control be at least 3.5'color LCD that will show the information on the display, such as movements, battery, brake, anti-collision information, etc.				
	• The remote hand control shall be with the backlight for operating in a dark environment				
	• The hand control shall control the electric movement of leg plate individually and simultaneously.				
	• With Electric brake to provide higher stability.				
	TECHNICAL SPECIFICATION				
	Basic Information				
	• Length of the table (main unit) at least 870 mm				
	• Width of the table with rails at least 590 mm				
	Electric Function				
	• The lowest position ≤ 600 mm				
	• The highest position ≥ 1050mm				
	• Longitudinal shift >330 mm				
	• Turn left ≥ 26°				
	• Turn right ≥ 26°				
	• Trendelendburg position ≥ 36°				
	• Reverse Trendelendburg position ≥ 36°				
	• Back plate up position ≥ 90°				
	• Back plate down position ≥ 45°				
	• Flex position ≥220°				
	• Re-flex position ≥ 110°				
	• Leg plate up ≥ 80°				
	• Leg plate down ≥ 100°				
	• Zero position by one electric button				
	Mechanical Function				
	• Head plate up ≥ 45°				
	• Head plate down >80°				
	ACCESSORIES				
	Standard:				
	• Arm board with cushion and clamp-2nos.				
	• Anesthesia screen I shaped with clamp-1 nos.				
	ORTHOPEDIC TRACTION:				
	ORTHOPEDIC TRACTION DEVICE (COMFORT)				
	SPECIFICATION:				
	Swivel Bar				
	• Made of stainless steel				
	• Length at least 1365 – 1660 mm				
	Counter Traction Post				
	• Length – at least 340mm-380mm Diameter at least 100mm				
	Counter Traction				
	• Material : Made of polyoxymethylene				
	Pelvis Plate				
	• Material : Made of Compact Laminate				
	Swivel Bar				

	• Horizontal rotate range – 130 degree				
	Swivel Bar				
	• Horizontal rotate range – 220 degree				
	Traction Boot				
	• Horizontal rotation of traction boot – 360 degree				
	• Vertical rotation of traction boot – 360 degree				
	• Height adjustment range of traction boot – 400mm				
	• Sliding distance of traction boot – 465mm				
	• Maximum Traction travel – 180 mm				
	Transport Cart				
	• Length –at least 1055mm				
	• Width – at least 755mm				
	• Height –at least 655mm				
	Boot type stirrups (pair) for foot and calf support with 2 clamp.				
	Gel Pad Accessories:				
	• Long gel body roll large,50×15×7 – (pair)				
	• Arm/leg pad, long,50×15×4 – (pair)				
	• Universal square pad-large.50×30×1.5 – (1 piece)				
	• Adult horseshoe headrest w/Ext – (1 piece)				
	• Short gel body roll,large,30×15×7- (pair)				
	CERTIFICATES:				
	a. IEC 60601-1:2012				
	b. IEC 60601-1-2:2014				
	At least 3 Years Warranty on Parts and Labor				
	Delivery Period:				
	60 Days				
	Terms of Reference:				
	CTC certification of current and valid Authorized or Exclusive Distributorship.				
	CTC certificate of current and valid Manufacturer's compliance with ISO 13485.				
	Notarized / Apostilled certification from the manufacturer stating that the equipment is brand new, unused and not a discontinued model or was listed in the market recall.				
	Notarized certificate guaranteeing the availability on the supply of spare parts of at least ten (10) years from end of production. A certification must be issued by the manufacturer for the bidder.				
	CTC of certification that the bidder must be in the business in the local market for a minimum of ten (10) years.				
	Notarized / Apostilled certification that the system or machine is not a retrofit solution.				
	CTC certificate of manufacturer's approved US FDA Premarket Notification (PMN) or CE Mark Approval.				
	The winning bidder shall provide *current and valid calibration certificate* for each equipment during delivery if deemed necessary.				
	Notarized / Apostilled certification that the supplier has the capability or authority for corrective and preventive maintenance of the equipment's. The certificate must be issued by the manufacturer to the bidder.				
	CTC of certification from the manufacturer authenticated by the Philippine consulate / apostilled from the country of origin of the unit that the warranty should not be affected with a change of distributor. (Local Notary Public can be.)				
	Warranty Certification: Notarized certification that the bidder/supplier shall provide a three (3) years warranty				

	for parts and services that include corrective maintenance, preventive maintenance, and/or calibration. The warranty shall commence upon the acceptance of the end user.				
	Notarized certification that the supplier / bidder must provide preventive maintenance and/or calibration schedule within warranty period.				
	CTC certification of ISO 9001:2015 compliant				
	Notarized certification that the supplier/bidder shall provide applications training and certification for end users and maintenance personnel of the hospital.				
	Unedited copy of Manuals: two (2) sets of Service Manual in English Language and two (2) sets of User Manual in English Language upon delivery of the equipment.				
	Notarized certification that the bidders have installation in critical care areas of DOH APEX HOSPITAL i.e. Philippine Heart Center, Lung Center of the Philippines, NK II, and the like for the past 5 years				
GHE02-2024	**ANESTHESIA MACHINE WITH PATIENT MONITOR AND PRONE POSITIONING SYSTEM**	**1**	**UNIT**	**3,500,000.00**	**3,500,000.00**
	• Basic working principle must be Gas Driven and Electronically Controlled with rising Bellow, Maximum Machine Weight must not exceed 128kg, Workbench supporting max weight capacity of 20kg, Top Plate supporting max weight capacity of 20kg, Working Temperature of 10-40 degrees C, =/<93% of Humidity, Input Voltage of 100-240V, Input Current of 3.5-8.5 A, Input Frequency of 50/60Hz +/- 1Hz, 7000mAh 11.1VDC Rechargeable Lithium-Ion Battery with six hours charging time and three hours continuous working operation time, Automatic Breathing Circuit Compliance at =/<4ml/100pa and Automatically compensates for circuit compression loss within the breathing circuit in mechanical mode, Tidal Volume range of VCV 15-1500 ml and PCV 5-1500 ml, 2000 Alarm Events and 60 hours trend				
	• Gas Source (Oxygen and AIR)				
	• With Electronic Flowmeter				
	• Oxygen Flush switch gives 100% fast oxygen				
	• Pressure Regulator				
	• With Total Flowmeter				
	• With Back-up Flow Control System Button				
	• With Flow Regulation Knob of the back-up flow control system				
	• Accommodates Two Vaporizers with Interlocking System (Sevoflurane and Isoflurane)				
	• ACGO (Auxiliary Common Gas Outlet) using connector type Taper coaxial fitting of 22mm outside and 15mm inside				
	• Auxiliary Air Flowmeter				
	• Auxiliary Oxygen Supply Flowmeter				
	• Autoclavable Breathing System must have the following; Expiration Port, Canister for CO2 sodalime absorbent, Canister hold and release lever, Manual Drain Valve, Leak Test Plug, Breathing Circuit Hook, Expiration Check Valve, APL Valve range 1-75 cmH2O with Minimum opening pressure of 0.3/0.5 cmH2O (dry/humid),				
	• Airway Pressure Gauge, Manual Bag Port, Bellows Assembly, Manual Bag Port Arm, Manual and Mechanical Ventilation Switch, Inspiratory Check Valve and Inspiration Port, and Circuit By-Pass Function				

	• Ventilator Modes: VCV/VC, PCV/VPC, SIMV-VC, SIMV-PC, PRVC, PSV/CPAP, Manual and Automatic Ventilation, SIMV-PRVC, PSVPro. Ventilation Principle is Chronometric, volumetric and barometric, Electronically Controlled and Pneumatically Driven, Electronic Selective Air or Oxygen				
	• Ventilator Monitoring Setting Ranges must include; Tidal Volume, Inspiratory, Expiratory Flow, Minute Volume, Frequency, Pressure (Pmean, Pplat, Ppeak, PEEP), Oxygen, CO2, N2O and Halogen numerical values, Compliance and Patient Resistance, Tidal Volume range 15-1500ml, Pressure limit range 10-100 cmH20, Pressure support range 3-60 cmH20, Respiratory Rate 4-100 bpm, I:E Ratio 4:1-1:10, Apnea I:E 4:1-1:8, Apnea Time 10-30 second, Apnea Pressure 3-60 cmH20, Inspiratory pause OFF, 5~16% of inspiratory time, Inspiratory time 0.2~5s, Inspiratory pressure 5~70 cmH2O, PEEP OFF, 3~30 cmH2O, Trigger pressure -20~-1 cmH2O, Trigger window 5~90%, Trigger flow 0.2~15 L/ min, Flush oxygen 25~75 L/ min, Inspiratory stop level 5~80%, Pressure slope 0~2.0s,				
	• Positive End Expiratory Pressure (PEEP) Type Integrated, electronically controlled, Range 0~70 cmH2O				
	• Ventilator Monitoring Ranges; TV (Inspiratory tidal volume) 0~3000 mL, TV (expiratory tidal volume) 0~3000 mL, MV (Per-minute ventilation amount) 0~100 L/min, FiO2 (Oxygen concentration) 18~100%, Airway pressure -20~120cmH2O, PEEP 0~70cmH2O, Ppeak (Airway pressure) -20~120 cmH2O, Pmean (Mean pressure) -20~120 cmH2O, Pplat (Platform pressure) 0~120 cmH2O, I: E (Inspiratory- expiratory ratio) 4:1~1:12, Freq (Respiratory rate) 0~120 bpm, Compliance 0~300 mL/cmH2O, Resistance 0~600 cmH2O/(s/L)				
	• At least 12.1" 800 x 600 Resolution Touchscreen Ventilator and Monitoring Main Display Screen must have/exhibit the following; Alarm Indicator, Patient Type, Patient Information, Alarm Message Area, Alarm Sound Pause Icon, System Date and Time, Main Power Supply and Battery Status Icon, Ventilator's Monitoring Values Display Area, CO2 and O2 Monitoring Display Area, System Prompt Message Display Area, Stand-by Button, Timer, Ventilation Mode and Parameter Setting Display Area, Battery Status Indicator, Working Indicator, AC Power Indicator, Pressure and Volume histograms/indicator display, AG Concentration Monitoring Display Area, and Current Ventilation Mode Display.				
	• AGSS (Anesthesia Gas Scavenging System) must have the following; Waste gas exhaust noozle connector, AGSS waste gases outlet, Outer cone connector for hose of transfer system, Pressure Compensation Port, Main Body of AGSS System, Red Color Float, and Flow regulation Knob, Suction flow rate 50-80LPM, Stainless steel mesh filter with pore size of 60-100um				
	• Optimal Flow Indicator				
	• At least two Monitoring Module Slots				
	• With ETCO2 module (capnography)				
	• Module must be compatible with the Patient Monitor				
	• 4 pcs of Caster Wheel with Central Brake System				
	• With at least two Storage Drawer with lock and key				
	• With Amrest/Handle for easy maneuvering to and from Operating Room				

	• At least four Auxiliary power output sockets with individual socket breaker with output voltage of 100-240V, output frequency of 50/60Hz.				
	• Must have Ventilation Cooling Window and Exhaust Fan				
	• Must have an accessible communication interface port				
	• Must have Pipe-in centralized driving Gas Supply Interface (Oxygen and Air) with NIST connection, Pressure range 280-600kPa				
	• Must have Spare gas cylinder driving Gas Supply Interface (Oxygen and Air) with PISS connection, Pressure range 280-600kPa				
	• Must have an equipotential stud for earth ground				
	• Must have a power cord hook for tidy cord management				
	• Must have a main power socket and its system breaker				
	• Must have comprehensive ventilation mode such as the following; Manual (Induction), VCV, PCV, and PRCV (Maintaining Anethesia), SIMV-VC, SIMV-PC, and SIMV-PRVC (Anesthesia Recovery), PSV, and PSVPro (Practice of Spontaneous Breathing)				
	• Must have at least 10 seconds shutdown delay				
	• Must have a Ventilator Operation Risk Reminder/Prompt				
	• Must have a central lock braking system				
	PATIENT MONITOR				
	• Main Display Monitor of not less than 12" TFT Touchscreen and Navigation Knob with 3 built in module slots for various monitoring parameters, must have a built in thermal printer, must not exceed 5kg, 360' visible (Dual Alarm) Indicator Light, must have fixed hidden handle, must have Al-Mg alloy stent design, Easy to maintain, must have these six conventional monitoring parameters of 5-Lead				
	• ECG (optional 3/12-lead) and provides 26 arrhythmia analysis, Heart Rate Respiration, Dual-Temperature that can measure skin and oral/anal temperature simultaneously, SpO2 provides i-sports and anti-low perfusion. AcuTec NIBP High Accuracy technology for Hypertension. Power Supply 100-240V, 50/60Hz +/-1Hz, must use 4400mAh Lithium-Ion rechargeable battery with charging time of 6 hours and 3-6 hours continuous battery back up.				
	• Monitoring/Functional Modules can be place in one auxiliary rack/hub with a maximum capacity of 10 module slots that works in any order.				
	• Various User Interface such as Standard Interface. Big Font, Trendm OxyCRG, List, Bed to Bed and 7-Lead ECG/12-Lead Full Screen Cascade ECG				
	• Date storage Alarm Event Recall: 200 groups, Wave Recall: 2 hours, NIBP Recall: 2000 groups, Trend Graph: 120hours, Trend Table: 120hours, ARR Event: 100 groups				
	• Interfacing USB interface, RJ45 network interface, and Plug-in slot				
	• Recorder Type: Built-in; Thermal array, Channel: 3 channel waveforms, Speed: 25mm/s,50mm/s, Record width: 50mm, External printer: Yes				
	• Respiration Method: RA-LL Impedance Method. RR measurement range: (Adult: 0-120rpm, Pediatric/Neonate: 0 -150bpm), Accuracy: 7-150rpm ±2rpm or ±2% (whichever isgreater), 0-6rpm: unspecified, RESP Apnea Alarm: Adult: 10s-60s Ped/Neo: 10s~20s. Alarm: Audible and visual alarm;				

	alarm events reviewable, Sweep Speed: 6.25,12.5, 25 mm/s, Gain Selection: X0.25, X0.5, X1, X2, x4				
	• SpO2 Measurement & alarm range: 0~100%, Resolution: 1%, Accuracy: ±2% (70~100%, Ped/Adu, non-motion), ±3% (70-100%, Neo, non-motion); 0-69% unspecified, PR Measurement Range: 25--250bpm, Resolution: 1bpm Accuracy: ±1bpm, Alarm range: 20~350bpm,				
	• Temperature (Dual Channel) Measurement & alarm range: 0~50°C, TEMP sensor: Standard configuration-skin TEMP sensor, Resolution: 0.1°C, Accuracy: ±0.1°C (exclusive of error of sensor), Channel type: T1, T2, TD (Temperature Difference)				
	• Dual IBP Module				
	PRONE POSITIONING SYSTEM				
	• Fully adjustable height and width of the base for proper fitting of most adult patient head and pediatric patients (a least 37.17 kg) - Open design for greater visibility of patient's eyes and ET tube and allows use of temporal nerve stimulatio during procedure - Mirror made from durable polycarbonate material - Prone contoured cushion set (latex free) - MR conditional - 3 piece system – base, mirror and cushion				
	a. mirror: 500 grams or less				
	b. mirror materials: polycarbonate				
	c. base weight: 800 grams or less				
	d. foam set weight: 250 grams or less				
	e. foam set material - polyturethane				
	Basse hardware material shall be stainless steel				
	f. adjustable height (vertical) : 24.5mm - approx. 1"				
	g. adjustable depth (horizontal): 40.0mm - approx. 1.5"				
	Warranty				
	Atleast 3 Years Warranty on Parts and Labor				
	Delivery Period:				
	60 Days				
	Terms of Reference:				
	CTC certification of current and valid Authorized or Exclusive Distributorship.				
	CTC certificate of current and valid Manufacturer's compliance with ISO 13485.				
	Notarized / Apostilled certification from the manufacturer stating that the equipment is brand new, unused and not a discontinued model or was listed in the market recall.				
	Notarized certificate guaranteeing the availability on the supply of spare parts of at least ten (10) years from end of production. A certification must be issued by the manufacturer for the bidder.				
	CTC of certification that the bidder must be in the business in the local market for a minimum of ten (10) years.				
	Notarized / Apostilled certification that the system or machine is not a retrofit solution.				
	CTC certificate of manufacturer's approved US FDA Premarket Notification (PMN) or CE Mark Approval.				
	The winning bidder shall provide *current and valid calibration certificate* for each equipment during delivery if deemed necessary.				

	Notarized / Apostilled certification that the supplier has the capability or authority for corrective and preventive maintenance of the equipment's. The certificate must be issued by the manufacturer to the bidder.				
	CTC of certification from the manufacturer authenticated by the Philippine consulate / apostilled from the country of origin of the unit that the warranty should not be affected with a change of distributor. (Local Notary Public can be.)				
	Warranty Certification: Notarized certification that the bidder/supplier shall provide a three (3) years warranty for parts and services that include corrective maintenance, preventive maintenance, and/or calibration. The warranty shall commence upon the acceptance of the end user.				
	Notarized certification that the supplier / bidder must provide preventive maintenance and/or calibration schedule within warranty period.				
	Notarized certification that the supplier/bidder shall provide applications training and certification for end users and maintenance personnel of the hospital.				
	Unedited copy of Manuals: two (2) sets of Service Manual in English Language and two (2) sets of User Manual in English Language upon delivery of the equipment.				
	Notarized certification that the bidders have installation in critical care areas of DOH APEX HOSPITAL i.e. Philippine Heart Center, Lung Center of the Philippines, NK II, and the like for the past 5 years				
GHE03-2024	**CENTRAL MONITORING SYSTEM WITH 16 BASIC CARDIAC MONITORS AND 2 SPECIAL CRITICAL CARE MONITORS WITH EEG**	**1**	**SET**	**12,000,000.00**	**12,000,000.00**
	Display: 12.1-inch color TFT LCD touchscreen				
	Resolution: 800 × 600 dots				
	Waveforms: 4 - 6				
	Saved waves: 120 hours of one ECG wave (or SpO2 if ECG is not measured)				
	Trend graph: 120 hours				
	Numeric value list: 120 hours				
	Arrhythmia recall: 120 hours				
	Alarm history: 120 hours				
	Battery operation time: 6hours				
	Recorder: 3 traces				
	Network Interface: Standard				
	Interbed: 8 beds • Interbed gives quick access to check any patient in the network. From any monitor, you can check the vital information and alarm status of any other monitor in the network. With this interbed function, you can immediately check the status of any patient. This leads to better care for all patients Interbed: 8 beds				
	Dimension: 330 W × 274 H × 156 D mm				
	Weight: 4kg				
	Parameters: ECG, Temperature, Spo2, NIBP, Respiration capable for CO2, IBP ◆ Non Invasive Blood Pressure, NIBP Measuring method: Oscillometric Measuring range: 0 to 300 mmHg Cuff pressure display range: 0 to 300 mmHg Accuracy: ±3 mmHg (0 mmHg ≤ NIBP ≤ 300 mmHg) Cuff inflation time: Adult/Child: ≤ 11 s (700 cc), 0 to 200 mmHg Neonate: ≤ 5 s (70 cc), 0 to 200 mmHg				

	Measurement mode: Adult, child or neonate Maximum measurement time: Adult/Child: ≤ 160 s Neonate: ≤ 80 s Operation mode: Manual, STAT (≤ 15 min), Periodic and SIM (depends on the SITE setting) Auto remeasurement: 1 time Air leakage: ≤ 3 mmHg/min				
	Systolic range: Adult: 40 - 280 mmHg Child: 40 - 280 mmHg Neonate: 30 - 140 mmHg Diastolic range: Adult: 10 - 235 mmHg Child: 10 - 235 mmHg Neonate: 10 - 110 mmHg Mean range: Adult: 20 - 255 mmHg Child: 20 - 255 mmHg Neonate: 15 - 125 mmHg Initial pressurization value: Adult: 180 mmHg Child: 140 mmHg Neonate: 100 mmHg Maximum pressurization value: Adult/Child: 300 mmHg Neonate: 150 mmHg Display items: Systolic (SYS), diastolic (DIA), mean (MAP), cuff pressure during NIBP measurement, pulse rate NIBP data display update cycle: Updated every measurement				
	◆ Temperature Measuring range: 0 to 45°C, 32 to 113°F Measuring accuracy*: ±0.2°C (25°C ≤ TEMP ≤ 45°C) ±0.3°C (0°C ≤ TEMP < 25°C) * Essential performance in EMC standard Internal noise: ≤ 0.014°C (at 37°C) Temperature drift: within ±0.005°C /°C Display range: 0 to 45°C (32 to 113°F) Display update cycle: Every 3 s or when alarm is generated. Time response delay from probe to monitor display: ≤ 6 seconds (sensor time constant is not included) Recovering time after defibrillation: 10 s Alarm:				
	Upper limit range: 0.1 to 45.0°C (33 to 113°F) in 0.1°C (1°F) steps, OFF Lower limit range: OFF, 0.0 to 44.9°C (32 to 112°F) in 0.1°C (1°F) steps				
	◆ ECG Leads: 3-electrode cable: I, II, III 5-electrode cable: I, II, III, aVR, aVL, aVF, V Defibrillation-proof: ECG input protected against 400 Ws/DC 5 kV IEC 60601-2-27:2011201.8.5.5 compatible Electrode offset potential tolerance: ≥ ±500 mV Input dynamic range: ≥ ±5 mV Internal noise: ≤ 30 μVp-p (Referred to input) Noise suppression: RL driving gain: maximum 40 dB Maximum voltage: 1.23 Vrms				
	Common mode rejection ratio: ≥ 95 dB Input bias current: ≤ 100 nA				

	Frequency response: DIAG mode: 0.05 to 150 Hz (–3 dB) MONITOR mode: 0.3 to 40 Hz (–3 dB) MAXIMUM mode: 1 to 18 Hz (–3 dB) Input impedance: ≥ 5 MΩ (at 10 Hz), ≥ 2.5 MΩ (at 0.67 to 40 Hz) ESU protection: Provided (IEC 60601-2-27: 2005 compatible) Recovery time after defibrillation: 10 s				
	Leads-off sensing: Each leads has own sensing with user configurable automatic lead change Active electrode: < 100 nA Reference electrode: < 500 nA Waveform display: Display sensitivity: 10 mm/mV ±5% (DIAG mode at ×1 sensitivity) Number of channels: 2 (maximum, with 5 electrodes on home screen) Sensitivity control: ×1/4, ×1/2, ×1, ×2, ×4, or AUTO Pacing mark display: Available Cascade ECG Waveform: Available Recording sensitivity: 10 mm/mV ±5% (same as the display sensitivity)				
	Heart rate count: Calculation method: Moving average/Instantaneous beat to beat QRS detection (at × 1 sensitivity): Adult: Width: 70 to 120 ms, Amplitude: 0.5 to 5 mV, rate: 30 to 200 beats/min Child and neonate: Width: 40 to 120 ms, Amplitude: 0.5 to 5 mV, rate: 30 to 250 beats/min Counting range: 0, 15 to 300 beats/min (±2 beats/min) Counting accuracy: ±2 beats/min (0, 15 to 300 beats/min) (Essential performance in EMC standard) Heart rate display update cycle: Every 3 s or when alarm is generated Heart rate sync mark delay time: within 100 to 200 ms (when QRS is detected) Tall T-wave rejection capability: Complies with the heights of T-waves from 0 mV to 1.2 mV specified in IEC 60601-2-27:2011 201.12.1.101.17 Heart rate averaging: Calculated by using the most recent 4 or 12 beats.				
	Pacemaker pulse detector rejection of fast ECG signals: Slew rate at which the pacemaker pulse detector responds: 6 to 8 V/s Tested as specified in ANSI/AAMI EC13 Sect. 4.1.4.3 Pacemaker pulse rejection capability, without overshoot: Overshoot amplitudes and time constants of ±0.12 mV/100 ms to ±2 mV/4 ms (As defined by method B of IEC 60601-2-27: 2011 201.12.1.101.13, this corresponds to the pacemaker pulses amplitudes and widths as follows: Pacemaker pulse:±4 mV/2 ms to amplitudes ±80 mV/0.1 ms.)				
	Heart rate alarm: Upper limit range: 16 to 300 beats/min, OFF in 1 beat/min steps Lower limit range: OFF, 15 to 299 beats/min in 1 beat/min steps Alarm items: TACHYCARDIA, BRADYCARDIA, Escalating Alarm leads off time, CANNOT ANALYZE				
	Arrhythmia analysis: Analysis method: Multi-template matching method Number of channels: 1				

	QRS detection type: Adult, child, neonate VPC counting rate: 0 to 99 VPCs/min Arrhythmia message: ASYSTOLE, VF, VT, , VPC RUN, TACHYCARDIA, BRADYCARDIA, COUPLET, EARLY VPC, BIGEMINY, FREQ VPC, VPC Other messages: NOISE, CHECK ELECTRODES, LEARNING Arrhythmia alarm: Upper limit range: OFF, 1 to 99 VPC/min Number of arrhythmia recall files: 120 hours Storage time per file: 10 s ST level measurement: Number of measurement channels: 3-electrodes: 1 ch 5-electrodes: 2 ch ST level measuring range: ±2.5 Mv Measurement point: automatic with possibility to adjust manually ST level alarm: Upper limit range: –1.99 to 2.00 mV in 0.01 mV steps, OFF Lower limit range: OFF, –2.00 to 1.99 mV in 0.01 mV steps				
	◆ SpO2 Display: Display range: 0 to 100%SpO2 Declared range: 70 to 100%SpO2				
	Critical Care MONITOR (2 units) Display: CU-151R Display size: at least 15inch color TFT LCD Resolution: 1280 x 800 dots Pixel pitch: 0.204 x 0.204 Display type: Resistive touchscreen display Measuring parameters: ECG (3/6/12 lead), respiration (impedance method), SpO2, SpO2-2, NIBP, temperature Waveform display mode: Moving or fixed Normal Sweep speed: 25, 50 mm/s Slow sweep speed: 1.56, 6.25, 12.5 mm/s				
	Display colors: 32, selectable Number of traces: Up to 15 traces on one display Position of numeric data: Selectable (Left or right) Number of screen layouts: 3 for each display (A layout can be changed with one touch by function key)				
	ALARM: Alarm items: Upper/lower alarms, arrhythmia alarms, interbed alarms, technical alarms Alarm levels: Crisis (red, blinking), Warning (yellow, blinking), Advisory (yellow or blue, lit) Alarm indication: Message, highlighted numeric value, blinking alarm indicator, alarm sound Alarm suspend: Provided (for 1, 2, 3 min, Off) When connected to a central monitor, this alarm can be adjusted from the central monitor. Auto setting: Upper/Lower alarm, ST level Interbed alarm setting: All, Crisis & Warning, Crisis, Off				
	POWER REQUIREMENT: AC: 100 to 240 V DC (battery): 10.8 V Line frequency: 50 or 60 Hz Battery Type of battery: Lithium ion Battery operation time: at least 2 hours				
	REVIEW:				

	Trend graph: Storage capacity: 72 hours, Type of trend graph: 3 trend graphs, CSA, DSA Number of parameters in each trend graph: Up to 9 Number of channels for CSA/DSA: Up to 8 Vital sign list: Storage capacity: 72 hours Number of vital sign list: 3 Number of parameters displayed in each list: Up to 15 List interval: 1, 5, 10, 15, 30 or 60 min				
	ECG: Leads: 3-electrode cable: I, II, III 6-electrode cable: I, II, III, aVR, aVL, aVF, 2 from V1 to V6				
	10-electrode cable: I, II, III, aVR, aVL, aVF, V1 to V6 Heart rate counting range: 0, 15 to 300 beats/min (±2 beats/min) Arrhythmia analysis: Analysis method: Multi-template matching method Arrhythmia alarm items: ASYSTOLE, VF, VT, EXT TACHY, EXT BRADY, VPC RUN, V BRADY, SV TACHY, TACHYCARDIA, BRADYCARDIA, PAUSE, COUPLET, EARLY VPC, MULTIFORM, V RHYTHM, BIGEMINY, TRIGEMINY, FREQ VPC, VPC, A-Fib, End A-Fib, IRREGULAR RR, PROLONGED RR, NO PACER PULSER, PACER NON-CAPTURE 12-lead interpretation: Analysis software: ECAPS 12C Capable of measuring 18 Leads ECG.				
	RESPIRATION (IMPEDANCE): Measuring method: Transthoracic impedance pneumography Number of channels: Selectable from R-F or RL Respiration rate counting range: 0 to 150 counts/min Respiration rate counting accuracy: ±2 counts/min (0 to 150 counts/min) Apnea detection time: Off, 5 to 40 s OCRG: OCRG (oxycardiorespirogram) combines compressed trends of beat-to-beat heart rate, respiration, and oxygenation levels. OCRG can help doctors detect the cause of apnea attack.				
	NON INVASIVE BLOOD PRESSURE, NIBP: Measuring method: Oscillometric Measuring range: 0 to 300 mmHg Accuracy: ±3 mmHg Measurement accuracy (based on ISO 81060- 2) Standard deviation: ≤±5 mmHg Cuff inflation time: Adult/childe: ≤ 11 s (700 cc), 0 to 200 mmHg Neonate: ≤ 5 s (72 cc), 0 to 200 mmHg Operation mode: Manual, STAT, periodic, SIM (depends on the SITE setting). Automatically triggers NIBP even at periodic NIBP measurement. NIBP: Getting the systolic pressure during inflation and automatically deflates to get the diastolic pressure. Provides fast and painless measurement of NIBP.				
	SpO2: SpO2 measurement: Compatible with Masimo Pulse Oximeter a. Display range: 1 to 100% SpO2 b. Declared range: 70 to 100 % SpO2				
	Measuring accuracy: a. No motion: ±2%SpO2 (adult) ±3%SpO2 (neonate) b. Motion: ±3%SpO2 (adult) ±3%SpO2 (neonate) c. Perfusion index: 0.2% to 1% d. Capable of acoustic respiration rate				

	Temperature: - Number of channels: up to 4 - Measuring Range: 0 to 45°C, 32 to 113°F				
	Interbed Capability: - You can view data of other patient monitor while on a specific monitor. Both individual display and 20 bed display are available.				
	Drug Calculation: - Can calculate the flow rates and dosages for medication and titration. Ideal solution for medical and paramedical personnel.				
	Cardiac Output, CO (Non-Invasive) - To calculate cardiac output noninvasively and continuously. It uses Pulse Wave Transit Time which is obtained from the SpO2 and ECG-signals. It can continuously display esCCO, esCCI, esSV, esSVI, esSVR and esSVRI. - Can obtain through the parameters of ECG, Sp02 and NIBP.				
	Software Continuous Cardiac Output Monitoring estimated Continuous Cardiac Output using ECG, pulse wave and blood pressure Estimated Continuous Cardiac Output derived from pulse wave transit time (PWTT) Only uses preexisting parameters, ECG, SpO2, and blood pressure Clinically acceptable accuracy Simpler to use (no special skill required)				
	Potential Applications - Advanced monitoring of patients in ER, OR, recovery room and ICU - Hemodynamic monitoring after pulmonary artery catheters (PACs) removal. esCCO will support the earlier removal of PACs. - Hemodynamic optimization of patients who cannot use PACs - Support in the decision making process for goal-directed fluid management and more				
	ELECTROENCEPHALOGRAM (EEG) HEAT SET Quick and simple EEG Monitoring 8 channels Noise-robust EEG recording - Built in active amplifier reduces external noise - Built in motion sensor makes it easier to distinguish a seizure wave form noise cause by motion				
	Bluetooth wireless communication Detection of nonconvulsive seizures and characterization of spells in patient with altered mental status with: - A history of epilepsy - Flutuating level of consciousness - Acute brain injury - Recent convulsive status of epilepticus - Stereotyped activity such as paroxysmal movements, nystagmus, twitching, jerking, hippus, automatic variability				
	Monitoring of ongoing therapy - Induced coma for elevated intracranial pressure or refractory status epilepticus - Assessing level of sedation				
	Ischemia detection - Vasospasm in subarachnoid hemorrhage - Celebral ischemia in other patients at high risk for stroke				

	Prognosis - Following cardiac arrest - Following acute brain injury				
	AMPLIFIER Number of Electrodes: - 10 (EEG electrodes 8, Reference electrode 1, Z electrode 1)				
	Noise Level: - 5 Vp-p or less (0.53 to 60 Hz)				
	CMRR: - 90 Db or more				
	Input dynamic range and differential offset voltage: - ≠500 Mv or more				
	DATA PROCESSING COMPONENTS				
	Sensitivity: - 5 to 200 μV/mm				
	Time constant/low-cut filter: - 0.03, 0.1, 0.3 sec/0.53, 1.6, 5.3 Hz				
	High-cut filter: - 60, 50 (RAPID), 35, 30,, 15 Hz				
	AC Filter: - 50/60 Hz				
	OTHERS				
	Safety: - Defibrillation-proof type BF applied part				
	Resistance to water/dust: - IP33				
	Battery: - AA (LR6) Alkaline battery: 2pcs				
	Dimension and Height: - 56 W x 43 H X 151 D mm, - 240g (without the belts, forehead pad and batteries)				
	Consumables - With disposable electrode for EEG initial 2 starting kits				
	Warranty for parts and service **3 years**				
	Delivery Period:				
	60 Days				
	Terms of Reference:				
	CTC certification of current and valid Authorized or Exclusive Distributorship.				
	CTC certificate of current and valid Manufacturer's compliance with ISO 13485.				
	Notarized / Apostilled certification from the manufacturer stating that the equipment is brand new, unused and not a discontinued model or was listed in the market recall.				
	Notarized certificate guaranteeing the availability on the supply of spare parts of at least ten (10) years from end of production. A certification must be issued by the manufacturer for the bidder.				
	CTC of certification that the bidder must be in the business in the local market for a minimum of ten (10) years.				
	Notarized / Apostilled certification that the system or machine is not a retrofit solution.				
	CTC certificate of manufacturer's approved US FDA Premarket Notification (PMN) or CE Mark Approval.				
	The winning bidder shall provide *current and valid calibration certificate* for each equipment during delivery if deemed necessary.				
	Notarized / Apostilled certification that the supplier has the capability or authority for corrective and preventive				

	maintenance of the equipment's. The certificate must be issued by the manufacturer to the bidder.				
	CTC of certification from the manufacturer authenticated by the Philippine consulate / apostilled from the country of origin of the unit that the warranty should not be affected with a change of distributor. (Local Notary Public can be.)				
	Warranty Certification: Notarized certification that the bidder/supplier shall provide a three (3) years warranty for parts and services that include corrective maintenance, preventive maintenance, and/or calibration. The warranty shall commence upon the acceptance of the end user.				
	Notarized certification that the supplier / bidder must provide preventive maintenance and/or calibration schedule within warranty period.				
	Notarized certification that the supplier/bidder shall provide applications training and certification for end users and maintenance personnel of the hospital.				
	Unedited copy of Manuals: two (2) sets of Service Manual in English Language and two (2) sets of User Manual in English Language upon delivery of the equipment.				
	Notarized certification that the bidders have installation in critical care areas of DOH APEX HOSPITAL i.e. Philippine Heart Center, Lung Center of the Philippines, NK II, and the like for the past 5 years				
				TOTAL AMOUNT	**23,500,000.00**

Submitted by:

VICTOR GERARDO B. PUNDAVELA, MD. FPOA,FPCS,MMHoA
Chief, NCMH General Hospital

Recommending Approval:

ALDEN C. CUYOS, MD, FPPA, IFAPA, MMHoA
Chairperson, BAC for Equipment

Approved By:

SGD.
NOEL V. REYES, MD, FPPA, MMHoA
Medical Center Chief II