Equipment Specifications

Item **Description**

A6D06 TESTER, DEFIBRILLATOR

Use for testing defibrillator output energy. Loads of over 100 Joule to be measured.With use programmable protocols and test limits. Unit to be portable. Suitable for biphasic deffibrillators

A6D08 TESTER, E.C.G

Portable battery operated ECG/arrhytmia simulator.Heart rates from 30 to 180 beats per minute, accuracy ± 2%. With selectable output amplitude and QRS indicator

A6D12 TESTER, INFUSION PUMP

Infusion pump analyser for measuring the output of volumetric infusion pumps. Complete reports of volumetric output, flow rate and system accuracy.

A6D13 TESTER, ELECTOSURGICAL

For verification of the operational parameters of electrosurgical units. To measure true RMS value of applied electrosurgical waveform, current, power, RF leakage and peak to peak voltage.

A6D14 TESTER, ELECTRICAL SAFETY

Portable unit to verify the safety of electricaly powered devices in hospital. Leakage current measuring range 0-1mA. Ground resistance measuring range 0-200 Megaohm. With input protection from damage in event of high voltages. With digital display.

C0B10 BED, RENAL DIALYSIS

Specially designed for use in renal dialysis department.
With 4 electric motors for separate adjustment of back section(up to 65°), leg, and height adjustment (55-95 cm). Also with trendelenburg adjustment.
Height-adjustable and swivelling armrest; Removable head and foot rest
With 4 antistatic castors 125mm, with brake and direction locking
Overall dimensions approx 200 x 85 cm
With mattress at least 10cm thick with washable and waterproof cover.

To include a portable TV/DVD player with a 10" at least TFT screen. Integrated reception antenna. Mains and rechargeable battery operation. Remote control. Greek subtitles and menu support. Playback of DVD, CD, JPEG, MPEG4, DIVX,WMA etc files. Pair of headphones to be included.

C1L01 CHAIR, CLINICAL, HAEMODIALYSIS

Three sectioned chair, fully electrically operated by either patient or staff with the use of a hand switch control. Height adjustment. Possibility of positioning from upright sitting to a horizontal bed surface, as well as trenbelenburg positioning.
Adjustable pillow for neck support. Height adjustable upholstered armrests, capable of being inclined or swiveled out of the way. Electrically adjustable footrest with variable preseting for patients of any height.
Detachable upholstery, washable and desinfectable. Built in paper roll holder and halogen lamp.
Horizontal length at least 190 cm. Battery back-up operation in the event of power failure. On four swivel castor, with central brake system.
Complete with incorporated, electronic weight scale.
To include a portable TV/DVD player with a 10" at least TFT screen. Integrated reception antenna. Mains and rechargeable-battery operation.
Remote control. Greek subtitles and menu support.
Playback of DVD, CD, JPEG, MPEG4, DIVX,WMA etc files. Pair of headphones to be included.

C4G00 PUMP, INFUSION, VOLUMETRIC

Microprocessor controlled portable, dual AC/battery operated unit.
Digital display of set values, flow rate and total volume infused. K.V.O function to keep the infusion route open after the completion of scheduled infusion. Memory of data in case of a temporary interruption. Adjustable infusion pressure limits. Programmable for automatic secondary infusion.
Free flow protection, activated even with door open.
Built in rechargeable battery, automatically charged during AC operation. The unit must automatically switch to battery operation mode if AC power supply should fail. Complete with mounting device for item I.V. pole.
Operation characteristics (approximately):
Flow rate setting range: 0,1-999,9 ml/hr in 0,1 ml/hr increments.
Accuracy ± 5% .
Total volume setting range: 0,1 - 9999 ml in 0,1 ml increments.
Adjustable KVO rate
Adjustable Infusion pressure in at least three levels.
Automatic bolus reduction after occlusion release
Audible and visual alarms in the following cases: End of infusion, internal malfunction, flow error, door open, air in line, occlusion, empty container, low battery.
Capable of being connected to a specific stand, capable of holding and supplying electricity to at least six apparatus. Capability of central operation management together with syringe pumps.

Equipment Specifications

Item **Description**

C4G05 PUMP, INFUSION, PARENTERAL SOLUTIONS

Microprocessor controlled portable, dual AC/battery operated unit., suitable for parenteral solutions delivery.
Digital display of set values, flow rate and total volume infused. K.V.O function to keep the infusion route open after the completion of scheduled infusion. Memory of data in case of a temporary interruption. Adjustable infusion pressure limits. Programmable for automatic secondary infusion.
Free flow protection, activated even with door open.
Built in rechargeable battery, automatically charged during AC operation. The unit must automatically switch to battery operation mode if AC power supply should fail. Complete with mounting device for item I.V. pole.
Operation characteristics (approximately):
Flow rate setting range: 0,1-999,9 ml/hr in 0,1 ml/hr increments.
Accuracy ± 5% .
Total volume setting range: 0,1 - 9999 ml in 0,1 ml increments.
Adjustable KVO rate
Adjustable Infusion pressure in at least three levels.
Automatic bolus reduction after occlusion release
Audible and visual alarms in the following cases: End of infusion, internal malfunction, flow error, door open, air in line, occlusion, empty container, low battery.
Capable of being connected to a specific stand, capable of holding and supplying electricity to at least six apparatus. Capability of central operation management together with syringe pumps.

C4G10 STAND, PUMP, INFUSION

Especially designed stand, s.s. construction, capable of holding and supplying electricity to at least six apparatus.To provide central operation management and independent positioning of each apparatus. To include hoohs for IV solutions.

C4H00 PUMP, INFUSION, SURINGE

Microprocessor controlled, portable, dual AC/battery operated unit.
Digital display of set values, flow rate, total volume infused, pressure level and battery level.
KVO function, selectable pressure limits. Programmable bolus rate. Automatic bolus reduction after release of an occlusion. Memory of infusion events.
Built in rechargeable battery, automatically charged during AC operation. The unit must automatically switch to battery operation mode if AC power supply should fail. Complete with mounting device for item I.V. pole. To accept syringes from 5-50ml. Fluid resistant construction.
Flow rate adjustable from 0.1 to 1200 ml/hr, in 0,1 ml/hr increaments. Accuracy +/-2%.
Audible and visual alarms in the following cases: Infusion near end, end of infusion, system malfunction, syringe unlocked, occlusion, low battery .
Capable of being connected to a specific stand, capable of holding and supplying electricity to at least six apparatus. Capability of central operation

E0P01 VENTILATOR, LUNG

Volume and pressure controlled ventilator, microprocessor controlled, with color display. Back-up battery, minimum 60 minutes.

Modes of ventilation:
-Volume Control Ventilation (VCV),
-Pressure Control Ventilation (PCV),
-Synchronized Intermittent Mandatory Ventilation (SIMV),
-Bi-Level Ventilation
-Continuous Positive Airway Pressure (CPAP)
-Non Invasive Ventilation (NIV)

Capability for Inspiratory and Expiratory hold and Manual Breath

Monitoring of the following parameters: FiO2, Minute Volume, Tidal volume, Frequency, I:E ratio, Pressures: Pmax, Pplat, Pmean, PEEP/CPAP. Paw continuous monitoring.
Trending of monitored parameters. Waveform curves display of monitored parameters and trending data. Waveforms analysis, static and realtime loops.

Adjustable audiovisual alarms for the following parameters: Paw (H and L), FiO2 (H and L), Exhaled Minute volume (H and L). Audiovisual alarms in the
following cases: Power failure, loss of gas supply, tubing disconnection, ventilation cycle failure. In case of inoperative condition, appart from the alarm, the
ventilator should allow the patient to spontaneously breathe air.
Patient circuit, fully autoclavable and support arm.
Mounted on specific trolley from the same manufacturer.

Note: Medical gas connections must be compatible with the outlets of the hospital.

Equipment Specifications

Item **Description**

E0P10 VENTILATOR, PORTABLE, EMERGENCY

Volume constant, time cycled ventilator, for controlled ventilation.
Modes of operation : Control, Assist control, SIMV, PSV, CPAP. Possibility of adjustable PEEP ventilation and pressure limitation.
Blender for adjustement of oxygen concentration values between at least 40% and 100%.
Airway pressure gauge. Monitoring of Ppeak, Pmean, PEEP, Flow, Tinsp, Frequency.
Internal recheargable battery for at least 4 hours of operation.
Complete with carrying strap, portable cylinder support, O2 pressure reducer and 2L oxygen cylinder.

E0Q00 VENTILATOR, LUNG, SPECIAL CARE

High-end critical care ventilator, for pediatric to adult patients, that integrates ventilation with advanced parameters monitoring capability and state of the art winning procedures.
The ventilator should offer complete range of ventilation modes, with new advanced modes of ventilation and measurements. Active exhalation valve that allows spontaneous breathing in all modes. Air and O2 inlets for connection to the central piping system. Back-up battery, minimum 60 min.

Modes of ventilation:
-Volume Control Ventilation(VCV),
-Pressure Control Ventilation (PCV),
-Pressure Control Ventilation with Volume Guarantee (PCV-VG)
-Synchronized Intermittent Mandatory Ventilation, in Volume/Pressure Control (SIMV-VC / SIMV-PC),
-Bi-Level Ventilation
-APRV
-Pressure Support Ventilation (PSV)
-Continuous Positive Airway Pressure (CPAP)
-Non Invasive Ventilation (NIV)

Capabilities for:
- Automatic Patient Detection
- Airway resistance measurement and compensation
- Leak Compensation
- Rapid Shallow Breathing Index (RSBI)
- Inspiratory and Expiratory hold
- P0.1 maneuver
-100% O2 maneuver
- Manual Breath
- Automatic Suction Routine
- Intrinsic PEEP measurement
- Upgradable for CO2 measurement

Color touch screen min 12'' with possibility to display, minimum 3 waveforms simultaneously. Monitoring of the following parameters: FiO2, Minute Volume, Tidal volume, Frequency, I:E ratio, pressures: Pmax, Pplat, Pmean, PEEP/CPAP, Patient compliance and resistances. Paw continuous monitoring. At least 24 hrs trending capabilities of all monitored parameters and waveforms. Waveform analysis, static and realtime loops.

Adjustable audiovisual alarms for the following parameters: Paw (H and L), FiO2 (H and L), Tidal volume (H and L), Minute volume (H and L), High Breathing
Frequency, Apnoea. Audiovisual alarms in the following cases: Power failure, loss of gas supply, tubing disconnection, ventilation cycle failure.
Complete with synchronized nebulizer with flow compensation. Patient circuit, fully autoclavable and support arm.
Mounted on specific trolley from the same manufacturer.

Note: Medical gas connections must be compatible with the outlets of the hospital.

E0R01 VENTILATOR, LUNG, NEONATE, SPECIAL CARE

Volume and Pressure controlled neonatal ventilator, microprocessor controlled. Modes of operation: IPPV, CPPV, SIMV with PEEP, Assist mode by flow trigger, user adjustable, pressure support. Tidal volume from 5 ml.
Digital display of set ventilation parameters.
Color touch screen min 12'' , for monitoring of the following parameters: I:E, FiO2, Minute volume, Tidal volume, Breathing Frequency, Pmax, Pmean. Paw continuous monitoring. Patient compliance and resistance. Trended data (at least 24 hours) for ventilation parameters. Waveform curves display of monitored parameters and trended data.
Adjustable audiovisual alarms for the following parameters: Paw (H and L), FiO2 (H and L), Minute volume (H and L), loss of PEEP/CPAP.
Audiovisual alarms in the following cases: Power failure, loss of gas supply, tubing disconnection, ventilation cycle failure.
Complete with a suitable, servo-controlled, heated humidifier.
Patient circuit, fully autoclavable and support arm.
Complete with a purpose made mobile stand with equipment tray.

Equipment Specifications

Item **Description**

E4B02 MONITOR, PATIENT, ICU/CCU

G.D. Six channels patient monitor, microprocessor controlled fully digital modular or configured technology design.

O.C.
1.Waveform display of up to 6- 8 parameters simultaneously/ selectable display of waveforms and digital readout of chosen parameters.
2.Real Twelve- lead ECG display with measurements and interpretation. Automatic 12 lead ECG analysis.
3.Measuring parameters capability : ECG/HR/RR / BP (4) /T (2)/ SaO2 / NiBP/ C.O. /CO2 /BIS /EEG/CCO
O.F
1.Trend period selectable 1-24hr at least, with 1min resolution and simultaneous display of all monitored waveforms and digital readouts.
2.Full set of Processing and calculation of various parameters (Cardiac output, PWP, Haemodynamic, dose calculations)
3.Analysis of recorded parameters (complete 12 lead ST analysis with simultaneous display of all ST values, full arrhythmia analysis on 2 ECG leads
simultaneously at least, etc)
5.Capable of applying wedge filter method
6. Operation on fully charged batteries, min 1 hour
DISPLAY
Color waveform display on high resolution screen, 12'' size.
ALARMS: Presetable / Programmable medical alarms, min in 3 levels, and also technical alarms.
SAFETY: 1.Electrical safety protection of patient (IEC 601-1 standard) 2.Protection against defibrillation (R/F protection) 3.Compatible with EN 60601-1-1&2
CONFIGURATION :
The following configuration should be offered : ECG/HR/RR / BP (2) /T (2)/ SaO2 / NiBP/ C.O.
ACCESSORIES :
Range of patient cables for all clinical applications and parameters. Reusable accessories
INTERFACE
In connection with the central station must be able to communicate with CIS, HIS etc via HL7 gate.
Capable of interfacing with Ethernet (cable or wireless) network and operation room information system. Inter-monitoring communication with display of at least 2 waveforms per patient.
To be supplied with a rail mounted monitor shelf with length of support arm 350mm with tilt and swivel function.
In connection with the Central station must be able to communicate with clinical information systems, HIS etc, via HL7 gate

E4B03 MONITOR, PATIENT, ICU/CCU, CO2

G.D. Eight channels patient monitor, microprocessor controlled fully digital modular or configured technology design.

O.C.
1.Waveform display of up to 8 parameters simultaneously/ selectable display of waveforms and digital readout of chosen parameters.
2.Real Twelve- lead ECG display with measurements and interpretation. Automatic 12 lead ECG analysis.
3.Measuring parameters capability : ECG/HR/RR / BP (4) /T (2)/ SaO2 / NiBP/ C.O./CO2/BIS/EEG/ continuous CO through arterial line (module or inteface)

O.F
1.Trend period selectable 1-24hr at least, with 1min resolution and simultaneous display of all monitored waveforms and digital readouts.
2.Full set of Processing and calculation of various parameters (Cardiac output, PWP, Haemodynamic, dose calculations)
3.Analysis of recorded parameters (complete 12 lead ST analysis with simultaneous display of all ST values, full arrhythmia analysis on 2 ECG leads simultaneously at least, etc)
4.Capable of applying wedge filter method

DISPLAY
Color waveform display on high resolution screen, 15'' size.
ALARMS: Presetable / Programmable medical alarms, min in 3 levels, and also technical alarms.
SAFETY: 1.Electrical safety protection of patient (IEC 601-1 standard) 2.Protection against defibrillation (R/F protection) 3.Compatible with EN 60601-1-1&2
CONFIGURATION
The following configuration should be offered : ECG/HR/RR / BP (2) /T (2)/ SaO2 / NiBP/ C.O./ CO2 (sidestream &/or mainstream)
ACCESSORIES
Range of patient cables for all clinical applications and parameters. Reusable accessories
INTERFACE
In connection with the central station must be able to communicate with CIS, HIS etc via HL7 gate.
Capable of interfacing with Ethernet (cable or wireless) network and operation room information system. Inter-monitoring communication with display of at least 2 waveforms per patient.
To be supplied with a rail mounted monitor shelf with length of support arm 350mm with tilt and swivel function.
In connection with the Central station must be able to communicate with clinical information systems, HIS etc, via HL7 gate

Equipment Specifications

Item **Description**

E4C03 MONITOR, PATIENT, RECOVERY / INTERMEDIATE CARE

G.D. Microprocessor controlled minimum of four (4) channels, for use in intermediate care and recovery units. Fully digital open technology design.

O.C.
1. Waveform display & digital readout of selected parameters Second ECG possible
2. Measuring parameters-waveforms: ECG \HR\NIBP \SaO2 \T \Resp
3. High resolution color display, min 10 "
4. Battery for 2 hr

O.F.
1. Trend period 24hr . Capability of trend review of previous (discharged) patient
2. Processing-evaluation of various parameters-indexes
3. Analysis of recorded parameters (arrhythmia analysis).
4. Freeze capability

ALARMS: Presetable / Programmable medical alarms, min in 3 levels, and also technical alarms.
SAFETY / FILTERING :
1. Electrical safety protection of patient (IEC 601-1 standard)
2. Protection against defibrillation (R/F protection)
3. Special filtering to avoid artifacts from lung motion activity

ACCESSORIES : Cables and reusable accessories for all parameters. Rail mounted monitor shelf with length of support arm approx. 350mm with tilt and swivel function.

INTERFACE
Capable of Ethernet (cable or wireless) networking for data processing and communication with Central Stations.

E4C17 MONITOR, CO2/SpO2

G.D.
Microprocessor controlled, monitor for the waveform(min 3hr) & numerical presentation of SpO2 and EtCO2 on an LCD screen. Computer interface through RS 232.

E4H04 MONITOR, PORTABLE, 4 CHANNELS

G.D. Microprocessor controlled minimum of four (4) channels, for transport use.

O.C.
1. Waveform display & digital readout of selected parameters. Second ECG channel possible
2. Measuring parameters-waveforms: ECG \HR\NIBP \SaO2 \T \Resp\CO2
3. High resolution color display, min 10 "
4. Battery for 3 hr

O.F.
1. Trend period selectable: 1-24hr at least with 1min resolution. Capability of trend review of previous patient
2. Processing-evaluation of various parameters-indexes
3. Analysis of recorded parameters (arrhythmia analysis on 2ECG leads simultaneously at least, etc).

ALARMS : Presetable / Programmable medical alarms, min in 3 levels, and also technical alarms.

SAFETY / FILTERING :
1. Electrical safety protection of patient (IEC 601-1 standard)
2. Protection against defibrillation (R/F protection)
3 .Special filtering to avoid electromagnetic artifacts (EN 60601-1-1-2)
4. Freeze capability and event view of frozen waveform
5. 3 different sweep speeds for monitored waveforms

ACCESSORIES : Cables and reusable accessories for all parameters. Rail mounted monitor shelf with length of support arm approx. 350mm with tilt and swivel function.

INTERFACE :
Capable of Ethernet (cable or wireless) networking for data processing and communication with Central Stations

E4K01 MONITOR, ANTE-NATAL, CARDIOTOCOGRAPH

G.D.
Antepartum foetal monitor for the measuring of foetal HR (FHR).
O.F./O.C.
FHR measured by Ultrasound and uterine activity monitored by external toco -transducer. Digital dispay of HR in the range of 50-210 BPM.
Including : high resolution thermal printer, external toco transducer, watertight ultrasound transducer of minimum 7 crystals , mobile cart, transducers holder.
Self test capability

Equipment Specifications

Item **Description**

E4K02 MONITOR, INTRAPARTUM, CARDIOTOCOGRAPH

Intrapartum,foetal monitor measuring 3 HR displayed numerically, suitable for monitoring twins.
Measurement of direct ECG , maternal HR, maternal NIBP, maternal SPO2, uterine activity.
The unit should have the following inputs :MECG, MNIBP, MSPO2, 2 x Ultrasound transducer of minimum 7 crystals each. Including multi channel thermal printer,mobile cart,electrodes and assosiated transducers (Ext.Toco, dECG, MNIBP, MSPO2, 2x Ultrasound,Uterine catheter)
Minimum 5'' display, for display of all parameters and waveforms in one screen
Intrauterine pressure with signal range in: 0 - 100 mm Hg.
Possible telemetry interface.
Self test facility

E4W07 CENTRAL STATION ICU/CCU, FD

G.D. Central station for use with ICU/CCU bedside monitors. To be able to collect data from 16 patients

O.F/O.C
1.Accomodation of min 16 patients with simultaneous display of ECG and at least one other waveform for all patients simultaneously .Selectable of all
waveforms and data simultaneously from one monitor without interrupting the display of the rest of the patients. Total no of 24 waveforms min 3 per patient (for 8
patients)
2.Waveform display on two 19"colour high resolution LCD monitor , depended on monitors configuration
3.Digital display of patient identity ,HR,main parameters
4.Selectable waveform configuration
5.Memory period min72hr (tabular, graphical display forms),including arrhythmia event storage for each patient.
6.Capable of various (min12) different arrhythmia alarms from each patient
7.Complete alarm management of bedside monitors (change of alarm limits, arrhythmia level, etc)
8..Alarm audio/visual with automatic recording on 2 channels thermal printer for at least ten different alarms
9..Interfaces for ICU /CCU bedside monitors/printer and digital telemetry
10.To Include full disclosure system for patient documentation for min 72 hr and 4 waveforms per patient.
11. Web browser capability integrated on central station or separate workstation
12.To be able to accommodate digital telemetry
13. Patient liscences : 12
INTERFACE
Capable of interfacing with Ethernet network . Integrated or seperate web browser, HL7 gate for interfacing with clinical cardiology system, clinical information system,
PACS for data/waveform/images collection, display and processing.

E4W08 CENTRAL STATION /CCU, FD, TELEMETRY

G.D. Central station for use with ICU/CCU bedside monitors.To be able to collect data from 16 patients

O.F/O.C
1.Accomodation of min 16 patients with simultaneous display of ECG and at least one other waveform for all patients simultaneously .Selectable of all waveforms and data simultaneously from one monitor without interrupting the display of the rest of the patients. Total no of waveforms min 24, 3 waveforms for 8 patients
2.Waveform display on 19"colour high resolution LCD monitor, depended on monitors configuration.
3.Digital display of patient identity, HR, main parameters
4.Selectable waveform configuration
5.Memory period min 72hr (tabular,graphical display forms), including arrhythmia event storage for each patient.
6.Capable of various (min12) different arrhythmia alarms from each patient
7.Complete alarm management of bedside monitors (change of alarm limits, arrhythmia level, etc)
8.Alarm audio/visual with automatic recording on 2 channels thermal printer for at least ten different alarms
9.Interfaces for ICU /CCU bedside monitors/printer and digital telemetry
10.To Incude full disclosure system for patient documentation for min 72 hr and 4 waveforms per patient.
11. Web browser capability integrated on central station or separate workstation
12.To be able to accommodate digital telemetry
13. Patient licenses : 8 (including 4 telemetry patients)
INTERFACE
Capable of interfacing with Ethernet network . Integrated web browser for interfacing with clinical cardiology system, clinical information system, PACS for data/waveform/images collection, display and processing.

Equipment Specifications

Item **Description**

E5B00 ECG RECORDER, MULTI-CHANNEL, MOBILE

G.D.
Twelve channel ECG recorder for simultaneous acquisition of up to 12 leads at least.
O.F./O.C.
-Real time continuous recording of 12 channels
-Color LCD display of six and twelve -ECG format to be selectable
- Software for ECG measurement and interpretation. Arrhythmia extended recording. Memory for min 100 ECG's.
- Able to communicate with Cardiology Clinical Information system for 12 lead ECG transmission (The same system for CCU monitors)
-Automatic/manual operation modes.
-Digital recorder with selectable presentation of simultaneous recordings. Printing of all channels on a A4 page.
-Alphanumeric keyboard
-user manual measurements
-Rechargeable batteries for approximately 50 ECG's. Or at least 30 min continuous recording
Measurements and interpretation of ECG
- Able to connect with external monitor- Export in PDF format
- Compatible with IEC 60601-2-51 performance standard
ACCESSORIES
Power cord,electrodes,
-100 sheets of paper. ECG cables with individually replaceable leads
- Mobile cart of same manufacturer cart with arm for holding lead wires.

E5B35 HOLTER SYSTEM, BP

G.D.
System consisting of PC workstation and HOLTER recorders, for the recording and analysis of Blood Pressure (BP) on 24h continuous basis.
O.F/O.C
1.Three programmable HOLTER recorders with 24h recording capability at least.
USB interface of connection with PC.Sampling of BP in the range of 5-120 min.
Measurement of systolic/diastolic BP with oscillometric method.
2.One PC state of the art (RAM 2 GB, HD 120 GB, 3 usb ports, DVD-R/W), flat screen min 17" and one printer (laser or deskjet).
3.Including the special software for the presentation (including graphs) and analysis of measurements (deviation,mean value,statisical reports,etc.)
4. To include min 2 measurement protocols, configurable by the user

E5B40 HOLTER SYSTEM, ECG

G.D.
System consisting of PC workstation and HOLTER recorders,for the recording and analysis of ECG on 48h continuous basis.
O.F/O.C
1.Three programmable HOLTER recorders with 48h recording capability at least. Max weight 90g
Solid state memory.Interface conection PC.
3hannels(minimum). Continuous/real time arrythmia and ST analysis.
Integral pacemaker detection in all recording channels.
water persistant
2.One state of the art PC and one printer(laser or deskjet) with Colour TFT min 15"monitor.
3. including the special software for the presentation (including graphs and trends) and analysis of measurements(deviation,mean value,statisical reports,slope,arrytmia detection,ST segment analysis, HRV time domain and spectral , defib analysis etc.).
Superimposition for review reason
Identification of unclassified beats, categorised by the user
4.ECG management software connectivity

Equipment Specifications

Item **Description**

E5P01 STRESS TESTING MACHINE, CARDIAC FUNCTION

G.D.
Complete integrated stress test system for cardiac function diagnosis.
O.F. / O.C
1.ECG recorder: Multi channel (12 leads acquired simultaneously, digital acquisition of ECG signal), measurements and interpretation software in resting ECG. Sampling rate min 4000 Hz.
Interpretation software to include stress test evaluation before-during-after examination on 12 (precordial leads included) ECG leads.
Microprocessor controlled acquisition system, HR measurement. Automatic arrhythmia detection and documentation.
Continuous measurement of ST. Display of ST trend. Real time ECG-display for all 12 leads simultaneously. Exercise Protocols: min 8 configurable.

To be able to export report in various format

2.Colour Laser Printer for the presentation of results and monitor for the continuous display of ECG and other stress data. Number of recorded traces: 3, 6, 12

3. Treadmill with non-slip surface (track size: 150x 45 cm approx.). Variable speed: 0-20 km/h, zero start. Elevation level: 0-24%. Including emergency stop, standard full handrail set and manual/auto exercise programs. Heart rate, patient name, ID, clock, waveforms, lead labels, speed, gain and filter settings are displayed.

4. System to be mobile on cart.

5. To be able to communicate with ECG management software

E5P20 TELEMETRY SYSTEM

G.D.
Telemetry system to be interfaced with CCU central monitoring station for 4 patients.
O.F/O.C.
System including:
- 4 Pocket size digital transmitters adapted on the patient to record ECG signal and optionally SpO2
-Digital or Analog transmission of 6 lead ECG in the UHF band
- 4 receivers with adjustable frequency channel
- Indication for battery status, electrode failure. Remote graph button
- Full arrhythmia analysis.
-Transmitter battery operated ,with minimum life time 48 hours
-Operation modes controlled from central station

F0A00 HAEMODIALYSIS MACHINE, BASIC

-System for automatic preparation of final dialysis fluid (acetate-bicarbonate) and automatic regulation and control of conductivity. With sodium and bicarbonate value selection according to individual patient therapy requirements.
- Integrated dialysis fluid flowmeter
-Suitable for controlled ultrafilration,sequential ultrafiltrationand haemodiafiltration. Sodium and ultrafiltration profiling.
-Bicarbonate haemodialysis either from concentrated dialysis fluid, or bicarbonate power cartridge.
-Single needle /single pass haemodialysis.
-High accuracy pump, preferably with capability of returning the blood to the patient in case of power failure by means of an integrated battery lasting approx 10 min.
-Automatic cleaning/water rinsing and heat and chemical disinfection.
-Self testing on machine start-up. Operation and monitoring of all treatment parameters, preferably in Greek language, with optical and acoustical alarms and safety systems for patient protection against machine failures and/or user errors.
- Integrated heparin pump with bolus capability
-Automatic measurement of arterial and venous blood pressure.
-Blood leakage and air bubble detection.
-Measurement and control of blood flow and of total blood volume passed through the filter.
-Upgradable to blood pressure & temperature monitoring. Capable for future connection to patient data management system.
-To accept cartridges, dialyzers, fluids etc. from all well known manufacturers.
-Wheel mounted with braking capability.
- Complete with holders for filter/bags

Equipment Specifications

Item **Description**

F0A01 HAEMODIALYSIS MACHINE, COMPLETE

-System for automatic preparation of final dialysis fluid (acetate-bicarbonate) and automatic regulation and control of conductivity. With sodium and bicarbonate value selection according to individual patient therapy requirements.
- Integrated dialysis fluid flowmeter
-Suitable for controlled ultrafilration, sequential ultrafiltration and haemodiafiltration. Sodium and ultrafiltration profiling.
-Bicarbonate haemodialysis either from concentrated dialysis fluid, or bicarbonate power cartridge.
- To include urea measurement of KT/V during the treatment cycle.
-Single needle /single pass haemodialysis.
-High accuracy pump, preferably with capability of returning the blood to the patient in case of power failure by means of an integrated battery - lasting approx 10 min.
-Automatic cleaning/water rinsing and heat and chemical disinfection.
-Self testing on machine start-up. Operation and monitoring of all treatment parameters, preferably in Greek language, with optical and acoustical alarms and safety systems for patient protection against machine failures and/or user errors.
- Integrated heparin pump with bolus capability.
-Automatic measurement of arterial and venous blood pressure.
-Blood leakage and air bubble detection.
-Measurement and control of blood flow and of total blood volume passed through the filter.
-Upgradable to blood pressure & temperature monitoring. Capable for future connection to patient data management system.
-To accept cartridges, dialyzers, fluids etc. from all well known manufacturers.
-Wheel mounted with braking capability.
- Complete with holders for filter/bags

F0A15 HAEMODIAL.MACHINE, CV -VH

The device should be controled by microprocessor, which perform multiple self-test and safety procedures for the safe operation.
Able to perform in 5 different therapy modes.
All the therapy parameters should be displayed on a high-resolution color screen
Able to operate with almost all the market dialysers suitable for every therapy as well as to operate with fixed cassette (multifiltrate cartridge) for easier set up and handling.
It should have all the necessary automation and safety systems for patient protection against any machine fault or user mishandling (air detector, all pressure detectors, bubble catcher etc)
It should perform continuously measurement, calibration and control of arterial venous and transmembrane pressures, for patient safety.
It should be equipped with self detect error program (special software) for easier and quicker maintenance and repair.
With 2 special chambers for the precise online heating of the dialysate at the desired temperature.
With 4 autonomous high precision scales.
It should have a precise heparin pump with bolus ability.
With 4 peristaltic pumps. One for the blood, one for the filtrate, one for the dialysate and one for the dialysis solution.
It should have a back up battery system which will be activated in case of power failure, for at least 15-20 minutes.
Equipped with castors with brakes, for easy transportation.

F0F00 PERITONEAL DIALYSIS MACHINE

Hospital use machine performing automated peritoneal dialysis. All current types of therapeutical methods IPD, CCPD, NPD, etc, as well as glucose and time profiling.
Automatic check of all functions (autotest) before each treatment. Small preheat time.
The overall treatment time and the dialysate solution total volume can be automatically foreseen.
The treatment parameters can be visualized on color touch screen, modified during treatment, preselected and fixed.
Supplied with diskettes for storing at least 3 months worth of data.
Equipped with battery and integrated memory allowing to save the treatment parameters even in case of mains interruption. Automatic restart of the system.
Alarms for high/low temperature and patient low drain.
Independent microprocessors for function and safety.
Automatic barcode recognition of bag solutions as prescribed by therapist.
Able to connect to a remote PC (telemedicine).
Small dimensions, low-noise operation. To include mobile case.

Equipment Specifications

Item **Description**

F4A00 INCUBATOR, NEONATE, INTENSIVE CARE

Microprocessor controlled, mobile incubator, for critically ill babies. Height adjustable.
Large, transparent, double wall canopy. Front access door and rear access door, slide out mattress tray. Six elbow operated access ports.
Warm air circulation system and effective air curtain to prevent heat loss even during open door interventions. Air flow velocity on the mattress at the level of 10cm/sec. Canopy and baby tray to be X-ray transparent. Baby tray to have tilt mechanism up to at least 12° in either direction.
Incubator to have both options of controlling the temperature either by monitoring the incubator air temperature or the baby skin temperature.
Integrated humidity and oxygene supply, servocontrolled.
Digital display of the following parameters : Set skin and incubator temperature, monitored skin and incubator temperature, set and monitored humidity and oxygen concentration.
Trending capability for all monitored parameters.
Bacterial filter to remove airborn particles. At least four self sealing access holes for tubing.
X-ray cassette tray. I.V. pole, at least two hooks, with mounting device.
Operation characteristics (approximate values):
Skin temperature setting: 35°- 38°C in 0.1°C steps.
Incubator temperature setting: 25°- 39°C in 0.1°C steps.
Oxygen supply adjustment range: 21 - 65%
Humidity supply adjustment range: 40 - 80%.
Incubator air temperature drop with the front access door open: not more than 5°C with the ambient temperature at 25°C. Operating noise level in hood not more than 50 dBA.
Audible and visual alarms in the following cases:
- High incubator air temperature with automatic heater cut out at 39°C
- If monitored baby temperatures differs more than +/- 0.5°C from set points
- If monitored air temperatures differs more than +1.5/-2.5ºC from set points
- Air circulation failure, skin temperature probe failure, air temperature sensor failure.
- High and low oxygen concentration.
- Power failure.

Automatic alarm testing.
Construction: The construction must permit washing and desinfection of the incubator. Incubator to incorporate cabinet for storage of equipment, on four antistatic swivel castors with brake system. Complete with integrated scale.

F4C00 INCUBATOR, NEONATE, PRIMARY CARE

Microprocessor controlled, mobile incubator, height adjustable.
Large, transparent, double wall canopy. Front access door and rear access door, slide out mattress tray. Six elbow operated access ports.
Warm air circulation system and effective air curtain to prevent heat loss even during open door interventions. Air flow velocity on the mattress at the level of 10cm/sec. Canopy and baby tray to be X-ray transparent. Baby tray to have tilt mechanism up to at least 12° in either direction.
Incubator to have both options of controlling the temperature either by monitoring the incubator air temperature or the baby skin temperature.
Integrated oxygen and humidity supply, servocontrolled. Humidifier boiler type, easily removable for cleaning.
Digital display of the following parameters : Set skin and incubator temperature, monitored skin and incubator temperature, set and monitored humidity concentration.
Trending capability for all monitored parameters.
Bacterial filter to remove airborn particles 0,3 ìm or larger. At least four self sealing access holes for tubing.
X-ray cassette tray. I.V. pole, at least two hooks, with mounting device.
Upgrading capability for servocontrolled oxygen supply and integrated scale.
Operation characteristics (approximate values):
Skin temperature setting: 35°- 37,5°C in 0.1°C steps.
Incubator temperature setting: 25°- 39°C in 0.1°C steps.
Oxygen supply adjustment range: 21 - 65%
Humidity supply adjustment range: 40 - 95%.
Incubator air temperature drop with the front access door open: not more than 5°C with the ambient temperature at 25°C. Operating noise level in hood not more than 50 dBA.
Audible and visual alarms in the following cases:
- High incubator air temperature with automatic heater cut out at 39°C
- If monitored baby temperatures differs more than +/- 1°C from set points
- If monitored air temperatures differs more than +3/-3 ºC from set points
- Air circulation failure, skin temperature probe failure, air temperature sensor failure.
- High and low oxygen concentration.
- Power failure.

Automatic alarm testing.
Construction: The construction must permit washing and desinfection of the incubator. Incubator to incorporate cabinet for storage of equipment, on four antistatic swivel castors with brake system.

Equipment Specifications

Item **Description**

F4D00 INCUBATOR, NEONATE, TRANSPORT

Dual battery/AC transport incubator.
Double wall transparent canopy, carrying handles. Front and head access door, slide-out mat- tress tray. Warm air circulation system .
Control of the temperature by monitoring the incubator air temperature: incubator temperature setting 25°-38°C in 0.1°C steps. Digital display of set and monitored air temperature and of infant temperature and oxygen concentration. Adjustable humidity control. Battery level indicator. To include oxygen cylinder regulator and flowmeter.
To be complete with ventilator for neonates, Air/O2 blender and Transport Neonate Monitor.
Bacterial filter to remove airborn particles 0.5 ì or larger. Self sealing access holes for tubing. I.V. pole, at least two hooks, with mounting device.
Built-in examination light and aspiration device. Complete with baby restraining straps.
Audiovisual alarms:
- High air temperature with automatic heater cut out
- Temperature sensor failure, air circulation failure. High / low oxygen concentration.
- Power failure. Low battery or external DC.

Automatic alarm testing.
Construction: The construction must permit washing and desinfection of the incubator. Complete with collapsible, gas-spring assisted trolley, shelf for ventilator and monitor, 2 places for medical gas bottles . To include two rechargeable internal batteries for at least 3 hours of independent power supply, plus battery charger.

F4E00 HEATER, RADIANT, OVERHEAD

Mobile radiant heater on 4 swivel castors. Approx. height above baby 60 cm. Ambient temperature range approx. 20°C to 28°C.

F4F00 PHOTOTHERAPY UNIT, NEONATAL

Wavelength range 420 to 480 nm. Height adjustable unit, mounted on four swivel castors.

F4F01 PHOTOTHERAPY UNIT, NEONATAL, MATRESS TYPE

Comprising one fluorescent- blue light -tube. Approx. light intensity up to 3mW/cm2.
To include timer. Dimensions approx 600 x 300 mm

F4J00 RESUSCITATION APPARATUS, NEONATE, COMPLETE

Height approx. 1m. Possibility of height adjustment. Trendelenburg and reverse trendelenburg adjustment. 4 detachable perspex walls. Storage drawers under procedure table and hinged flap work surface. X-ray cassette tray. Shelves for medical apparatus and IV pole. 4 antistatic castors with brakes.
Radiant heater above procedure table and strong illumination. Rescusitator for intermittent positive pressure ventilation, with Air / O2 blender for oxygen regulation between 21% and 100%. PIP and PEEP control, airway pressure gauge. Suction unit approx. 0 -150 mm Hg , oxygen flowmeter approx. 0-15 lpm. Microprocessor controlled selection and display of skin temperature. Servocontrolling of skin temperature setting. Digital chronometer and acoustic signal for control of Apgar times. Alarms for power failure, malfunctions, probe falt, critical infant temperature.

C2B07 DEFIBRILLATOR, BIPHASIC

G.D.
Portable defibrillator, microprocessor controlled.
Form of shock : biphasic, escalating variable energy.
O.F. / O.C.
1.Mains and battery (rechargeable) operated. 50 max-energy shocks or min of 4hours ECG monitoring.
2.Manual, cardioversion and ECG synchronized operation modes. Autosequence mode
3.Display of ECG and optionally SpO2 through paddles or electrodes .Also display of HR, available energy. Color screen 5,5'' size at least
4.Charge time in 200J max 5sec
5.Energy : 0 - 270 Joules
6.Event summary
7.Paddles: Standard paddles with manual or auto recording button, for adults and pediatrics. Supplied with long paddle cord.
8Charge/ready indicators.
9.External pacemaker with self-adhesive defib/pace electrodes. Pace rate from 30-180 bpm and 0-140 mA pulsed current.
10. Impedance compensation
11.Thermal printer for recording the displayed parameters.
12. Memory for min 40 events archiving with date/time data

Equipment Specifications

Item **Description**

C2B08 DEFIBRILLATOR, PACEMAKER CAPABILITY, BIPHASIC

G.D.
Portable defibrillator, microprocessor controlled with pacemaking capability included.
Form of shock: biphasic, escalating variable energy.
O.F. / O.C.
1.Mains and battery (rechargeable) operated. 50 max-energy shocks or min of 4hours ECG monitoring.
2.Manual, cardioversion and ECG synchronized operation modes. Autosequence mode
3.Display of ECG and optionally SpO2 through paddles or electrodes .Also display of HR, available energy. Color screen 5,5'' size at least
4.Charge time in 200J max 5sec
5.Energy : 0 - 270 Joules
6.Event summary
7.Paddles: Standard paddles with manual or auto recording button, for adults and pediatrics. Supplied with long paddle cord.
8.Charge/ready indicators.
9.External pacemaker with self-adhesive defib/pace electrodes. Pace rate from 30 -180 bpm and 0-140 mA pulsed current.
10. Impedance compensation
11.Thermal printer for recording the displayed parameters.
12. Memory for min 40 events archiving with date/time data

C2B09 DEFIBRILLATOR, AED

Portable AED defibrillator, with Greek voice commands/instructions.
Biphasic technology. ECG display and event storage memory.
Capable of connection to PC or laptop for data transfer.
Complete with battery, storage case and a pair of electrode pads.

C2P10 NON INVASIVE BLOOD PRESSURE/ PULSE RATE/ OXYMETER

Standard non invasive blood pressure (NIBP) as well as pulse rate and MAP
Includes pulse oximeter, thermometer and internal printer
Simple programming, a large digital display and display of the plethmographic waveform.
Uses the oscillometric method to determine systolic and diastolic pressure, mean arterial pressure and pulse rate with dual hose technology.
Approved by the manufacturer for use in hypertensive and hypotensive patients. Incorporates special motion artifact rejection software to reject patient movement.
Includes automatic blood pressure mode, blood pressure mode, programmable alarms, and built in memory.
Standard RS-232 computer interface for uploading patient data to your network or PC.
12V DC input. Battery operated
Supplied with its own dedicated mobile stand.