

Indira Gandhi Memorial Hospital Male', Republic of Maldives Biomedical Engineering Department

# **Technical Specification for Equipment**

Equipment: Cardiac Monitor (Portable and wall mount)

- Easy to use, lightweight and suitable for adult, pediatric and neonatal patients, capable of operating on dual power supply, mains and built-in rechargeable internal batteries.
- > Battery capacity should be 6 HRS in full battery capacity.
- User friendly interface.
- Should be able to see the review of trend, events and storage in the system and must have integrated system that can connect with a centralized monitoring using a wired LAN connection.
- Digital SPO2, high capacity resistance against interface of ESU, motion & low infusion index.
- Isolated against defibrillation effect.
- Audible and visual alarms. A full function physiological and technical alarms with adjustable options.
- > Built in thermal printer.
- > Ability to measure parameters
  - ► ECG (3 or 5 lead)
  - > Respiration
  - Oxygen Saturation (SPO2)
  - ➢ Temperature (TEMP)
  - Blood pressure (NIBP)
  - > IBP
  - ► EtCO2
  - > St segment, arrhythmia detection
- > Touch screen operation, Rotating switch and LCD monitor size range: 5.5 to 6
- Operating modes must be multi lingual interface user configurable displays with adjustable color and position of waves. Also must have multiple display options with standard, large numeric, 12 lead dynamic or 7 lead ECG, oxy CRG and bed to bed view.
- A certified Biomedical training for preventive maintenance, Repairing, troubleshooting and necessary technical aspects in the part of manufacturing standards should be provided.
- > All the accessories must be provided with the machine.

- Should consist of an authorized simulating, testing and calibrating device with all the necessary connector and adaptor cables to attach and check with the system should be provided.
- > Should
- Should perform Preventive maintenance with all the necessary spares, document and check list with respect to the manufacturer standards in the warranty period.
- > All necessary accessories for the start and functioning of the equipment needs to be supplied
  - > Power Cable
  - $\succ$  ECG Cables.
  - ➢ SpO2 Sensors.
  - $\triangleright$  NIBP cuffs.
  - > NIBP lead.
  - ➢ IBP Cable.
  - ➢ EtCO2 Cable.
- Both the type of monitors must be with baskets to put the accessories and portable monitor must be with a stand with wheels.

## **Power Supply**

▶ Line voltage 220-240AC, 50-60Hz and fitted with a 13amp plug as well as DC charging facility.

## Standards/Cortication, Safety

Should be a CE / FDA Approved product and should have ISO standards, IEC Standards, RTCA DO-160 standards.

#### **User Training**

> Must provide user training (including how to use and maintain the equipment).

#### Warranty

Minimum 12 months from the date of handing over/installation and commissioning

#### **Documentation**

- ▶ User (Operating) manual in English.
- Service (Technical / Maintenance) manual in English.
- > List of important spare parts and accessories with their part numbers and costing.
- > Certificate of calibration and inspection from factory