



Biomedical Engineering Unit
Regional Atoll Health Services Division
Ministry of Health, Male', Republic of Maldives

Technical Specification for Equipment

Equipment: WEIGHING MACHINE DIGITAL (ADULT)

- Long life battery operation for ease of use
- Capacity minimum: 150kg • Accuracy : 100g
- Platter Size: 350 mm x 300 mm (Tolerance +1- 10%)
- The Electronic Adult Weighing Scale should incorporate following features for user-friendly convenience.
- Digital Display • TARE facility with zero function.
- HOLD function to lock the weight.
- Should be battery operated

Standards/Certification, Safety

Should be a CE / FDA Approved product and should have ISO standards

Warranty

12 months from the date of handing over or installation and commissioning





Biomedical Engineering Unit
Regional Atoll Health Services Division
Ministry of Health, Male', Republic of Maldives

Technical Specification for Equipment

Equipment: Manual BP Apparatus

1) Functionality and Performance

- Mobile (Manual Aneroid) sphygmomanometer used to manually measure patient's blood pressure.
- Large approximately 15 cm aneroid blood pressure gauge, with scale ranging from 0 to 300 mmHg, with clear dial, numbers, and face
- The cuff, gauge, and bulbs should be made of heavy-duty materials that withstand harsh environment.
- The bulb should have a metal air release valve.
- Cuff sizes: 3 sizes, adult (L and XL) and pediatric, one of each must be included.
- Spare cuff (of each size) and bulb must be provided.
- Standard accessories shall be included
- Shall be CE marked and/or FDA approved

2) Trainings and Warranty:

- The unit and the accessories must be supplied with one year of warranty.





Biomedical Engineering Unit

Regional Atoll Health Services Division

Ministry of Health, Male', Republic of Maldives

Technical Specification for Equipment

Equipment: Stethoscope, Adult

1) Characteristics

- Chest piece : Dual head no chill rim & diaphragm
- Diaphragm : Tunable diaphragm
- Binaural : Dual-leaf spring encased at 15° angle
- Operating temperature range : 0° C ~ 40° C
- Operating humidity : Less than 95% RH
- Highlighted Features
 - Tunable diaphragm
 - Non chill rim and diaphragm
 - Low and high frequency acoustic sensitivity
 - Durable tubing
 - Double-leaf binaural spring inside the tubing
 - Solid chest piece

2) Trainings and Warranty:

- The unit and the accessories must be supplied with one year of warranty.



[Handwritten signature]



Biomedical Engineering Unit
Regional Atoll Health Services Division
Ministry of Health, Male', Republic of Maldives
Technical Specification for Equipment

Equipment: **Stethoscope, Pediatric**

Two-sided models with traditional bell/diaphragm chest pieces are designed, sized and acoustically precise for children and infants.

Features

- One-inch traditional bell (pediatric) and bell (infant) combined with a floating diaphragm
- Solid stainless steel chest piece
- Comfortably angled, anatomically correct headset
- Single-lumen tubing available

Standards, Safety and Training

- Should be FDA approved/CE marked

Documentation

- User/Technical/Maintenance manuals to be supplied in English.
- List of important spare parts and accessories with their part number and costing.

Warranty:

- **12 months from date of handover and commissioning**





Biomedical Engineering Unit
Regional Atoll Health Services Division
Ministry of Health, Male', Republic of Maldives

Technical Specification for Equipment

Equipment: Finger Pulse Oximeter

Specification:

1. Continuous non-invasive monitoring of functional oxygen saturation(SpO₂)
2. Should be light weight for easy transport and battery operated.
3. Measurement Range:
 - a. SpO₂ Saturation Range 1% to 100%
 - b. Pulse Rate Range 20 to 250 beats per minute (bpm)
 - c. High Accuracy for adults and neonates
 - d. Saturation (% spO₂ ± 1 sd)
 - e. Should display SpO₂ and HR on the screen
4. Safety/Alarms
 - a. Audible and visual alarms for high/low pulse rate and sensor off

All necessary accessories for the start and functioning of the equipment has to be supplied

Standards, Safety and Training

Should be a CE / FDA Approved product and should comply with ISO standards

Warranty

12 months from the date of handing over or installation and commissioning





Ministry of Health
Male', Republic of Maldives

Technical Specification for Equipment

Equipment: Vitals Monitor MoH/TS/EQ/029

Specification:

1. Fast and accurate readings with LCD display
2. Measure the vital parameters for adults as well as newborns.
3. Inbuilt rechargeable batter with long operation time
4. User friendly, mobile and shock resistant
5. Parameters: NiBP, Pulse, SpO₂, and Temperature
6. Measurement Range with accuracy +/-1%
 - a. Pulse oximeter: 0..100% SpO₂
 - b. Display range: 0..99% SpO₂
 - c. Pulse measurement range: 30..250 /min
7. Should include NiBP adult and pediatric cuff
8. SpO₂ cable with sensor probe
9. Temperature probe
10. Mobile cart with lockable castor wheels

All necessary accessories for the start and functioning of the equipment has to be supplied

Power Supply

Line voltage 220 – 240 V and fitted with a 13amp UK type G plug

Standards, Safety and Training

Should be a CE / FDA Approved product and should comply with ISO standards

Warranty

12 months from the date of handing over or installation and commissioning

User/Technical/Maintenance manuals to be supplied in English and certificate of calibration and inspection.

List of important spare parts and accessories with their part number and costing has to be provided.





Biomedical Engineering Unit
Regional Atoll Health Services Division
Ministry of Health, Male', Republic of Maldives

Technical Specification for Equipment

Equipment: IR Thermometer

Specification:

1. Tympanic thermometer with rapid measuring time.
2. Clinical Measuring Range at least of 32-45 °C
3. Accuracy \pm 0.5°C or better
4. Temperature should be displayed in both °C & °F
5. Measuring time, no greater than 10sec.
6. Battery operated (battery included).
7. Battery life at least of 1000 takes
8. Auto shut-off.
9. Water and disinfectant 'resistant.

Trainings and Warranty:

- The unit and the accessories must be supplied with one year of warranty.





Biomedical Engineering Unit
Regional Atoll Health Services Division
Ministry of Health, Male', Republic of Maldives

Technical Specification for Equipment

Equipment: Fetal Doppler

Specification:

1. The unit should be portable and easy to use
2. The unit should have LCD/LED display with backlight, can be used in any illumination condition
3. High sensitivity probe with 2 MHz in continuous wave
4. Accurate and reliable FHR detection with clear sound
5. Multi-displaying of FHR: number, battery status indicator, voice intensity indicator
6. Built in rechargeable battery

All necessary accessories for the start and functioning of the equipment has to be supplied

Standards/Certification. Safety

Should be CE/FDA approved product and should have ISO standards

Warranty

12 months from the date of handing over or installation and commissioning

User/Technical/Maintenance manuals to be supplied in English and certificate of calibration and inspection

List of the important spare parts and accessories with their part number and costing have to be provided

