

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

Technical Specification for Equipment

No	Item Name	Quantity
01	Ventilator Analyzer	01
02	Infusion Device Analyzer	01

No	Item	Purpose	Specification
04	Ventilator Analyzer	To verify performance of mechanical ventilators.	-Flow Range: ± 750 mL/min to ± 300 L/min -Flow Accuracy: $\pm 2\%$ of reading -Pressure Range: -10 to +100 cmH₂O -Pressure Accuracy: $\pm 1\%$ or ± 0.1 cmH₂O -Volume Accuracy: $\pm 1\%$ -O₂ Sensor Range: 0–100%, Accuracy: $\pm 1\%$ -Measurements: Tidal Volume, Inspiratory/Expiratory flow, Pressure, Respiratory Rate, I:E ratio -Display: 5–7" color touch display -Modes: Real-time waveform and numeric -Connectivity: USB, Wi-Fi, SD card export -Power Supply: Rechargeable Li-ion battery with AC adapter (BS1363) -Connectivity: USB, Wi-Fi, SD card export - Option for anesthesia analyzer attachment must be present, in case of future procurement -Power Supply: Rechargeable Li-ion battery with AC adapter (BS1363)
		Accessories	-Test Lung
No	Item	Purpose	Specification
05	Infusion Device Analyzer	To test flow accuracy and occlusion alarm of infusion pumps.	-Flow Rate Range: 0.1–3000 mL/h -Accuracy: $\pm 1\%$ or better -Channels: Minimum 4 channels -Bolus Measurement: Yes -Occlusion Alarm Detection: Yes -Data Display: Real-time flow rate and volume

			-Test Duration: Programmable test period -Memory: Stores up to 1000 results -Connectivity: USB and Wi-Fi -Power Supply: Rechargeable Li-ion battery with AC adapter (BS1363)
		Accessories	-Cleaning Solution

User and Technical Training:

- Vendors must provide comprehensive user training for all operators and technicians **(Mandatory)**.
- Training should include both hands-on and theoretical sessions.
- Training certificates must be provided to all participants.
- Additional training shall be provided following major software updates or significant equipment upgrades, where applicable.

Bid Documentation

Bidders must submit:

- All certificates & test reports.
- Product data sheets & brochures.
- Recommended spare parts & consumables list.
- Official distributorship certification/ letters. **Mandatory**
- Quotation:
 - Must contain detailed pricing for equipment and all provided accessories (per item price)
 - Must be compatible with Fluke centralized test management software.
 - Price of anesthesia gas analyzer module quoted as a separate optional accessory for assessment and possible future procurement.
- Recommended spare parts and consumables, with **individual unit prices**.
- Calibration costs, including:
 - Recommended calibration frequency.
 - Cost per calibration.
 - Estimated total calibration cost over **5 years**
- Completed compliance matrix

End of Specification