S. No.	Equipment Name	Technical Specifications	Unit	Justification	Propriety article certificate	Remarks
1	**MULTI FREQUENCY-BODY COMPOSITION ANALYZER MACHINE**	TECHNICAL SPECIFICATION OF BODY COMPOSITION ANALYZER MACHINE • Measurement Method : Direct Segmental Multi-frequency Bioelectrical Impedance Analysis Method (DSM-BIA) and Simultaneous Multi-frequency Impedance Measurement (SMFIM) using Tetra-polar electrode method using 8 touch electrodes • Multi-frequency Frequency Range : 20, 100 kHz or better.	1	Measures core body composition of muscle mass, bone mass, segmental analysis, Fat free mass, body fat distribution in patients and healthy population.	Yes	1. Atleast 5 research paper should be published on the specific instrument. 2. The reliability and validity of the equipment should be provided. 3. There should be scope of extension of validity for the equipment.

		• Measurement Area : Simultaneous Multi-frequency Impedance Measurement (SMF-BIA) • (Right Arm, Left Arm, Trunk, Right Leg, and Left Leg) • Result Sheet Data for adults : Results and Interpretations • Body Composition Analysis (Total Body Water, Protein, Minerals, Body Fat Mass, Weight), Muscle-Fat Analysis (Weight, Skeletal Muscle Mass, Body Fat Mass), Obesity Analysis (Body Mass Index, Percent Body Fat), Segmental Lean Analysis (Right Arm, Left Arm, Trunk, Right				

		Leg, Left Leg), Segmental Fat Analysis (Right Arm, Left Arm, Trunk, Right Leg, Left Leg) Body Composition History (Weight, Skeletal Muscle Mass, Percent Body Fat) Weight Control (Target Weight, Weight Control, Fat Control, Muscle Control), Nutrition Evaluation (Protein, Minerals, Fat Mass), Obesity Evaluation (BMI, Percent Body Fat), Body Balance Evaluation (Upper, Lower, Upper-Lower), Waist-Hip Ratio (Graph), Visceral Fat Level (Graph), Research Parameters (Skeletal Muscle Mass,				

		Fat Free Mass, Basal Metabolic Rate, Waist-Hip Ratio, Waist Circumference, Visceral Fat Level, Obesity Degree, Recommended calorie intake per day, Calorie Expenditure of Exercise, Blood Pressure (Systolic, Diastolic, Pulse, Mean Artery Pressure, Pulse Pressure, Rate Pressure Product)) Results Interpretation QR Code Impedance (Each segment and each frequency) • Outputs- Total Body Water, Protein, Minerals, Weight, Muscle Mass, Body Fat Mass, Percent Body Fat, BMI, Basal				

		Metabolic Rate, Waist Circumference, Visceral Fat Level, Segmental Lean Analysis(Right Arm, Left Arm, Trunk, Right Leg, Left Leg), Segmental Fat Analysis(Right Arm, Left Arm, Trunk, Right Leg, Left Leg), Fat Control, Muscle Control, Impedance (Each segment and each frequency) • Optional Equipment attachments : Stadiometer from same OEM, Blood pressure monitor from same OEM, Thermal printer from OEM, Hand Grip Dynamometer. • Printing Logo : Printing the hospital name, address,				

		contact information, and logo available. • Data Storage Up to 100,000 data units can be stored when using an ID • Measurement Mode : Self Mode, Professional Mode • Various Result Sheets : Test Results Sheet, Test Results Sheet for Children, Test Thermal Results Sheet • Checking Measurement Results: LCD Monitor, Windows compatible Data management software for further analysis. • Measurement Current : Approx. 200μA (±40μA) • Power Input AC 100-240V, 50-60Hz, 1.2A				

		• Power Output DC 12V, 3.4A • Display: 600 × 1024 7inch Color TFT LCD having both Touchscreen and Keypad option. • Transmission Device : RS-232C 4EA, USB HOST 2EA, USB SLAVE 1EA, LAN (10T) 1EA, Bluetooth 1EA, Wi-Fi 1EA • Printing Device : USB port (printer designated by the manufacturer), thermal printer (optional), Machine should be supplied along with compatible printer. • Dimensions : Dimension 356 (W) × 796 (L) × 995 (H): mm • Product Weight : Approx. 14 kg (main unit)				

		• Measurement Time : Approx. 15 sec. • Measurement Height : 95 ~ 220 cm • Measurement Weight : 10 ~ 250 kg • Applicable Age : 3~99 years • Operating Environment : 10 ~ 40°C, 30 ~ 75% RH, 70 ~ 106 kPa • Storage Environment : 10 ~ 70°C, 10 ~ 80% RH, 50 ~ 106 kPa (No Condensation) • USB Storage : Backup data should be saved in the software by using a USB Thumb Drive having the option to restore results on the software from a backup file. • QR Code : Scan the QR code on the LCD or result sheet, transmit it to the				

		management website, and check the results. • CERTIFICATES: The system should have US-FDA registered, European CE and EN-ISO certification.				

Annexure-A

SPECIFICATIONS FOR MULTI FREQUENCY BODY COMPOSITION ANALYZER MACHINE