SAM'S INTERNATIONAL®

AN ISO CERTIFIED COMPANY

ONE STOP SHOP FOR ALL MEDICAL/PHYSIOTHERAPY/GYM & FITNESS EQUIPMENT REQUIREMENT

BODY COMPOSITION ANALYZER

PROUDLY MANUFACTURED IN INDIA BY
SAM'S INTERNATIONAL

MAKE IN INDIA

CE 0197

TÜVRheinland CERTIFIED

ROHS

Certificate and authentication :
ISO13485, ISO9001:2008, ISO14001:2004, GBT28001-2001, CE 2004/108/EC 93/42/EEC, RoHS 2002/95/EC

सत्यमेव जयते

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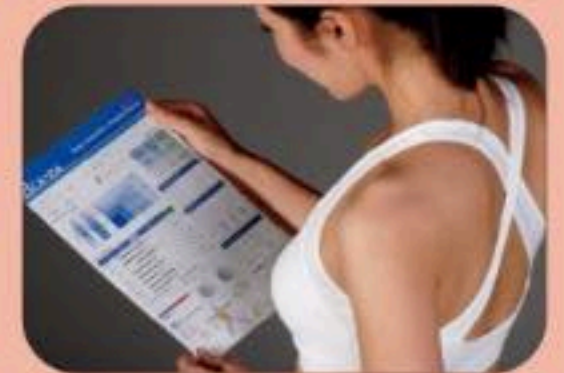MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम

For everyone who pursuit clinical health & wellness. with medical professional accuracy & function BCA-1C is popular choice for hospital, clinics, gyms, paramilitary & police forces. It uses 2 accurate testing frequencies, 8 electrodes, 6 circuit whole body testing, conveniently and looks elegant & easy transportable.

Features

Build-in thermal printer
With 2 testing frequencies : 50, 250KHz
8 electrodes, whole body testing
Large (8') color TFT touch LCD
Automatic weight scale
Automatic personal information memory
Support colorful report printing through outside printer

- For Precise obesity analysis;
- For quick health assessment;
- Predict the risk of many chronic disease;
- Making plans for physical exercise;
- Making scheme for weight control;
- Evaluate the progress and achievement of weight control;
- Basic data for proper diet plan.

BIA Technology

Different part of human body has significant difference on impedance. BCA use 6 testing circuits: Left Arm-Right Leg, Right Arm-Left Leg, Left Arm-Left Leg, Right Arm-Right Leg, Left Arm-Right Arm, Left Leg-Right Leg. Only this complex model can give real comprehensive impedance level of whole body.

Multi-Frequency Bioelectrical Impedance Analysis (MFBIA) utilizing frequencies between 1 kHz and 1000 kHz. An electric current less than 100 kHz cannot penetrate cell and flows through extra-cellular water so is used to measure extra-cellular water (ECW). An electric current over 100 kHz penetrates cell membranes and flows through cell so is used to measure total body water (TBW). Using multiple frequencies, ECW and TBW are measured separately and this can be helpful to diagnosis of body water balance, especially edema.

ECW (Intracellular Water)   ECW (Extracellular Water)   Cell

BCA use advanced Tetrapolar 8-Point Tactile Electrode System. Tetra-polar electrode method separates current electrode and voltage electrode and uses each current electrode and voltage electrode, which brings high accuracy (Low contact resistance) and conformity.

Health Management on body composition analyzer

Member Setup → Testing → Fitness Plan → Plan Operating → Tracing → Plan Adjustment → Success
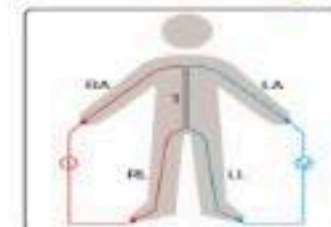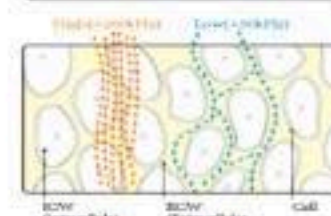
The Meaning of Body Composition Analysis

Human body consists of water, protein, fat, and minerals and these elements exist in a certain ratio. Because this ratio is balanced in healthy people, if we can find out the unbalanced state of these elements, it is possible to use it as an indicator of many disease like obesity, edema, metabolic disorder and malnutrition.
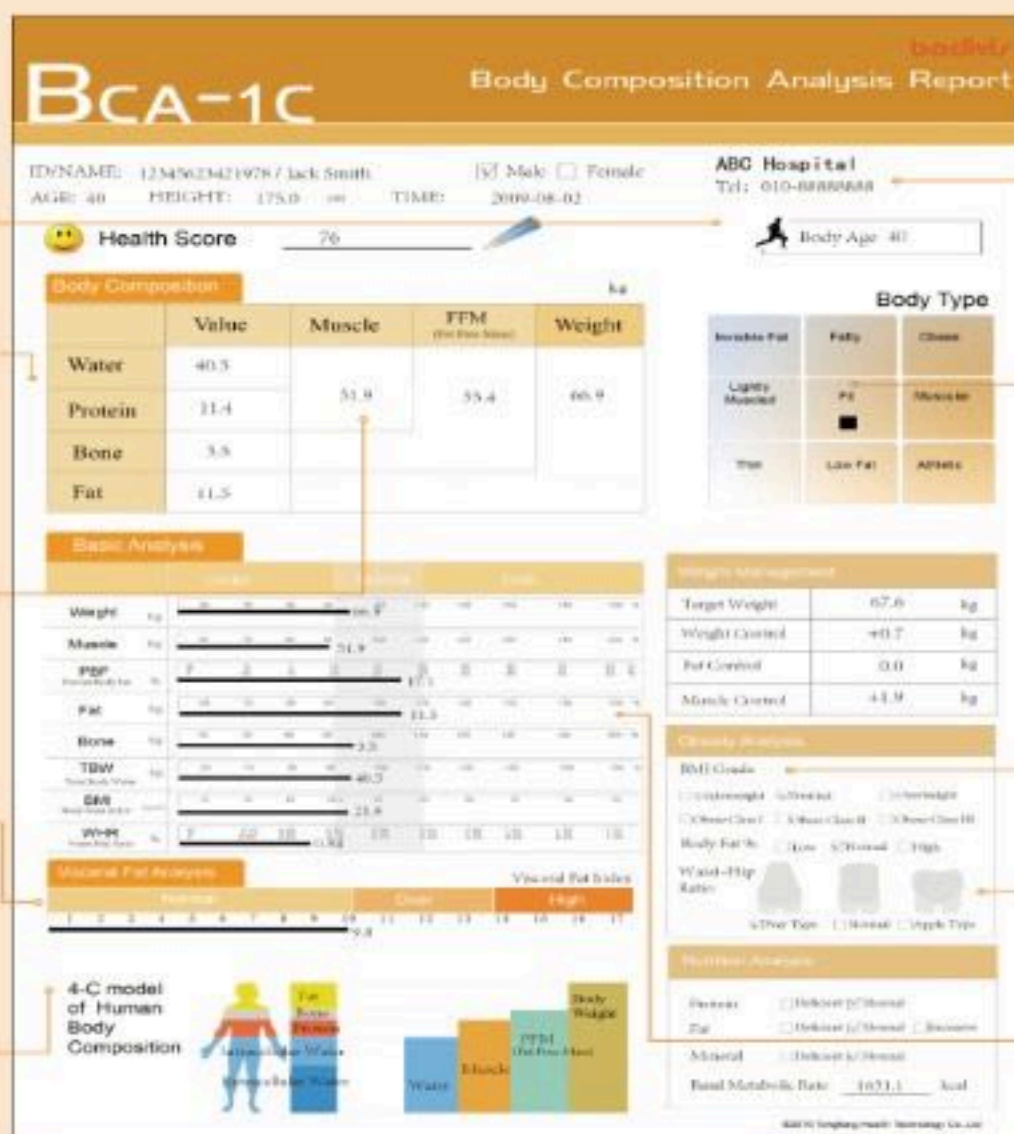
Colorful Printing Report

Unique body age function let you know your physical age

Detailed number for every compossition

Show the relationship between various compositions

Visceral fat index show the risk level of you "belly" fat

Colorful mark of different composition

BCA-1C — Body Composition Analysis Report

ID/NAME: 12345623421978 / Jack Smith   ☑ Male ☐ Female   ABC Hospital
AGE: 40   HEIGHT: 175.0 cm   TIME: 2019-08-02   Tel: 010-88888888

Health Score ___ 76 ___   Body Age 40

Body Composition (kg)

	Value	Muscle	FFM (Fat Free Mass)	Weight
Water	40.5	51.9	55.4	66.9
Protein	11.4			
Bone	3.5			
Fat	11.5			

Body Type

Print user's name and contact, facilitating commercial promotion

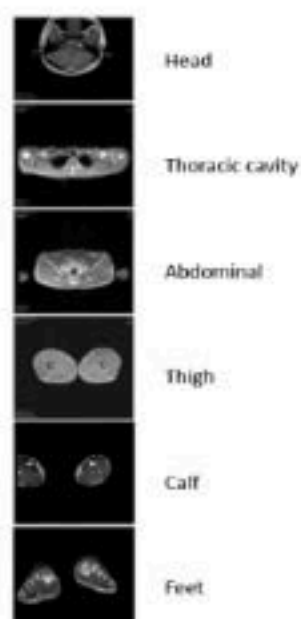Help tester identify their body type quickly

Classify obesity level with BMI and PBF%, more practical

Show WHR type vividly

Each item is featured with graphic bar

Guaranteed by MRI ——the golden standard

Most applicable BIA system need to be calibrated by other methods, among those, MRI scanning is more accurate than DXA, CT and ultrosonic. MRI (Magnetic Resonance Imaging) can scan whole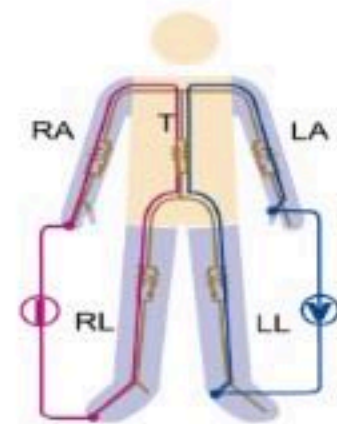 body and regarded as "Golden Standard". Our research team use whole body scan to get continuous image of every cross section (interval 1 cm) of human body. By using specific software, we identify each composition and calculate its area. Then we calculate the volume of each composition and work out the final result with our patented equation.
Our analyzer is with high correlation with DXA result as well.

Real multi-frequency, multi-circuit

Modern science proved that low frequency current pass the human body in different way with high freqeuncy current. Low frequencies flow through the external water and are unable to penetrate the cell wall. A higher frequency will measure the water content inside of the cell because it penetrates the cell wall. By using a diverse set of frequencies, we can accurately measure fluid inside and outside the cell separately. Our BCA series based on 2~6 different frequencies that flow through each segments, providing a more accurate body impedance information. Our unique DDS technology produce the most accurate

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2 Testing frequencies, build-in thermal printer & outside printer support, with visceral fat analysis and smaller size.

Technical inspiration from Tsinghua University

Tsinghua University, the most famous university in the World, is well known for its fundamental scientific and engineering education. TFHT, as the subsidery of Tongfang Group (operated by Tsinghua University), take advantage of rich technology resources of Tsighua University and enjoy the top expertise from the University. Most of our excellent products come from the co-operation with Tsinghua. For example, the body composition anayzer is a result after 10 years basic research and passed examinations in many famous hospitals. The strict procedure ensures our analyzer to be on the top level.

Now the manufacturing license/Technology Transfer have been given to Sam's International India and they are manufacturing the products in India.

frequency for testing. DDS (Direct Digital Synthesizer)is the most advanced system to output high definition sine wave alternate current.

Segmental Analysis

Different part of human body play different role in total impedance. The impedance of whole body is not sensitive to body composition. With our advanced segmental impedance measuring model, we divide the body as 5 parts: Left Arm, Right Arm, Trunk, Left Leg and Right Leg. BCA measure the impedance of individual part and calculated together in our equation. Combined with the

6 circuits testing method, BCA can tell the most accurate composition of every part of your body.

Software Support

Our BodyVista™ system combined the power of BCA embeded OS with PC's processing capability. With this powerful software, you can test and print report from PC, manage member information, setup user's name, storage all the data, backup database, do complex inquiry, and get various statistic charts. The software make the body composition analyzer a powerful consulting system.

Operating Interface

Thermal paper report

Specification

MODEL BCA-1C

Measuring method	Direct Segmental Multi-frequency Bioelectrical Impedance Analysis Method(DSM-BIA)
Testing Frequency	50, 250 KHz
Electrode Method	Tetrapolar 8-Point Tactile Electrode System
Output	**Basic Items** Body Weight (auto detected) Total Body Water(TBW) Protein Mass, Fat Mass,Bone Mass, Muscle Mass, Percent Body Fat (PBF),Percent Body Protein/Bone/Water, Visceral Fat Index,Body Mass Index (BMI), Basal Metabolic Rate (BMR) Fitness score, Body Shape Graph, Body Age **Weight Management** Target Weight, Weight Control, Fat Control, Muscle Control **Nutrition Analysis** Protein, Fat, Mineral Level
Resistance Scope	100~1000Ω
Current	500μA
Power Supply	AC 220V, 50Hz
Display	8'(800*600) color TFT touch LCD
External Interface	RS 232C(9 pin), USB port, RJ45(10/100Base-T)Ethernet
Printer	Build-in thermal printer or designated printer
Dimension	674(L)×410(W)×968(H)mm
Machine Weight	10kg
Measurement Duration	<10 seconds
Height Range	50~210cm (1 ft. 8 in.~6 ft.10 in.)
Weight Range	10~250kg (22 ~ 551lbs.)
Age Range	7~99
Operation Environment	10~40℃ (50~104℉) 30~80%RH, 500~1060hPa
Storage Environment	0~40℃ (32~104℉) 30~80%RH, 500~1060hPa

* The appearance and specification of the product may be changed without notification. The picture showed in this catalogue is for reference only.
* Individuals with pacemaker or other internal medical devices should not use this analyzer.

ALSO CONTACT US FOR :

ORTHOPAEDICS & TRAUMA CARE, NEUROLOGY, CRITICAL CARE, DENTAL, UROLOGY, PULMONARY, MEDICINE, DERMATOLOGY, CARDIOLOGY, DIABETIC, PHYSIOLOGY, ANATOMY, DIETRICS, PEDIATRICS, HOSPITAL FURNITURE, LAB / RESEARCH, RESCUE & DISASTER MANAGEMENT HOME CARE EQUIPMENT