BioScan® 920-II

Segmental Abdominal Body Composition Analyser

a new approach to lifestyle disease prevention

MALTRON

Your health our vision

Quantitative tool to scientifically measure euvolemic state *fast accurate and repeatable*

BioScan 920-II the most advanced analyser of its kind offering incomparable performance designed to be interactive and deliver precise benefits to patients

Maltron Instruments use scientific method of measuring Bioelectrical Impedance. A total of four or Eight electrodes are used (tetrapolar).

A low-level battery current is passed through the body and the absolute measurement of impedance, phase, resistance, reactance and capacitance are measured

BioScan 920-II stores 1000 patients' results and the high speed medically isolated USB interface enables downloading of the measured data directly to the PC software.

Using the measured raw data, Maltron BioScan performs complex analysis in less than 5 seconds.

Displaying parameters such as Extracellular and Intracellular fluids, Total Body Water, Fat and Fat Free Mass, Dry Weight and many others including mineral composition.

The patient information is provided within seconds without the need of complex clinical techniques.

As pioneers Maltron has led the way in establishing many new clinical applications in the field of BIA.

The first manufacturer to offer accurate DRY weight, GFR and Creatinine Clearance assessment.

BioScan 920-II offers a totally non-invasive method of assessing patients in many clinical setting, providing quick analysis of over 45 different parameters.

Assessment of Body Composition is important in order to monitor changes in Hydration, loss of Muscle Mass and identify malnutrition

Pre and Post assessment including detailed analysis of Hypertension / Hypotension can be performed.

BioScan Abdominal Composition mode enables measurements of Visceral, Subcutaneous and depth of Fat.

The use of BioScan 920-II can guide Medical therapy to achieve optimal hydration status, help improve discharge timing and decrease long - term complications.

Optimizing Dry weight can help reduce development of worsening renal function.

Maltron's Windows7 32/64 bit PC and Windows8 compatible Software offers advance assessment and easy to use database for patient Management, wellness and analysis

Key features
of BioScan 920-II

- Multi-frequency
- Impedance • Resistance
- Reactance • Phase Angle
- Capacitance at all frequencies
- Calibrated for Preterm - 99 yrs
- Obese & Anorexia population
- Different Ethnicity
- “S” version calibrated for Sports & Athletic population
- Real-time monitoring of changes as they happen
- Single-channel
- Multi-channel
- Direct Segmental
  Upper / Lower arm
  Upper / Lower Leg
  Torso
- 4 / 8-Electrode mode
- Simultaneous segmental analysis
- Whole body
- Both side full body
- Thorax region
- Abdominal Composition
  Subcutaneous Visceral depth of Fat
- Segmental body composition without empirical estimations
- Segmental FAT / ECW / ICW / Muscle Mass & Volume assessment
- Segmental Oedema marker
- Maltron Biomarkers for different clinical conditions
- Pre & Post Assessment
- Over & Dehydration Assessment
- Nutritional Status Marker
- Malnutritional Indicator
- Hypertension / Hypotension
- Statistical Analysis

MONITORING FLUID LOAD AND FLUID STAUS IS IMPORTANT

BioScan 920-II FUTURE OF PATIENT MONITORING

COMPLETE CLINICAL ASSESSMENT within seconds

ABSOLUTE MEASUREMENTS

Absolute measurements have been highly correlated to changes in the human body and have been shown to be good indicators in predicting mortality.

DRY WEIGHT

Under and over estimation of dry weight is important and has been shown to impair the survival and quality of life of haemodialysis patients.

BODY COMPOSITION

Nutritional assessment of children and adults in clinical and field settings is important in order to identify potential causes of inadequate nutrition status, including the risk of malnutrition. Performing nutritional assessments in diseased patients enable medics to identify related disorders and to monitor the effects of any treatment.

GFR

An important indicator of Kidney function. A rate at which waste is removed from our kidneys. High correlation was found using BioScan 920-II in the estimation of GFR, avoiding the necessity of 24 hour urine collection or calculating using CC or MDRD formulas.

MINERALS AND PROTEIN

Bone, soft tissue and protein content of the body. Inorganic compounds containing an abundance of metals. In clinical patients the assessment of the loss of minerals is important.

GLYCOGEN MASS

The primary storage form of carbohydrates found in the cytoplasma of most cells.

FLUID STATUS

Intracellular & Extracellular body fluids in both healthy and diseased patients is of significant importance.
Extracellular Water (ECW) increases in different diseases and oedema is the most common sign of ECW expansion.
Monitoring these changes in patients can provide us with detailed information and understanding of changes as a result of disease.

CREATININE

Creatinine estimations can be performed using the BioScan 920-II, avoiding 24 hour urine collections.

BCM

Body Cell Mass is an accurate method of establishing a healthy subjects nutritional status or a patients degree of malnutrition. BCM is used for normalisation of energy expenditure and other metabolic measures.

BIOSCAN 920-II RESULTS DISPLAYED

- Impedance
- Phase Angle
- Resistance
- Reactance
- Capacitance

- Dry Weight

- Fat %
- Fat Mass
- Fat Free Mass
- Fat Free Mass %
- Body Volume
- Body Density
- Body Mass Index
- Resting Metabolic Rate
- Target Fat (min / max) %
- Target Weight (min / max)
- Target Water (min / max) %

- Glomerular Filtration Rate

- Total Body Potassium
- Total Body Calcium
- Protein Mass
- Mineral Mass

- Glycogen Mass

- Extracellular Fluid
- Intracellular Water Volume
- Extracellular Water Volume
- Extracellular Water Lt
- Total Body Water Volume
- Intracellular Water Lt
- Intracellular Water %
- Extracellular Water %
- Total Body Water Lt
- Total Body Water %
- Extracellular Mass
- Extracellular Solids
- Extracellular / Intracellular Water
- Extracellular Water / Total Body Water
- Intracellular Water / Total Body Water
- Interstitial-Fluid Extravascular
- Plasma-Fluid (Intravascular)

- Creatinine

- Body Cell Mass
- Muscle Mass

BioScan 920-II Technical Specifications

Technique:	Bioelectrical Impedance Analyser
Frequency:	Multi-frequency (5kHz, 50kHz, 100kHz, 200kHz)
Impedance Range:	2 - 1200 Ohms
Impedance Resolution:	10 - 100R range : 0.1R 100 - 1100R range : 1R
Impedance Accuracy:	Impedance to within 0.5% of F.S.D. +/- 3R across 5 - 1100 R range
Phase range:	1° - 30°
Phase Resolution:	0.05°
Phase Accuracy:	2% of F.S.D. +/- 0.1°
Resistance Range:	2 - 1200R
Resistance Resolution:	2 - 100R range : 0.1R 100 - 1100R range : 1R
Reactance Range:	0R - 580R
Reactance Resolution:	0.1 ohms
BioScan 920 Estmiation of	**DATA OUTPUT RESOLUTION** TBW - ECW - ICW in increments of 0.1 litres (0.1pints) FFM - FM in increments of 0.1Kg BCM 0.1Kg
Ambient Temperature Environment:	+10°C to 40°C
Relative Humidity:	30% to 75% non-condensing
Atmospheric Pressure:	700hPa to 1060hPa
Test Current:	0.8mA approx
Power:	Mains adapter or 4 X NiMH rechargeable cells
Battery Current:	max 350mA
Weight:	1.825 kgs
Dimensions:	272 x 302 x 130 mm (10.7 x 11.9 x 5.1ins)
Service:	No serviceable parts
Guarantee:	12 months Parts and Labour (excluding disposable items, Cables & Electrodes)