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Utilize body composition to assess risk Safe, Convenient, and Reliable

Designed to be straightforward and easy to operate, the MA601 is suitable for all your medical staff, whether assistants, nurses, or doctors. In less than a minute, subjects will receive clinically validated results for body water, fat, muscle, cellular quality, and more!

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Improve patient assessment

Easy-to-operate. Non-invasive and safe.

The MA601 features an intuitive touchscreen interface and voice guidance throughout the measurement process, requiring minimal training to operate safely and properly. Completing an advanced scan in less than a minute, the MA601 uses segmental multi-frequency measurement technology to provide clinically validated results you can trust.

Key Health Indicators

Body Fat Analysis

The MA601 provides body fat ranges commonly seen for Underfat, Athlete, Normal, Overfat, and Obese populations, making it easier to place results in context. In addition to whole-body fat level, additional detail is provided through segmental fat and abdominal Visceral Fat Level.

Track Body Composition History

By selecting the same user ID prior to measurement, changes in body composition can be tracked automatically (Weight, Fat-Free Mass, Skeletal Muscle Mass, and Percent Body Fat), making it easy to observe trends and changes.

Cellular Health Indicator

Phase Angle is a critical screening tool for assessing cellular health, offering an important indicator for identifying subjects that may be outwardly healthy with potential health complications.

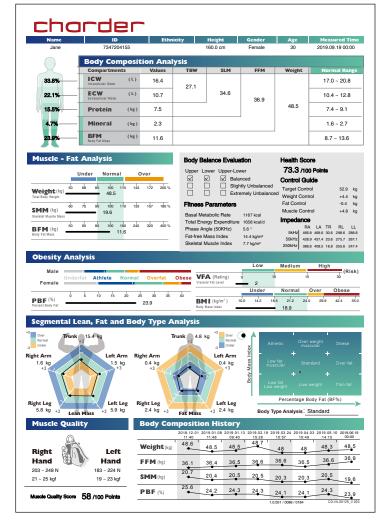
Muscle Analysis

Through measurement of cellular quality, the MA601 can provide estimates of potential handgrip strength, used as a clinical marker for poor mobility, and a better predictor of sarcopenia than muscle mass. By comparing grip strength with comparable group percentiles, muscle strength level can be placed in context.

Hydration Status

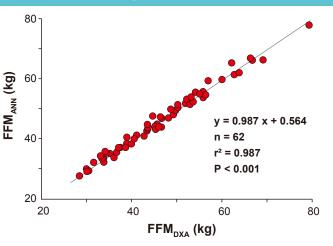
Abnormal body water is an important early warning sign for a variety of health complications. Precise tracking and management of extracellular and intracellular fluid is of utmost importance in a wide variety of diseases, including but not limited to cardiac and renal deficiency. Compare Extracellular and Intracellular water proportion to evaluate imbalance, and track body water changes as frequently as needed.





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Results you can trust



Relationship between FFM values predicted by Charder's Back Propagation-Artificial Neural Network model, and FFM values measured by DXA

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Intuitive and user-friendly voice-guided interface Voice-guided measurement procedure

7-inch color touchscreen combined with voice guidance throughout measurement procedure makes the MA601 easy-to-operate, improving reliability and reproducibility of results. Measurement results are organized clearly on a professional result sheet, and can be transferred to a PC for advanced analysis and data management.

Body fat analysis

Clinically validated results

High correlation with DXA

Charder's years of research in the field of Bioelectrical

Impedance Analysis include utilization of Artificial Neural

Networks, with algorithms formulated and validated using "gold standards" such as CT and DXA for results you can trust.

Body fat results in context

Body Fat Percentiles

The MA601 makes it easy for health professionals to compare a subject's body fat percentage with ranges typically found in different body types, for a more detailed comparison than a typical "under", "normal", "over" evaluation.

Evaluate body fat by location

Abdominal visceral fat

It isn't just about the amount of fat, but where it's located. In addition to fat mass in different body segments, the MA601 provides a visceral fat calculation derived from area, providing a useful reference for evaluation of obesity-related diseases.

Male									
	Unde	rfat	Athle	ete	Norm	al	Overt	at	Obese
Female									
	0	5	10	15	20	25	30	35	40
PBF (%) Percent Body Fat	_						23.9		

		Low		Medium		High		7 :-1-)
VFA (Rating) Visceral Fat Level	0	• 2	10		15		30	Risk)
		Under		Normal	0	ver	Obes	е
BMI (kg/m ²) Body Mass Index	10.0	14.2	18.5	21.2 18.9	24.0	29.9	42.4	55.0



	2018.12.01 11:40	2019.01.08 11:48	2019.01.13 09:40	2019.02.19 15:26	2019.03.24 10:57	2019.04.03 10:49	2019.05.10 14:15	2019.06.19 00:00
Weight(kg)	48.6	48.5	48.5	48.7	48	48	48.3	48.5
FFM (kg)	36.1	36.4	36.5	36.6	36.6	36.5	36.6	36.9
SMM(kg)	20.7	20.4	20.5	20.5	20.3	20.3	20.5	19.6
PBF (%)	25.6	24.2	24.3	24.3	24.1	24.1	24.3	23.9

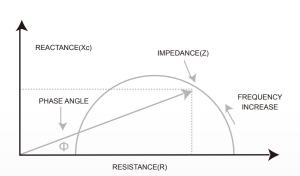
Body Composition History

Fluctuation in results is normal, and making evaluations based on one or two measurements can be risky. Unlike other body composition technologies such as Dual-Energy X-ray Absorptiometry, Bioelectrical Impedance Analysis does not utilize radiation. Thus, measurements can be conducted regularly without side effects, making it easier for medical practitioners to track and follow up with patient progress.

KEY INDICATOR

Malnutrition and other illnesses weaken body cells, which correlates with a decrease in phase angle. Conversely, a higher phase angle is commonly seen in subjects with stronger cell membrane integrity.

In clinical practice, phase angle has been used as a prognostic indicator of morbidity in various population groups.



How healthy are the cells in my body? Phase Angle

Quantity doesn't tell the whole story. Because two people with identical muscle and fat percentages or mass aren't necessarily equally healthy, health professionals can utilize phase angle, which decreases with illness and aging as a way to measure cellular quality. If subject's phase angle shows a clear decreasing trend, it may be a warning signal for deteriorating health and a more detailed health examination is recommended.



Muscle Analysis

Increase accuracy of fall screening Identify patients at higher risk for falls

Muscular strength is affected by both mass and quality. Because muscle quality can deteriorate more rapidly than mass with age, evaluation of muscular strength in addition to mass is particularly crucial in senior populations, to screen for fall risk. If subject's actual grip strength is lower than predicted through cellular analysis, we recommend a more detailed health check.

Right		Left
Hand		Hand
203 ~ 248 N	·	183 ~ 224 N
21 ~ 25 kgf		19 ~ 23 kgf

Muscle Quality Score 58/100 Points

Trunk

4.8 kg

Over

Under

Left Arm

0.4 kg

+3

Left Leg

+3 2.4 kg

-3

Normal





Right Arm

Right Leg

2.4 kg +3

0.4 kg

+3

Extracellular Water Proportion is a major risk indicator for
all-cause mortality, kidney deficiency, and cardiovascular
disease, providing potential early warning for health
complications requiring preventative action.

Fat Mass

ECW

0.33

< 0.36

17.0 L

Dehydration

0.34 0.35 0.36

Compartment	s	Values	TBW
ICW Intracellular Water	(L)	27.8	44.8
ECW Extracellular Water	(L)	17.0	-+.0

0.36-0.39

0.37 0.38 0.39

Normal

0.379

MA601 Body Composition Analyzer

Key Specifications

Bioelectrical Impedance Analysis (BIA)	l 5 Impedance Measurements: 3 frequencies (5kHz, 50kHz, 250kHz) for 5 segments (Right Arm, Left Arm, Trunk, Right Leg, Left Leg)
Electrodes	8-point Tactile Electrode Design
Display	800 x 480 pixels, 7-inch color touchscreen LCD
Capacity / Graduation	Max Capacity 300kg (0.1kg graduation)
Applicable Age	6-85 years old
Output / Transmission	USB 2.0 x2, Bluetooth (optional), Wi-Fi, RJ45 Ethernet
Data Storage	50,000 Measurements (data transfer available via USB, Bluetooth, or Wi-Fi)
Measurement Duration	Less than 45 seconds
Device Dimensions	506 (L) x 450 (W) x 1025 (H): mm 19.9 (L) x 17.7 (W) x 40.4 (H): inches
Device Weight	About 12kg (27lbs)

Result Sheet Output				
Body Composition Analysis	Intracellular Water, Extracellular Water, Total Body Water, Protein, Mineral, Body Fat Mass, Soft Lean Mass, Fat-Free Mass, Weight			
Muscle-Weight Analysis	Weight, Skeletal Muscle Mass, Body Fat Mass			
Obesity Analysis	Percent Body Fat, Body Mass Index, Visceral Fat Level			
Segmental Analysis	Lean Mass (Right Arm, Left Arm, Trunk, Right Leg, Left Leg) Fat Mass (Right Arm, Left Arm, Trunk, Right Leg, Left Leg)			
Body Type Analysis	Utilizes BMI and Percent Body Fat			
Muscle Quality	Estimated grip strength (N, kg), Muscle Quality Score			
Body Composition History	Weight, Fat-Free Mass, Skeletal Muscle Mass, Percent Body Fat (Last 8 results)			
Body Balance Evaluation	Analysis of balance between Upper, Lower, and Upper-Lower body segments.			
Fitness Parameters	Basal Metabolic Rate, Total Energy Expenditure, Phase Angle (50kHz), Fat-Free Mass Index, Skeletal Muscle Index			
Health Score	Combined evaluation of body composition results			
Control Guide	Target Weight, Weight Control, Fat control, Muscle Control			
Impedance	5kHz, 50kHz, 250 kHz			



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