

## ACCUNIQ BC360 Specifications

Optional Equipment	Ultrasonic Anthropometer, ACCUNIQ MANAGER, Fully Automatic Sphygmomanometer, Ankle Electrode, Result sheet for Infant, USB Memory, Bluetooth, Thermal Printer
Printing Logo	Printing logo or the name of hospital, address, contact information on the pre-printed result sheet.
Touch Screen	Touch Screen's sensor location adjustable
Data Storage	Maximum 100,000
Measurement Mode	Scale mode / Body Composition mode
Various Result Sheets	Body composition result sheet, Result sheet for children (Option)
Measurement Result	LCD, Web, Data management program, Consulting program (Option)
USB Storage	Data storage and backup
QR Code	Scan the QR code on LCD&result sheet with your smart phone. all results transmitted to the web site. You can see the result whenever you want.

Model	ACCUNIQ BC360
Measuring Method	Tetra-polar electrode method using 8 touch electrodes
Frequency Range	5, 50, 250kHz
Measuring Site	Whole body and Segmental measurement (arms, legs and trunk)
Results Sheet Data	<p><b>Body Composition Results</b> Weight, Standard weight, Lean Body Mass, Mass of Body Fat, Skeletal Muscle Mass, Soft Lean Mass, Protein Mass, Mineral Mass, Total Body Water, Body Mass Index, Percent of Body Fat, Ratio of E.C.W./T.B.W., Waist to Hip Ratio, Visceral Fat Level, Visceral Fat Area, Abdominal Circumference, Control guide, Body Composition Change, Segmental Soft Lean Mass, Segmental Mass of Body Fat, Body Type, Body Cell Mass, Basal Metabolic Rate, Total Energy Expenditure, Age Matched of Body, Total score, Study Item (Segmental Impedance Classified by Frequency), Blood Pressure (In case of being connected with blood pressure monitor), QR Code</p> <p><b>Results Sheet for Infants (Option)</b> Weight, Standard weight, Lean Body Mass, Mass of Body Fat, Subcutaneous Fat Mass, Skeletal Muscle Mass, Soft Lean Mass, Protein Mass, Mineral Mass, Total Body Water, Intra Cellular Water, Extra Cellular Water, Body Mass Index, Percent of Body Fat, Waist to Hip Ratio, Body Type, Fatness, Child Growth Curve (height, weight), Body Cell Mass, Basal Metabolic Rate, Total Energy Expenditure, Age Matched of Body, Nutritional Assessment, Body Composition Change, Segmental Soft Lean Mass, Segmental Mass of Body Fat, Study Item (Segmental Impedance Classified by Frequency), QR Code</p>
Power Consumption	60VA
Measuring Current	Approx. within 180 $\mu$ A
Power Consumption	Input (AC 100~240V, 50~60Hz), Output (DC 12V, 5A adapter)
Display	7 Inch Wide Color LCD Touch Screen
Input Device	Touch Screen, PC Remote Control
Transmission Device	USB Port, RS-232C, Bluetooth (Option)
Printing Device	A4 Printer, Thermal Printer (Option)
Dimension	<b>Main Unit</b> 414x636x980mm (WxDxH $\pm$ 10mm), <b>Main Unit+Height Meter</b> 414x740x2230mm (WxDxH $\pm$ 10mm)
Weight	Approx. 18kg (main unit)
Measuring Range	100~950 $\Omega$
Measuring Time	Within 30 seconds
Applicable Height	50~220cm
Measuring Weight	10~250kg
Applicable Age	1~99 years old
Operation Ambient	Ambient temperature range +5 to +40 $^{\circ}$ C, Relative humidity range 15 to 93% (non condensing)
Storage Ambient	Ambient temperature range -25 to +70 $^{\circ}$ C, Relative humidity range lower than 93% (non condensing)

※ For purpose of improvement, specifications and design are subject to change without notice.  
This is a medical device. Read precaution and operation method before use.

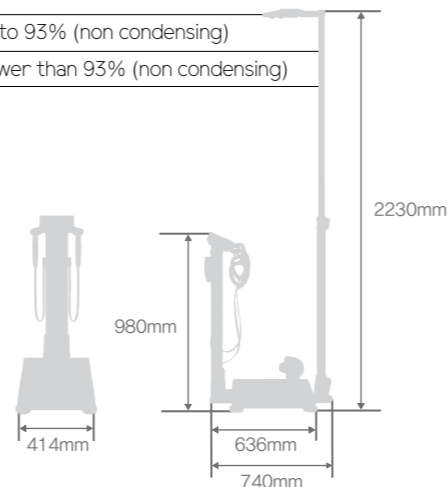


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Medical Diagnostic Device

# ACCUNIQ BC360

## Body Composition Analyzer

The BC360 is a multi-frequency, whole body and segmental Body Composition Analyzer that utilizes innovative BIA technology to ensure accurate and precise results. This cutting edge technology utilizes harmless, low-level frequencies to offer quick and easy total body composition assessments through the LCD touch screen, printouts and client tracking software.

The results sheet displays an easy-to-read graphical analysis to help maintain healthy body composition and whole body health trending.



www.accunIQ.com

# + ACCUNIQ

## Medical Devices to Help Promote Health & Longevity

ACCUNIQ medical devices are manufactured by SELVAS Healthcare, a global company that incorporates the most advanced technology available to provide accurate and reliable results. We are committed to partner with our customers to provide high quality products to help their patients and clients monitor and improve their health.

Crazy Fit, Incredible Life  
Our one and only desire - a perfect body!

### History

- 2016 Corporate name changed to SELVAS Healthcare, Inc., and listed in KOSDAQ
- 2015 World's first dual-type sphygmomanometer system approved by the US FDA
- 2014 Grand Prize, 1st People's Happiness Premium IT-incorporated Korean Medical Device Awards  
Popularity Award, Analysis and Diagnosis System Segment 2014 Selected by "Health & Beauty," a German fitness magazine
- 2010 Advanced Venture Company Award
- 2006 Director's Award by the Korea Food and Drug Administration (KFDA)
- 2005 Bronze Prize, 13th Republic of Korea Technical Awards  
Silver Prize, Venture Design Awards  
Bronze Medal of Industrial Effort, 35th Precision Technology Promotion Contest
- 2004 Body Fat Analyzer Selected as a World-Class Product (Ministry of Commerce Industry and Energy)
- 2003 Director's Award by the Korea Food and Drug Administration (KFDA)
- 2001 Prime Minister's Award, Trade Day  
KGMP(Korea Good Manufacturing Practice)-Certified
- 2000 Top Prize, Leaders' Venture Awards  
President Kim, Dae-Jung and First Lady visited our company
- 1999 Presidential Award in National Venture Awards  
Selected as a World Top-class Company

### Certifications and Awards



GMP Certified



CE Certified



TUV Rheinland Certified



Korea Testing Laboratory



Presidential Award in National Venture Award



Bronze Medal of Industrial Effort in Precision Technology Promotion Contest



GoodDesign Award

ACCUNIQ medical devices have been used globally to measure and analyze overall health results with our healthcare and fitness professionals in mind where accuracy is of the utmost importance. They are currently used globally in hospitals, medical facilities, doctor's offices, weight loss centers, Fitness Centers, nursing homes, public health facilities, and retail locations.



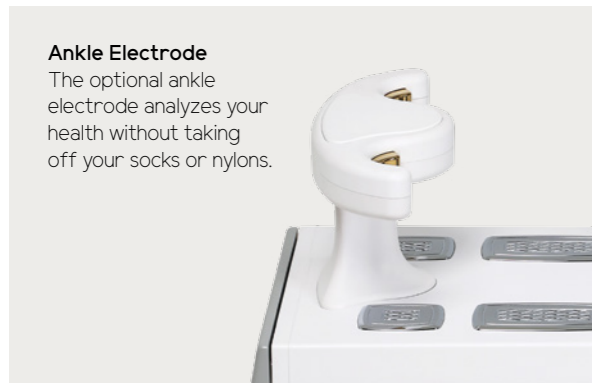
- 7 Inch LCD Touch Screen
- 3 Available Frequencies: 5,50,250 KHz
- Pediatric Mode Support
- Store up to 100,000 analysis data that can be recalled with an ID number
- Client Tracking Software Provided (ACCUNIQ MANAGER)
- Body Composition Analysis (includes 1 previous analysis to track client progress)
- USB and RS232 ports for computer or printer interface
- Optional Bluetooth Wireless Communication



Innovative technology meets stylish design. The BC360 utilizes the most advanced bio-electrical impedance (BIA) analysis technology to provide accurate and dependable results that have been validated by DEXA analysis.



**7" Wide Color LCD Touch Screen**



**Ankle Electrode**  
The optional ankle electrode analyzes your health without taking off your socks or nylons.



**Electrode Handle Hanger**  
This hanger is used to hang the curved electrode handles.



**Ultrasonic Anthropometer**  
Made more precise, the performance of the anthropometer enhances the confidence level of the analysis.

**Thermal Printer**  
Use the thermal printer to print the analysis quickly and easily.

## + Diverse Range of Options

ACCUNIQ body composition analyzers offer multiple options to meet multiple end-user requirements.



**ACCUNIQ MANAGER**

This easy-to-use software is designed to help a variety of customers keep track of their client and patient results and manage all of that data in a convenient format. It can be used for single or multiple locations with easy accessibility to multiple devices including computers, tablets and phones.



**Ankle Electrode**

This option helps you proceed with the analysis without taking off your socks or nylons and protects you from germs or fungi. It can also provide a more accurate analysis for users with thick dead skin cells on their feet.



**Fully Automatic Sphygmomanometer**

Connect our fully automatic sphygmomanometer for hospitals to control your blood pressure in connection with your body fat, which can help manage your body weight more efficiently.



**Bluetooth**

Connect the thermal printer to your PC or mobile device wirelessly via Bluetooth. Data is transferred and saved as soon as the analysis is complete without QR code or result sheet.



**Ultrasonic Anthropometer**

This option accurately and quickly measures your height automatically with the distance analysis method based on the AI and ultrasonic sensor.



**Result Sheet for Infants**

Displays how your baby is growing with the infant growth curve.



**USB Memory**

Use the USB memory to save the analysis data and view it on your PC.



**Thermal Printer**

Use the thermal printer to quickly and easily print the analysis.

# Various Results and Descriptions



ACCUNIQ

BC360

ID / NAME : SELVAS HEALTHCARE123 / Michael  
 Height : 170.6 cm Age : 35 years Gender : Male Test Date/Time : 21 - 09 - 2016 09:34

**1 Body Composition Analysis**

	values	Body Water	Soft Lean Mass	Fat-Free Mass	Weight
Body Water (g)	32.8 (37.4 ~ 39.7)	32.8	41.9 (44.1 ~ 53.9)	45.0 (51.2 ~ 54.4)	60.1 (54.4 ~ 73.6)
Proteins (kg)	9.1 (10.2 ~ 11.5)				
Minerals (kg)	3.1 (3.7 ~ 3.8)				
Body Fat (kg)	15.1 (9.0 ~ 13.4)				

**8 Comprehensive Evaluation**

Body Type over fat class 2  
 Biological Age 38 years  
 Basal Metabolic Rate(BMR) 1340 kcal  
 Total Daily Energy Expenditure 2063 kcal  
 Body Cell Mass 30.7 kg

**2 Muscle/Fat Analysis** [kg]

	Under	Normal	Over
Weight	65	75	85
SMM (Skeletal Muscle Mass)	70	80	90
Fat Mass	40	60	80

**3 Obesity Analysis**

	Under	Normal	Over
BMI (kg/m <sup>2</sup> )	14.50	16.50	20.6
PBF (Percentage of Body Fat)	10.0	12.5	25.2
Obesity Degree	-6.1 ( -10.0 ~ +10.0 ) %		Abdominal Circumference 82.0 (Less than 102cm) cm

**4 Abdominal Obesity Analysis**

	Under	Normal	Over
WHR (Waist to Hip Ratio)	0.75	0.96	0.89
VFL (Visceral Fat Level)	1	5	11
VFA (Visceral Fat Area)	50	100	107

**5 Control Guide** [kg]

	Measured data	Control	Goal to Control
Fat Mass	15.1	-3.9	Target to Control -3.9
Muscle Mass	41.9	+7.1	Control/week 0.5
Weight	60.1	+3.1	Duration to Control 8 week

**6 Extracellular Water Ratio**

	Optimal	Boundary	Over
ECW ratio	0.335	0.370	0.387

**7 Body Composition Change** [kg]

Test date	Weight	SMM	Fat Mass
2016.09.21 (09:34)	60.1	25.2	15.1
2016.01.19 (12:10)	63.9	28.0	28.0
2016.01.12 (15:49)	62.4	28.0	28.0
2016.01.05 (12:20)	61.8	27.9	27.9
2015.12.28 (18:17)	62.3	27.9	27.9
2016.12.20 (14:45)	60.9	27.6	27.6
2015.12.25 (15:25)	60.5	27.8	27.8

**9 Body Balance Assessment**

Upper Body L/R  balanced  imbalanced I  imbalanced II  
 Lower Body L/R  balanced  imbalanced I  imbalanced II

**10 Segmental Lean Mass**

Right Arm	2.79 kg
Left Arm	2.95 kg
Trunk	22.00 kg
Right Leg	7.03 kg
Left Leg	7.13 kg

**Segmental Fat Mass**

Right Arm	0.82 kg
Left Arm	0.81 kg
Trunk	7.86 kg
Right Leg	2.79 kg
Left Leg	2.87 kg

**11 Impedance** (584)

Freq	5K	50K	250K
RA.Imp	336	333	308
LA.Imp	335	321	293
Trunk	30	24	24
RL.Imp	292	246	215
LL.Imp	278	220	189

**12 Blood Pressure Analysis**

Systolic Lt 125 mmHg / Rt 111 mmHg  
 Diastolic Lt 65 mmHg / Rt 69 mmHg  
 Pulse 76 bpm  
 Blood pressure difference between right arm and left arm  
 Systolic 14 mmHg, Diastolic 04 mmHg

For history management, please upload this results at the website using QR code scanning.

JUNE 30, 2016 Rev A.0 SELVAS Healthcare, Inc.

**1 Body Composition Analysis**

This is a measurement of analysis results of body components(e.g., body water, proteins, minerals and body fat) relative to normal ranges.

**2 Muscle/Fat Analysis**

This graph of the Skeletal Muscle Mass(SMM) and fat mass illustrates the proportion of skeletal muscle and body fat that comprise the total body weight.

**3 Obesity Analysis**

This graph of percentage of body fat(PBF) and body mass index(BMI), of which the latter is critical in assessing the prevalence of obesity, illustrates clinical data needed for obesity analysis.

**4 Abdominal Obesity Analysis**

Fat in the body is divided into subcutaneous fat and visceral fat. Visceral fat is closely connected with adult diseases, and measured based on several factors.

**5 Control Guide**

This item presents your recommended target weight, weight, and muscle and fat mass control.

**6 Extracellular Water Ratio**

The extracellular water ratio refers to the percentage of extracellular water in the total body water. This is an index used to assess the water balance in the body.

**7 Body Composition Change**

This graph shows your weight, skeletal muscle mass, and body fat mass tracked over a period of time. It is important that you constantly pay attention to your health care instead of attempting to control your weight over a short period of time.

**8 Comprehensive Evaluation**

This item shows your body type, biological age, basal metabolic rate(BMR), total daily energy expenditure (TEE), and body cell mass.

**9 Body Balance Assessment**

Assesses the lateral balance of the upper and lower bodies, and the vertical balance between the upper and lower bodies.

**10 Segmental Lean Mass/Segmental Fat Mass**

This item assesses the muscle mass of 5 body parts (left arm, right arm, left leg, right leg, and trunk) in two graphs.

**11 Impedance**

Impedance using frequency applied to a body part. Impedance is a resistance value when electric current is passed through the body. Each subject has a unique impedance.

**12 Blood Pressure Analysis**

This item indicates your blood pressure data when the product is connected to the sphygmomanometer provided by ACCUNIQ. This is especially useful because it assesses your obesity level and blood pressure at the same time.

▼ Result Sheet for Infants (Option)

ACCUNIQ

For Child and Youth

ID / NAME : SELVAS HEALTHCARE123 / June  
 Height : 155.0 cm Age : 16 years Gender : Female Test Date/Time : 21 - 09 - 2016 11:43

**Body Composition Analysis**

	values	Body Water	Soft Lean Mass	Fat-Free Mass	Weight
Body Water (g)	28.8 (37.4 ~ 39.7)	28.8	12.7 (44.1 ~ 53.9)	45.1 (51.2 ~ 54.4)	56.5 (54.4 ~ 73.6)
Proteins (kg)	8.0 (10.2 ~ 11.5)				
Minerals (kg)	3.3 (3.7 ~ 3.8)				
Body Fat (kg)	15.4 (9.0 ~ 13.4)				

**Comprehensive Evaluation**

Body Type A: 0 of fat and a lack of muscle  
 Basal Metabolic Rate(BMR) 674 kcal  
 Total Daily Energy Expenditure 1037 kcal  
 Body Cell Mass 32.3 kg  
 Obesity Degree +20.6 ( -10.0 ~ +10.0 ) %

**Body Balance Assessment**

Upper Body L/R  balanced  imbalanced I  imbalanced II  
 Lower Body L/R  balanced  imbalanced I  imbalanced II

**Muscle/Fat Analysis** [kg]

	Under	Normal	Over
Weight	65	75	85
SMM (Skeletal Muscle Mass)	70	80	90
Fat Mass	40	60	80

**Obesity Analysis**

	Under	Normal	Over
BMI (kg/m <sup>2</sup> )	14.50	16.50	20.6
PBF (Percentage of Body Fat)	10.0	12.5	25.2

**Control Guide**

Target Weight	51.2 kg
Weight Control	-5.3 kg
Muscle Control	+0.0 kg
Fat Control	-5.3 kg

**Segmental Fat Mass**

Over	1.00kg
Normal	2.00kg
Under	3.00kg

**Segmental Lean Mass**

Over	2.00kg
Normal	6.70kg
Under	8.70kg

**Impedance** (522)

Freq	5K	50K	250K
RA.Imp	201	210	209
LA.Imp	201	210	209
Trunk	150	140	140
RL.Imp	190	180	181
LL.Imp	200	190	181

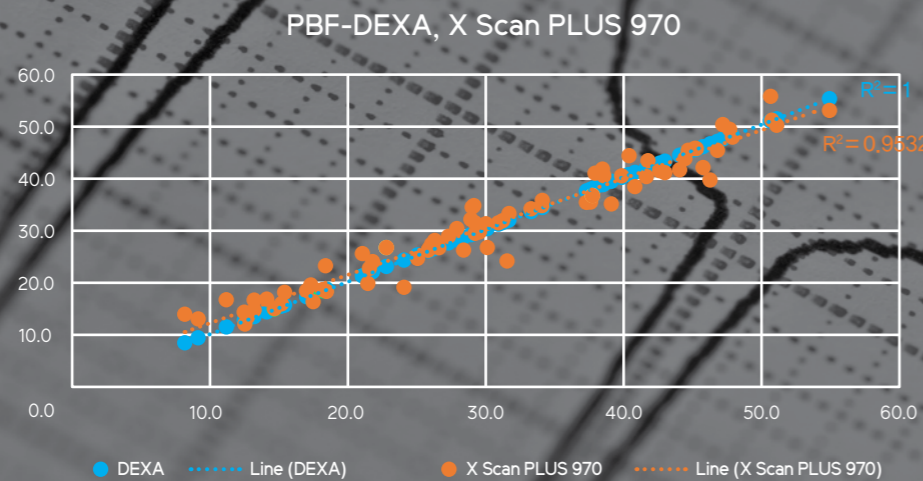
**Height/Weight Assessment**

[MEMO]

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# + High Consistency with DEXA

The methods of analyzing your body composition include computed tomography(CT), magnetic resonance imaging(MRI), and underwater weighing. Dual-energy X-ray absorptiometry(DEXA) is currently considered the gold standard since it accurately analyzes your fat, muscles, and bones and does not involve any radiation exposure. ACCUNIQ conducted clinical tests with IHT, a professional clinical organization based in Texas, USA, to verify our product's precision with DEXA. The result shows that our analysis is more accurate than our competitors.



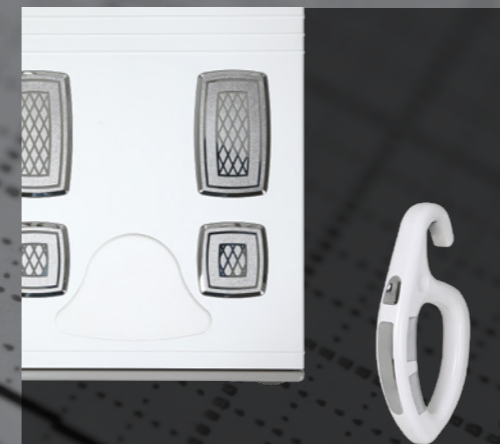
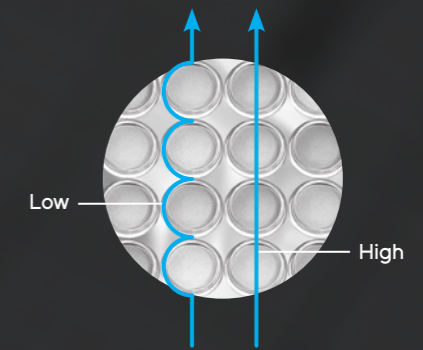
※Determination of coefficient(R2) of DEXA is 1, and the accuracy of ACCUNIQ is higher if R2 value is close to 1.  
 ※The accuracy of X Scan PLUS 970 is proved through clinical study with DEXA at IHT center in USA, and the accuracy of other ACCUNIQ brands are guaranteed by high correlation each other.

DEXA-ACCUNIQ	Paired T-test Analysis of Body Composition								
	Percent Body Fat(%)			Body Fat Mass(kg)			Lean Body Mass(kg)		
	Mean±SD	p-value	p-value explanation	Mean±SD	p-value	p-value explanation	Mean±SD	p-value	p-value explanation
	-0.4±0.7	0.17	DEXA PBF = ACCUNIQ PBF	-0.4±0.2	0.06	DEXA PBF = ACCUNIQ PBF	0±0.3	0.99	DEXA PBF = ACCUNIQ PBF

Coefficient of Determination between Our Products (X Scan PLUS 970 and ACCUNIQ BCA)	LBM R²		
	BC720	BC510	BC360
	0.9967	0.9949	0.9962

## Multi-Frequency Analysis

ACCUNIQ uses 6 frequencies between 1 kHz and 1000kHz to analyze your intracellular water, extracellular water, and total body water accurately. A frequency lower than 100kHz is used to analyze extracellular water since it flows along the cell membrane, whereas a frequency above 100kHz is used to analyze total body water as it flows through the cell membrane.



## Eight-Point Touch Electrodes

ACCUNIQ uses the 8-point touch electrodes method, which is highly accurate despite its complexity. Eight electrodes may be placed on the hands and feet or wrists and ankles to analyze body composition stably.

## Ankle Electrodes

ACCUNIQ provides the ankle electrodes as a convenient option to enable users to proceed with analysis without taking off their socks. This option differentiates ACCUNIQ from all of its competitors.

