Specifications

Ultrasound Bone Densitometer CM-200

Measurement Site	Heel (Calcaneus)
Measurement Method	Ultrasound Pulse Penetration
Measurement Parameter	Speed of Sound (SOS)
Measurement Time	Approximately 10 seconds
Measurement Precision	%CV : 0.5% or better (in measurement of Phantom)
Ultrasound Frequency	Center Frequency : 500 kHz
Ultrasound Output	Isptp : 1.8 mW/cm2
Measurement Block	Dry Type (Acoustic gel used)
Display Screen	Color LCD
External Connection	RS-232C available for External PC
Print out Details	Serial No., Date and time, Age, Sex, Foot Size, SOS value, T-score, Z-score, Graph, %YAM and %AGE
Operating Environmental Condition	Temperature : 10-35°C Humidity : 35-85%RH (No Condensation.) Atmospheric pressure : 700 to 1060 hPa
Storage Environmental Condition	Temperature : -10-50°C Humidity : 35-85%RH (No Condensation.) Atmospheric pressure : 700 to 1060 hPa
Power Supply Voltage	220 - 240 V AC ±10%, 50/60 Hz, 0.3A maximum. 100 - 110 V AC ±10%, 50/60 Hz, 0.6A maximum.
Classification	According to the type of protection against electric shock : Class 1 According to the degree of protection against electric shock: Type B
Dimensions	W510mm x D300mm x H210mm
Mass	Approximately 11kg

Power Supply voltage will be set in the factory and will not be changeable in the field.

Notes: Specifications subject to change without notice

CM-200 Utility Software (CMDS) Operating Environment

OS	Windows 2000, XP Home, XP Professional (Windows Vista compliant under development)
Memory installed	128MB or higher
Display	800×600 dots or more, 32768 colors or more (High Color 16 bits)
USB port	Required for connection of the HASP *a
RS-232C port	Required for use in On-line mode
Printer	Windows- compliant printer (Color printer is recommended.) PostScript is incompatible. *b

*a HASP key: "Utility Software for CM-200" cannot be used without the protect key.
*b PostScript printer: The printer in which the font for printing is not built.
CD-ROM drive is required to install "Utility Software for CM-200".

●Developed and Manufactured

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FURUNO

CM-200

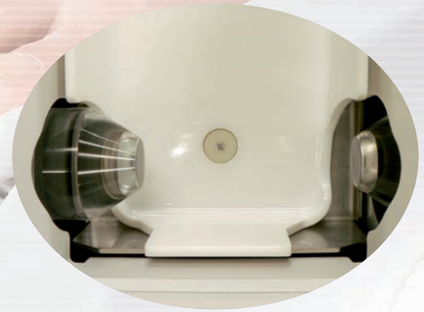
Ultrasound Bone Densitometer

Compact, Speedy and High Performance
Accurate result by unique Heel Temperature Compensation Feature

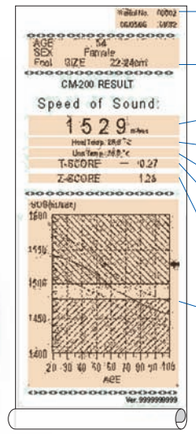
CM-200
Ultrasound Bone Densitometer

Heel temperature sensor

This new and unique function developed by FURUNO provides accurate results by compensating heel temperature.
(Patent Number : GB2424276)



Print out of well-coverage result

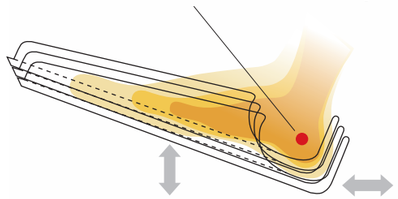


- Serial measurement No., date and time when the measurement was performed
- Setting values of the patient's age, sex, and foot size
- Speed of Sound (m/sec)
- Heel Temperature
- Unit Temperature
- Number of standard deviation relative to the standard SOS value of the young age group
- Number of standard deviation relative to the standard SOS value of the same age group
- Graph of measurement result (The SOS (*) of this patient is plotted.)

Height adjustable foot plate

The foot plate can be adjusted to five levels by operating the dial, and makes more accurate measure at the optimized position of heel in an easy operation.

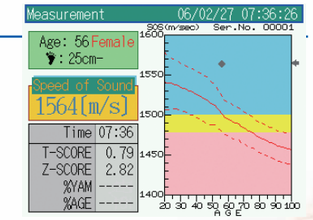
With adjustable foot plate, wide range of foot size can be measured accurately.



Easy-to-view color LCD

Operation panel guides you for easy measurement.

Color graph of result is displayed for easy result monitoring.



The result will be displayed on LCD

Safe and Speedy measurement

Approx. 10 seconds required for measurement.

Ultrasound method requires no special facilities. With radiation exposure-free, it allows to all generation including children to pregnant women to measure.

Description

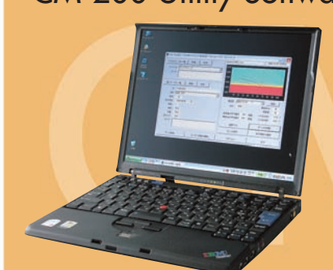
CM-200 is a bone densitometer using ultrasound (QUS) to measure speed of sound (SOS) in the heel. The typical application is Gynecology but as it does not use radioactive X-ray and the measurement is safe, it also perfectly meets Pediatric and Obstetrics applications.

The precise measurement has been accomplished with hell temperature compensation of speed measurement and assisted by a height adjustable footplate to accurately align a different size heel to the optimized position of the measuring device.

Measuring procedure is very simple, apply gel to a Stand-Off and position the foot, align cylinder then press START key. Within 10 seconds, result is printed out from onboard printer and displayed on a LCD. Because the size and weight are so small, it can be carried to any place for measurement.

While it is connected to PC with an optional data management software installed, remote operation and management of database for measured data is available.

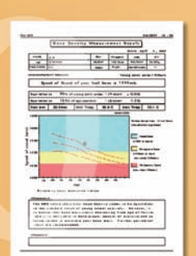
CM-200 Utility Software (CMDS)



This software enables to connect CM-200 with an external PC and display the patient's information (e.g. name, ID and birthday, etc.) and the measurement results (SOS: Speed of Sound), which are done by CM-200. The results show a plotted measuring value to Standard SOS value graph by age with comments based on the measurement results.

Also, T-SCORE (Number of standard deviation relative to the standard SOS value of the young age group) and Z-SCORE (Number of standard deviation relative to the standard SOS value of the same age group) can be displayed.

The patient's information and measurement results are saved in the database.



Major Functions

1. Registration of subject personal data classified by file
2. Record of subject individual measurement result
3. Plotting of measurement value to standard value graph, and printing
4. Display of comment based on measurement value
5. Graphical display of the trends (subject temporal change) of measurement result, and printing
6. Data search.
7. Printing of measurement data search result list.
8. Result can be output in CSV form.