




(g)	Energy(kcal)	Protein(g)	Fat(g)	Carbohydrate(g)
78	115	5.0	2.3	18.5
47	66	4.1	3.0	5.8
52	20	0.3	0.1	4.7
56	53	1.4	3.8	3.4
66	286	18.1	16.7	15.8
65	127	8.4	5.7	10.6
68	52	2.2	1.2	8.2
136	208	11.4	8.1	22.4

-  MEXT Ministerial Award for Science and Technology
-  MEXT Ministerial Award for Invention
-  Received the Monodzukuri Nippon Grand Award

Food Calorie Measuring Equipment

Calorie Answer®



CA-HM Measurement Guide



Reflection measurement method for solids



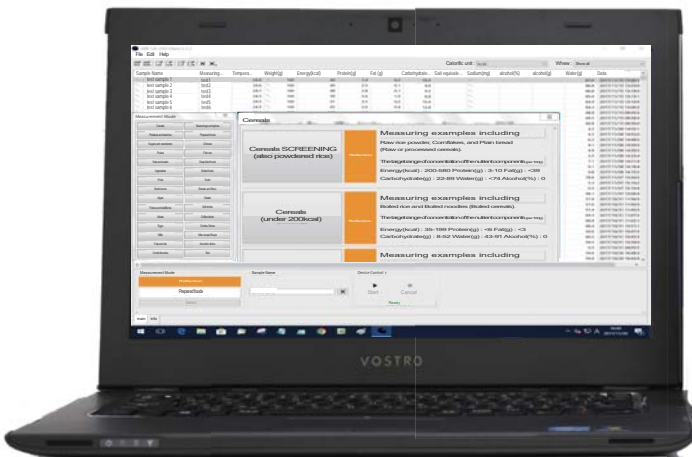
Connect to PC



Transmission measurement method for liquids

CA-HM makes it possible to measure the amount of nutritional content in a short time

A PC is not included with the CA-HM main unit



Calorie Answer employs a near-infrared spectroscopic analysis method, which uses the "transmission measurement method" for liquid samples and the "reflection measurement method" for powder and solid samples, and is capable of measuring nutritional components such as protein, fat, carbohydrate, and moisture as reference values in addition to calories in the measured product.

Features of Calorie Answer

- Measurements can be made in a short time. There are conventional methods of knowing the nutritional components of foods, such as database calculations and requests for analysis to specialized institutions, but immediate response is difficult.
- A wide variety of food items are grouped and the optimal measurement mode is prepared. The measurement mode can also be easily searched with a pop-up display.
- Can be operated via USB connection to a PC on which the supplied software is installed.
- Retention of measurement data history enables data comparison for each item using the filtering function.
- It is a measurement value per 100g, but it can be changed to any weight, and the result of each item is automatically converted.

The amount of sodium and salt equivalent will be measured separately with a sodium meter.
Salt equivalent is converted by inputting the sodium measurement value into the calorie answer sodium section.

Introduction of various measurement modes

17 measurement modes based on the Standard Tables of Food Composition in Japan

Consists of cereals, potatoes and starches, sugar and sweeteners, beans, nuts and seeds, vegetables, fruits, mushrooms, algae, seafood, meat, eggs, milk, oils and fats, confectionery, seasonings and spices, and prepared processed foods.

12 original measurement modes

Consists of fried food, simmered food, sushi, salad, soft drinks, coffee drinks, curry and stew, miso soup/soup, alcoholic drinks, Chinese food, fish roe, and bread.

6 modes are selected from the above items as standard equipment.

(Installation of all modes are also available)

* We can also separately create an original mode ^{*1} in accordance with your use, so please consult us.

* 1 The specifications of the original mode will be decided upon consultation, however, please understand that we may not be able to meet all of your requests.

Transmission Measurement Method

The adoption of the transmission measurement method makes it possible to measure foods and beverages that are difficult to measure with the reflective measurement method due to their high water content.

① Control cell measurement



With the measurement chamber empty, close the door and press the start button to begin measurement.

② Specimen measurement



After completing the measurement, set the sample and press the start button to begin the measurement.

Total measurement completed in about 3 mins. <Display Image>

Energy(kcal)	Protein(g)	Fat(g)	Carbohydrate(g)	Water(g)
528	8.3	27.5	61.8	2
482	5	24.5	60.3	9
537	8.1	53.2	6.6	31
315	4.5	8.2	55.8	30
204	7.5	10.1	20.7	61
172	6.5	4.5	26.4	62

Reflection Measurement Method

The adoption of the reflection measurement method enables measurement of raw materials and food products that have been crushed and homogenized with powders, solids, and other materials.

① Control cell measurement



Set the control cell in the measurement chamber, close the door, and press the start button to begin reference measurement.

② Specimen measurement



After measuring the control cell, replace the cell with the sample cell and press the start button to begin the measurement.

Total measurement completed in about 3 mins. <Display Image>

Energy(kcal)	Protein(g)	Fat(g)	Carbohydrate(g)	Water(g)
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Management and Collaboration

Management of measurement data with the included software, and expanded applications through linkage with sodium analyzers

Included software "JWPCA-HM Client"

Management

Main functions:
 Measurement mode selection/specimen name input
 Device control (start/cancel)
 Automatic conversion per gram, measurement history table management
 Filtering, text output of measurement history, etc.

Collaboration

Salt equivalent(g)	sodium(mg)
0.55880	220

Salt equivalent conversion function:
 It is possible to add "salt equivalent g" and "sodium mg" to the CA-HM measurement results by inputting the value obtained by sodium measurement into the sodium (mg) section.

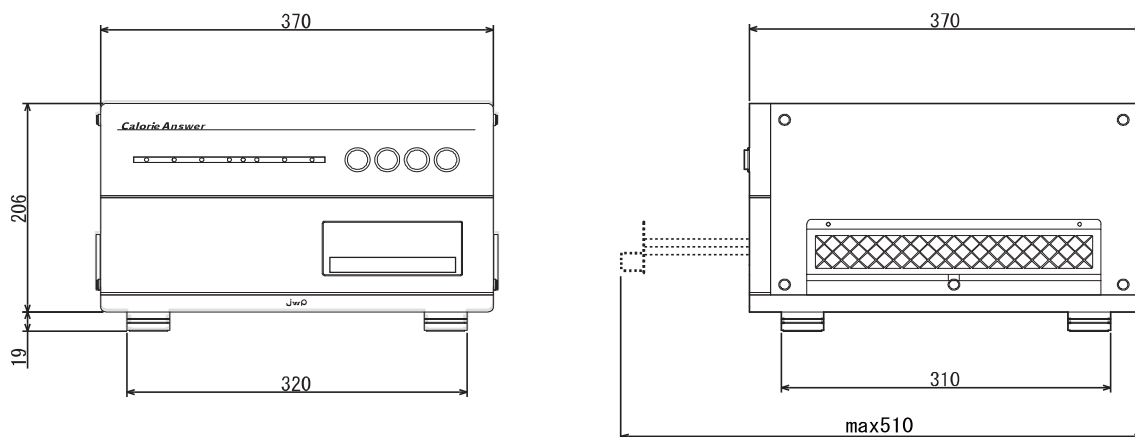
Main Specifications

Specifications are subject to change without notice

Model	CA-HM
Power supply used	AC100V 50/60Hz
Power consumption	100W(max)
Equipment weight	About 14 Kg
Measurement Time	About 3 minutes (Control cell measurement/sample measurement)
Measurement Object	Ingredients, food products in general (solid, semi-solid, liquid)
Measurement Item	Calories per 100g (calories) (Reference values: protein, fat, carbohydrates, water, [*] alcohol) <small>* Alcohol measurement is included depending on the installation</small>
Installation location	Avoid places with high temperature and humidity/No condensation/ Provide a space of 20 cm or more around the device
Accessories	1 control cell / 1 specimen cell eachs (for transmission/reflection)/ lamp / lamp replacement jig / power cable / communication cable / software installation disk
Software Operating Environment	[Supported OS] Microsoft Windows 7 or higher (32/64-bit version) [CPU] 32-bit/64-bit processor of 1 GHz or higher [Memory] 1GB or more [Hard disk] 500MB or more free space [Software] Office Excel

* Please confirm the measured values with the equipment and software before

External dimensions of measuring section



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