

Aroma Coder V2



What is Aroma Coder V2 ?

Aroma Coder V2 is a desktop type smell measurement device equipped with a high-performance smell sensor that can measure much like the olfactory organs of living things.

It is more compact and lightweight than the original Aroma Coder 35Q model for easier handling. Just place a few drops of analyte into sample holder allow it to stabilize and start measuring.

Our quartz crystal microbalance (QCM) array converts invisible smell into electronic signals that can be visualized by the included software, allowing objective assessment of various odors.

The "Aroma Coder V2" complies with CE marking requirements.

Mechanism of smell measurement

The detector unit within the device is equipped with 35 absorption membrane that adsorb volatile organic compounds (VOC) gas emitted by sample, where each membrane consist of different adsorption/desorption characteristics.

Thirty-five sets of frequency change data are obtained from a single measurement.

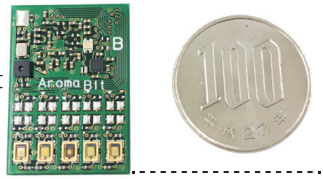
The adsorption membranes are coated on the QCMs. When VOC' s are adsorbed onto/desorbed from the surface of the membrane, the change in mass of the QCM is captured as a change in the oscillation frequency of the QCM.

By measuring this change in frequency of the individual QCMs, the 35 sets of data may be transformed into an overall response pattern, the "smell visualization pattern," of the Aroma Coder V2.

Process of digitizing a smell

Sensor Module

The basic 5-QCM Sensor Module essential to our smell measurement is shown to the right alongside a 100-yen coin. Aroma Coder V2 is equipped with a total of 7 sensor modules.



Compact size and high sensitivity

The Sensor Module is compact in size, measuring 3.2 cm x 2.4 cm. Seven 5-QCM Modules are mounted in each Aroma Coder V2 unit, realizing a 35-element multi-array QCM that can visualize complex smells with high resolution.

*QCM=Quartz Crystal Microbalance

Fast visualization of smell

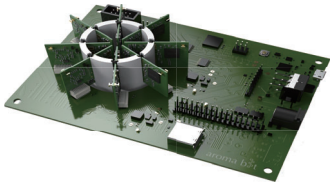
With 35 types of smell adsorption membranes mounted in a single device, measurements can be done quickly and easily. Data reliability may be improved by taking multiple scans of a sample. Currently we have a portfolio of over 100 membrane types including those under development, and expect to implement more types on our Sensor Modules in the near future.

Versatility of analysis

Data is acquired in CSV format and may be analyzed and expressed through various processing methods. Data may be used, for example, to focus on the similarity between samples or to create charts or codes according to the objective of the user. Standard software allows user to record data and output into CSV file.



Appearance



Detector

The Aroma Coder V2 detector unit consists of seven 5-QCM Sensor Modules mounted radially to allow simultaneous capture of all 35-element smell data.



SIDE



FRONT

Product Specification

[Aroma Coder V2]
Overall dimensions: 112 W x 155 L x 126 H (mm)
Stand: 112W x 123L x 90H (mm)
Weight: Approx. 1.5kg
Data output: USB2.0
OS: Windows 10
Power supply: AC100-240V

[Sample Jar]
Material: Glass
Jar size: 84 φ x 51H (without lid)
Inside: opening 67 φ
Capacity: 170ml

[Sample Conditions]
Size: Must fit inside Sample Jar
Temperature: Up to approx. 50°C

*The information provided herein is subject to change without notice.

*Detection may be difficult depending on the type of smell. Please inquire for further details.

[Contact Us] Aroma Bit, Inc. / Sales Div.
Tel: +81-3-6721-8151 Email: info@aromabit.com Web: <http://www.aromabit.com>

aroma bit[®]
copyright©2021 Aroma Bit, Inc.