

Indoor air quality monitoring

Fine Dust Measuring Instrument



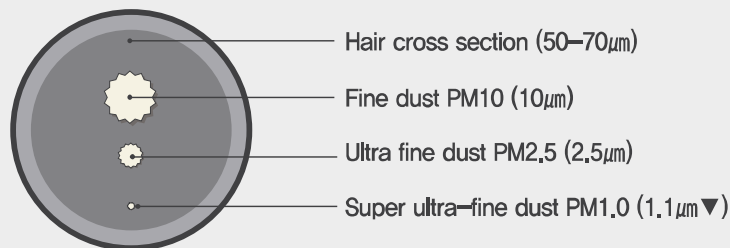
Smart air quality solution

Why is fine dust so dangerous?

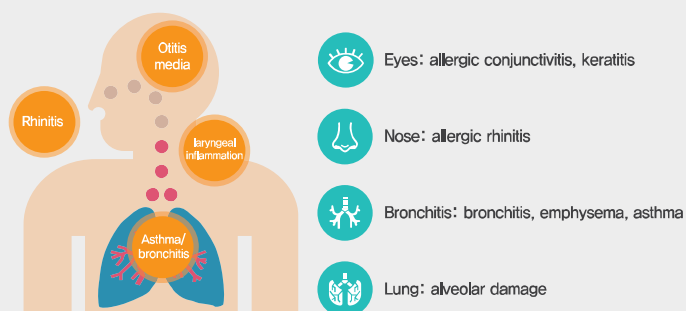
Particulate matter

Dust particles that are small enough to be invisible to our eyes (diameter less than $11\mu\text{m}$) can penetrate deep into human alveoli and cause various respiratory diseases.

Size comparisons for particulate matter



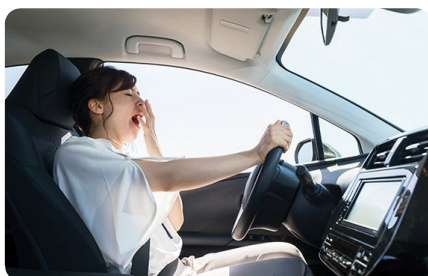
The effect of fine dust on the human body



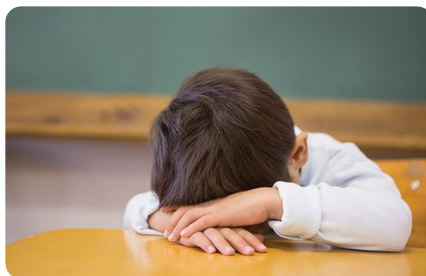
Type of carcinogens classified by the International Cancer Institute (IARC)

Category	Major Content	Example
Group 1	Substances identified as carcinogenic in humans	Asbestos, benzene, fine dust
Group 2A	Substances with high carcinogenic potential in humans	DDT, inorganic lead compound
Group 2B	Substances that are potentially carcinogenic in humans	Gasoline, cobalt
Group 3	Substances with uncertain carcinogenicity that are not possible to classify carcinogenicity in humans	Phenol, toluene
Group 4	Substances likely to have no carcinogenicity in humans	Caprolactam

Hazards of carbon dioxide



1. Carbon dioxide (CO_2) with 2,000ppm or more may cause drowsy driving accidents.



2. Carbon dioxide (CO_2) with 2,000ppm or more may result in busy brain and loss of attention in schools and libraries.



3. Carbon dioxide (CO_2) with 2,000ppm or more may cause an increase in heart rate and mild nausea in buses and subways.

CO₂ effect on the human body

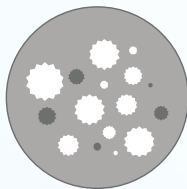
CO ₂ concentration (ppm)	CO ₂ concentration (oxygen concentration in air vol%)	Symptom per CO ₂ concentration
700	1.0(20.79)	No health problems
1,000	2.0(20.58)	Feeling discomfort
2,000	4.0(20.16)	Busy brain, mild headache, drowsiness
3,000 ~ 5,000	6.0(19.74)	Headache, dizziness
10,000	8.0(19.32)	Decreased respiratory, circulatory and cerebral functions

Source: The Ministry of Environment, Korea (2016,4)

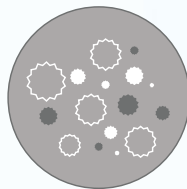
1. Simultaneous measurement for 3 types of particulate matter

It is different from existing air monitoring devices.

You can benefit accurate real-time measurement through the built-in sensor that can measure ultra-fine dust (PM_{2.5}), fine dust (PM₁₀) and super ultra-fine dust (PM_{1.0}) at the same time.



Fine dust



Ultra-fine dust



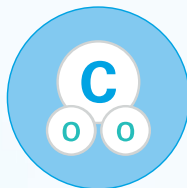
Super ultra-fine dust

2. High-end sensor

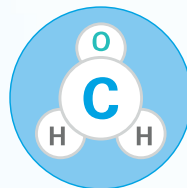
The world's famous sensors are in use.

We use the fine dust sensors from PLANTWOWER which is known to be the world's best in the air quality sector.

We use the best sensors in the formaldehyde and carbon dioxide industry!



Carbon dioxide



Formaldehyde

We guarantee highly accurate data through high-end sensors certified by Korea Laboratory Accreditation Scheme (KOLAS).

The reliability of this device is superior to other similar products sold on the market.

3. Intuitive user interface

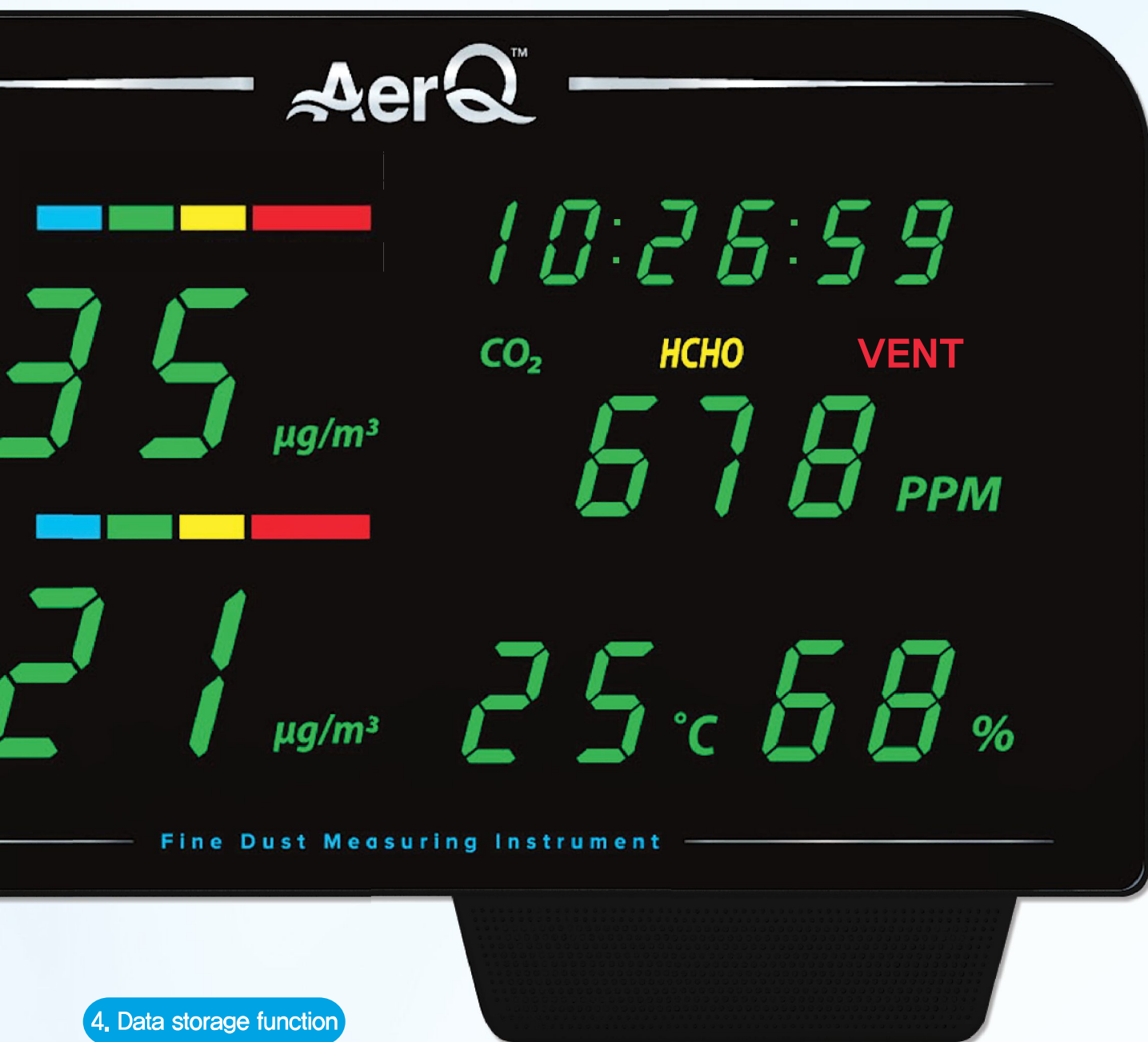
Large LED display with intuitive characters can increase your concentration.

Each character and number are displayed very comfortably, so everybody can easily recognize.

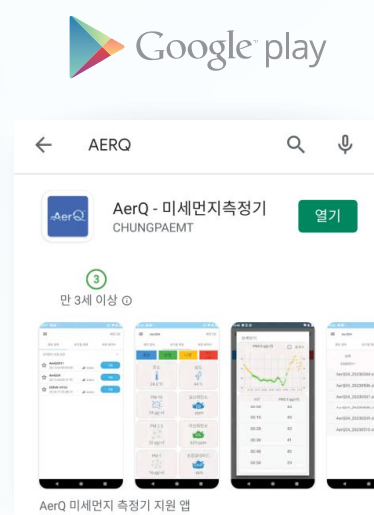
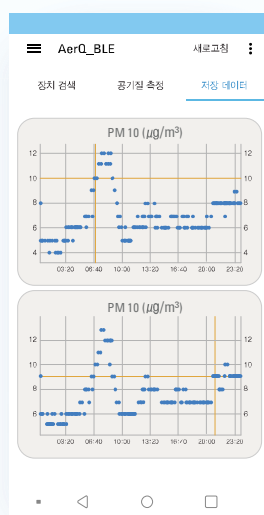
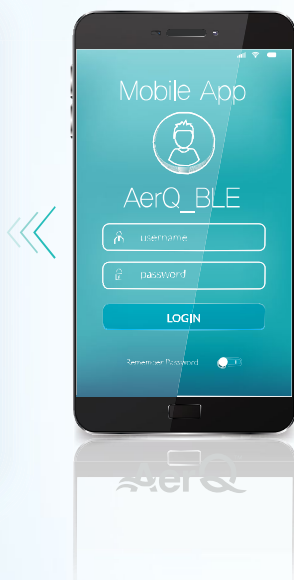
The color scheme is in accordance with the fine dust response standards.

PM₁₀

PM_{2.5}



4. Data storage function



Smart indoor air quality monitoring

For students' safe and comfortable environment



Office
Air Quality



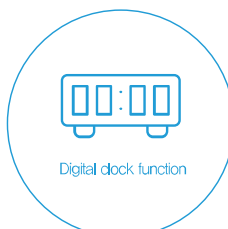
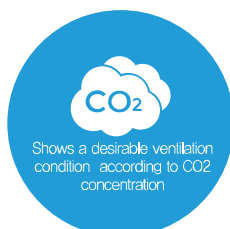
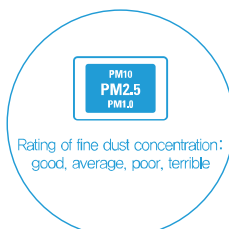
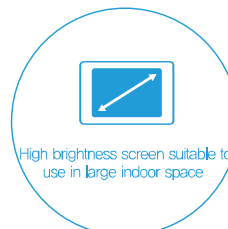
Public Place
Air Quality



School
Air Quality



Check eight display functions at once on a wide display!
Easier to use with simultaneous data storage on smart devices.

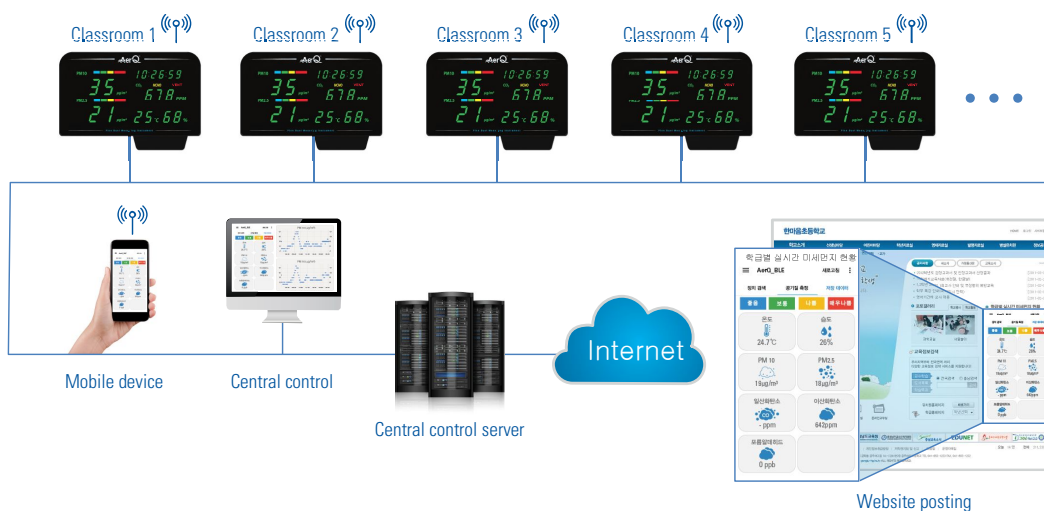




Safety Certification No.: R-R-CP2-AerQ-9

AerQ-A9 "Fine Dust Measuring Instrument" (LED wall mount)

Category		Specification
Fine dust measurement	PM2.5	0~200 μ g/m ³ (max. 500)
	PM10	0~200 μ g/m ³ (max. 1000)
	PM1.0	Downloadable through the official app
CO ₂ measurement		0 ~ 5,000ppm
HCHO measurement (formaldehyde)		0 ~ 2.000ppm (max.8.800)
Humidity measurement		0 ~ 99%
Temperature measurement		-40℃ ~ 80℃
Communication		Bluetooth 4.0
Dimension		410 x 251 x 50mm
Data storage		Downloadable through the official app (program)
Certification		CE, KC mark



Partner

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※ For the quality improvement, product specifications and appearances may change without prior notice.

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