

# ENVIRONMENTAL MEASURING INSTRUMENTS



## INDEX

|                                                     |       |
|-----------------------------------------------------|-------|
| Dust Indicators · PM2.5 Measurements .....          | 2-3   |
| Asbestos Measurements .....                         | 3     |
| Ambient Air and Work Environment Measurements ..... | 4     |
| MiniPumps .....                                     | 5     |
| Dust Sampling Media .....                           | 6     |
| Solvent Tubes .....                                 | 7     |
| Water Quality Measurements .....                    | 8-9   |
| Food Hygiene Inspections .....                      | 10-11 |
| Indoor Environments · Mask Fitting .....            | 12    |

## Digital Dust Indicator



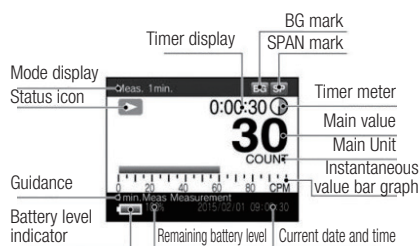
Model LD-5R

The LD-5R is a compact handheld dust indicator with a light scattering system and provides data faster than with the filtration collection method. It can perform real time measurement of suspended particle matter (SPM) in indoor spaces, public spaces and industrial health purposes.

### Specifications

|                         |                                                                  |
|-------------------------|------------------------------------------------------------------|
| Item Code               | 080000-73                                                        |
| Model                   | LD-5R                                                            |
| Measurement Principle   | Light scattering method                                          |
| Measurement Range       | 0.001 to 10,000 mg/m <sup>3</sup>                                |
| Measurement Sensitivity | 1 CPM = 0.001 mg/m <sup>3</sup>                                  |
| Function                | Timer Measurement, Logging Measurement, etc.                     |
| Size                    | W184×D68×H109.5 mm                                               |
| Weight                  | Approx. 1.1 kg (including batteries)                             |
| Accessories             | Shoulder strap, AC adapter, Size AA batteries x6, Set of filters |

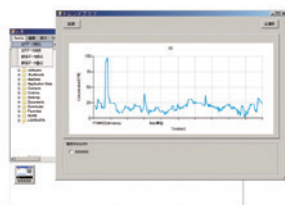
### Color Graphic LCD



### LED Indicator



### Communication Function



## High Concentration Digital Dust Indicator



Model LD-5D

The LD-5D uses a sheathed air detector mechanism and includes a built-in suction pump. It is a relative concentration indicator with a light scattering system and can perform measurements at tunnel construction sites and other worksites with comparatively high dust concentrations.

### Specifications

|                         |                                                                                    |
|-------------------------|------------------------------------------------------------------------------------|
| Item Code               | 080000-5                                                                           |
| Model                   | LD-5D                                                                              |
| Measurement Principle   | Light scattering method                                                            |
| Measurement Range       | 0.01 to 100.0 mg/m <sup>3</sup>                                                    |
| Measurement Sensitivity | 1 CPM = 0.01 mg/m <sup>3</sup>                                                     |
| Function                | Timer Measurement, Logging Measurement                                             |
| Size                    | W245×D90×H190 mm                                                                   |
| Weight                  | Approx. 2.88 kg (including batteries)                                              |
| Accessories             | Shoulder strap, AC adapter, Communication cable with software, Size C batteries x8 |

## Digital Dust Indicator (Personal Exposure)



Model LD-6N2

This small, lightweight dust indicator is for measuring a worker's personal exposure to dust. The control unit (electrical circuitry) is separate from the detector unit to make this easier for workers to wear. The measurement values stored can be transferred to a computer using special software.

### Specifications

|                         |                                                                                                                        |
|-------------------------|------------------------------------------------------------------------------------------------------------------------|
| Item Code               | 080170-22                                                                                                              |
| Model                   | LD-6N2                                                                                                                 |
| Measurement Principle   | Light scattering method                                                                                                |
| Measurement Range       | 1 to 100,000 CPM (0.001 to 100 mg/m <sup>3</sup> )                                                                     |
| Measurement Sensitivity | 1 CPM = 0.001 mg/m <sup>3</sup>                                                                                        |
| Function                | Manual measurement, Countdown timer measurement, etc.                                                                  |
| Size                    | Detector unit: W100×D37×H72 mm<br>Control unit: W70×D35×H105 mm                                                        |
| Weight                  | Approx. 0.5kg                                                                                                          |
| Accessories             | AC adapter, Standard scattering plate/zero measurement filter, Communication software, USB cable, Soft case, Clip 3pcs |

## PM2.5 Digital Dust Indicator



Model LD-5R

The LD-5R for PM2.5 is small, portable and highly maneuverable, so it can be operated in emergencies and as a simple measurement device in situations requiring mobility. It can also be used as an LD-5R by replacing the cyclone air sampling port with a standard air sampling port.

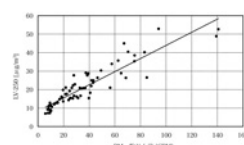
### Specifications

|                            |                                                                                                                         |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Item Code                  | 080000-725                                                                                                              |
| Model                      | LD-5R (main body)                                                                                                       |
| Measurement Principle      | Light scattering method                                                                                                 |
| Size Classification Method | Cyclone separating method                                                                                               |
| Function                   | Timer Measurement, Logging Measurement                                                                                  |
| Accessories                | PM2.5 cyclone particle size separator, Set of filters, Standard inlet, AC adapter, Shoulder strap, Size AA batteries x6 |

### Parallel measurement in multiple locations



### Example of a correlation between actual measurements and official analytical measurements



## Outdoor Dust Monitor



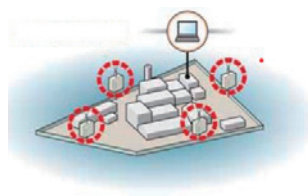
Model FLD-1

The FLD-1 consists of a light-scattering type dust indicator in a cabinet and is suitable for continuously measuring dust levels in outdoor environments. Also, thanks to an extensive selection of output functions, multiple units can be used to monitor dust concentrations at construction sites or along the boundaries of undeveloped building sites.

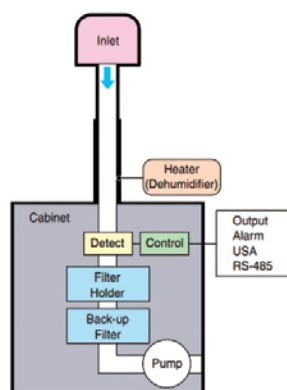
## ■ Specifications

|                       |                                  |
|-----------------------|----------------------------------|
| Item Code             | 080040-63                        |
| Model                 | FLD-1                            |
| Measurement Principle | Light scattering method          |
| Measurement Range     | 0.001 to 100.0 mg/m <sup>3</sup> |
| Suction Flow Rate     | 1.7L/min.                        |
| Filter                | Dia. 47mm                        |
| Power Supply          | 100V AC, 0.5A                    |
| Size (Main body Only) | W400×D200×H860 mm                |
| Weight                | Approx. 14kg                     |

## ■ Image of Placing



## ■ Real-time Dust Monitor FLD-1 Block Diagram



## PM2.5 Sampler



Model LV-250R

The LV-250R is a PM2.5 sampler. It is capable of mass concentration measurements of particulate matter (PM2.5) using a filter, based on the interim measurement manual designated by the Japanese Ministry of the Environment.

## ■ Specifications

|                                     |                                                                                                                            |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Item Code                           | 080040-710                                                                                                                 |
| Model                               | LV-250R                                                                                                                    |
| Particle Separation Characteristics | PM2.5 (50 % reduction in 2.5 μm particles)                                                                                 |
| Suction Flow Rate                   | 16.7 L/min                                                                                                                 |
| Filter                              | Dia. 47 mm                                                                                                                 |
| Items Displayed                     | Flowrate, Air temperature, Air pressure, Filter temperature, Filter pressure loss, Date and time, Measurement time, Errors |
| Power Supply                        | 100 V AC, 2A                                                                                                               |
| Size                                | W400×D320×H1414 mm                                                                                                         |
| Weight                              | Approx. 15 kg (main body), approx. 12 kg (stand)                                                                           |

## Asbestos Measurements

## Fiber Monitor



Model F-1K

The F-1K is an asbestos monitor which measures relative fiber concentration. It detects only fiber particles. It can be used as real-time monitoring at asbestos related workplace.

## ■ Specifications

|                   |                                               |
|-------------------|-----------------------------------------------|
| Item Code         | 080000-1000                                   |
| Model             | F-1K                                          |
| Measurement Range | 0.0 to 1000f/L                                |
| Display           | Fiber concentration (f/L), Fiber counts, etc. |
| Measuring Mode    | Down Timer, Manual, Logging                   |
| Data Output       | USB, RS-232C, Printer, Alarm (Open-Collector) |
| Power Supply      | 100V AC to 240V AC and NiMH battery           |
| Size              | W380×D230×H240 mm                             |
| Weight            | 5.2kg                                         |

## Asbestos Dust Sampling Pump



Model AIP-205

The AIP-205 is an air suction pump for sampling asbestos suspended in the air and supports both AC and DC power supplies. This suction pump provides high suction pressure responding to the sampling parameters for asbestos with great pressure loss.

## ■ Specifications

|                               |                                                              |
|-------------------------------|--------------------------------------------------------------|
| Item Code                     | 080800-205                                                   |
| Model                         | AIP-205                                                      |
| Flow Rate Variable Range      | 1.5 to 13 L/min (no load)                                    |
| Flow Rate Total Scale         | 1.5 to 15 L/min (20°C, 1 barometric standard)                |
| Maximum Suction Pressure      | 80kPa                                                        |
| Timer Setting                 | 0.1 seconds to 999.9 minutes                                 |
| Suction and Exhaust Port Size | Suction port: outer dia. 8 mm, not connected to exhaust port |
| Power Supply                  | 100V AC, 0.5A (Fuse 2A)                                      |
| Size                          | W200×D250×H210 mm(excluding protrusions)                     |
| Weight                        | 4.5kg                                                        |

## ■ Options

|           |              |                 |
|-----------|--------------|-----------------|
| Item Code | 080800-206   | 080800-107      |
| Item Name | Battery Unit | Battery Charger |
| Model     | BU-205       | BC-105          |

## Small Manometer



Model FP-1

The FP-1 small manometer uses a silicone pressure element and can accurately measure minute pressure changes in the range of -25.0 to +25.0 Pa. In addition, a data recording function is built in, so it can be used for measurements for negative pressure management in the isolation room at dismantling sites to remove asbestos.

## ■ Specifications

|                         |                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------|
| Item Code               | 080140-821                                                                                           |
| Model                   | FP-1                                                                                                 |
| Measurement Method      | Silicon diaphragm capacitance method                                                                 |
| Measurement Range       | -25Pa to +25Pa                                                                                       |
| Measurement Accuracy    | 0 to ±15Pa: ±1Pa ±1 digit at calibration 23°C, ±15.1Pa to ±25Pa: ±1.5Pa ±1 digit at calibration 23°C |
| Display Resolution      | 0.1Pa                                                                                                |
| Date Recording          | Total 5 blocks (1 block: 32001 data)                                                                 |
| Date Recording Interval | 5 seconds, 10 seconds, 60 seconds                                                                    |
| Size                    | W95×D45.4×H158 mm                                                                                    |
| Weight                  | Approx. 0.43kg (including batteries)                                                                 |
| Accessories             | Communication software, Communication cable, Toalontube x3m                                          |

## High Volume Air Sampler



Model HV-RW

This weatherproof sampler is intended for installation in order to collect toxic substances in the air at high flowrates. It has a wide flowrate range and can be used for both dust and dioxins by replacing the components. The folding design is convenient for transport and storage.

## ■ Specifications

|                              |                                                                                                                        |                                                                                               |
|------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Item Code                    | 080130-1201                                                                                                            | 080130-1203                                                                                   |
| Model                        | HV-RW for Aerosol                                                                                                      | HV-RW for Dioxins                                                                             |
| Standard Suction Flow Rate   | 1000L/min                                                                                                              | 100 or 700L/min                                                                               |
| Configurable Flow Rate Range | 100 to 1200L/min                                                                                                       |                                                                                               |
| Flow Rate Detection          | Differential pressure detection method                                                                                 |                                                                                               |
| Suction Pump                 | Brushless blower                                                                                                       |                                                                                               |
| Power Supply                 | 90V AC to 132V AC, 180V AC to 264V AC, 10A                                                                             |                                                                                               |
| Size                         | In use: W575×D575×H1420 mm<br>Sampling port height: 1210mm (from installation surface)<br>Folded up: W575×D575×H960 mm |                                                                                               |
| Weight                       | Approx. 31kg                                                                                                           |                                                                                               |
| Accessories                  | Filter case x1, Through pipe x1                                                                                        | Filter case x1, Shuttle tube x1, Quartz fiber filter x10 sheets, Polyurethane Foam x10 sheets |

## High Volume Air Sampler



Model HV-500R-4S

The HV-500R-4S is an air sampler combined with PM4 particle size separator and designed for suction rates of 100 to 800 L/min. It is compact to simplify on-site sampling, measurements and transport. It also enables dioxin sampling if optional parts are attached to the main unit.

## ■ Specifications

|                                     |                                        |
|-------------------------------------|----------------------------------------|
| Item Code                           | 090130-304                             |
| Model                               | HV-500R-4S                             |
| Standard Suction Flowrate           | 500 L/min                              |
| Particle Separation Characteristics | PM4 (4 µm particles)                   |
| Flowrate Detection                  | Differential pressure detection system |
| Suction Pump                        | Brushless blower                       |
| Power Supply                        | 180V AC to 264V AC, 5A                 |
| Size                                | W425×D200×H270 mm                      |
| Weight                              | Approx. 8.0 kg                         |

## Digital Orifice Flow Meter



Model OFD-1

The OFD-1 is an on-site use flow rate calibrator of the measurement site for high volume air samplers. Built-in temperature sensor and atmospheric pressure sensor make it possible to perform flow rate calibration automatically. When connecting to the HV-R series/HV-RW with a USB cable, it can perform calibration automatically.

## ■ Specifications

|                              |                                        |
|------------------------------|----------------------------------------|
| Item Code                    | 080130-8                               |
| Model                        | OFD-1                                  |
| Configurable Flow Rate Range | 90 to 1300L/min                        |
| Flowrate Detection           | Differential pressure detection system |
| Support Model                | HV-F series/ HV-R series               |
| Power Supply                 | Size AA batteries x4                   |
| Size                         | W105×D225×H180 mm                      |
| Weight                       | Approx. 2.0 kg                         |

## ■ Options

| Item Code    | Item Name                                               |
|--------------|---------------------------------------------------------|
| 080130-0551  | Square Shape Adapter                                    |
| 080130-07511 | Round Shape Adapter                                     |
| 080130-0553  | Orifice Adapter for Round Shape Particle Size Separator |

## Low Volume Pump



Model LVS-30

The LVS-30 is a small and light-weight suction pump that supports both alternate and direct (AC/DC) power supplies. As a low volume air sampler, it can be used for various types of sampling including measurement of particles in work environments or other atmospheric air environments.

## ■ Low Volume Pump, Model LVS-30 Basic Items

| No | Item Code   | Item Name                     |
|----|-------------|-------------------------------|
| 1  | 080800-030  | LVS-30 (main body)            |
| 2  | 080800-031  | Battery Unit, Model LI-30     |
| 3  | 080800-032  | AC Adapter, Model ATS090-P240 |
| 4  | 080800-0321 | Power Cable                   |

\*The LVS-30 main unit is not equipped with the power source to operate. For battery operation, all items No.1 to 4 are required. For AC adapter operation, items No.1, 3, and 4 are required. For outside Japan use, a separate power cable is necessary.

## ■ Specifications

|                              |                                                    |
|------------------------------|----------------------------------------------------|
| Model                        | LVS-30                                             |
| Operable Flow Rate Range     | 5.0 to 30.0L/min                                   |
| Size (excluding protrusions) | W168×D228×H111mm (excluding a handle)              |
| Weight                       | 2.3kg (incl. battery unit LI-30 (sold separately)) |

## Standard Flowmeter for Low Volume Air Samplers



Model FC-L1

The FC-L1 is ideal for calibrating the flowrate of suction pumps for low volume air samplers. The measured flowrate is automatically corrected to standard conditions (25°C, 1 atm; 20°C, 1 atm; 0°C, 1 atm; or actual flowrate), so the digital flowrate display can be used as a standard flowrate as is.

## ■ Specifications

|                                     |                                             |
|-------------------------------------|---------------------------------------------|
| Item Code                           | 080120-157                                  |
| Model                               | FC-L1                                       |
| Measurement Range                   | 5 to 40L/min                                |
| Accumulated Flow Rate Display Range | 0.0 to 99999L                               |
| Power Supply                        | Size AA batteries x4<br>AC adaptor (option) |
| Size                                | W105×D170×H100 mm                           |
| Weight                              | 900g                                        |

## PM4 Personal Dust Sampler Set



PM4 Personal Dust Sampler Set

This personal sampler is for evaluating personal exposure to dust in work environments. The exposure by working personnel can be measured both in terms of the concentration of inhalation dust (respirable particles) and the total dust concentration.

## ■ Specifications

|                                     |                                                                                                                                                                                                                                                                       |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Item Code                           | 080150-445                                                                                                                                                                                                                                                            |
| Filter Paper Holder                 | Model NWPS-254: Plastic, dia.25mm x1                                                                                                                                                                                                                                  |
| Particle Separation Characteristics | PM4 (50 % reduction in 4 µm particles)                                                                                                                                                                                                                                |
| Suction Pump                        | MiniPump, Model MP-W5P                                                                                                                                                                                                                                                |
| Suction Flow Rate                   | 2.5L/min                                                                                                                                                                                                                                                              |
| Composition                         | NWPS-254 personal sampler holder (with grease guide, metal sampling plate, toallontube) x1, MiniPump model MP-W5P x1, Grease set (with spatula and micro-spatula) x1, Intermediate clip x1, TF98 25mm dia. Fluoropolymer-coated fiber glass filter x100, Soft case x1 |

## Inertia Colliding Method of PM4 Separators



Model NWPS-254 / NW-354

The NWPS-254 and NW-354 can collect PM4 respirable particles (with a 50 % cut at 4 µm) at a suction flowrate of 2.5 L/min and 20L/min accordingly. The NWPS-254 and NW-354 are compliant with the regulatory conditions in article 2 item 2 of the Work Environment Measurement Standards.

## ■ Specifications

|                                     |                                                            |                                                                     |
|-------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------|
| Item Code                           | 080150-254                                                 | 080120-354                                                          |
| Model                               | NWPS-254                                                   | NW-354                                                              |
| Suction Flow Rate                   | 2.5L/min                                                   | 20L/min                                                             |
| Particle Separation Characteristics | PM4 (50 % cut at 4 µm)                                     |                                                                     |
| Operating Temperature Range         | 0 to 40°C                                                  |                                                                     |
| Accessories                         | Grease guide, Metal sampling plate, Toallontube 7×10 (1 m) | Grease guide, Clip case (with glass sampling plate and filter clip) |

## Mini Pump MP-ΣNII Series



Model MP-Σ300NII



Model MP-Σ100HNII

The MPΣN series products are air suction pumps equipped with functionality for constant flowrates. Total 4 types, basic types of MP-Σ30NII, MP-Σ300NII and MP-Σ500NII and high-loaded type of MP-Σ100HN are available by flowrate range. Lithium-ion rechargeable battery unit is designed as standard power source. It allows operating time twice as much time as operating time of AA alkaline batteries.

## ■ Specifications

| Item Code                | 090860-034                                                                                                                                     | 090860-304        | 090860-504        | 090860-104        |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|
| Model                    | MP-Σ30NII                                                                                                                                      | MP-Σ300NII        | MP-Σ500NII        | MP-Σ100HNII       |
| Operable Flow Rate Range | 0.05 to 0.500L/min                                                                                                                             | 0.50 to 3.00L/min | 2.00 to 5.00L/min | 0.30 to 1.50L/min |
| Power Supply             | Lithium-ion rechargeable battery (need quick charger)(option), AA dry cell batteries (need dry cell battery unit)(option), AC adapter (option) |                   |                   |                   |
| Size                     | W145×D67×H95 mm                                                                                                                                |                   |                   |                   |
| Weight                   | 650g (including lithium-ion rechargeable battery)                                                                                              |                   |                   |                   |

## ■ Options

| Item Code | 080860-110                  | 080860-011                          | 080000-1203               |
|-----------|-----------------------------|-------------------------------------|---------------------------|
| Item Name | Quick Charger, Model AC-10N | Dry Cell Battery Unit, Model DB-10N | AC adapter, Model PA-1203 |

## Wide Flow Range Mini Pump



Model MP-W5P

The MP-W5P is a portable air sampling pump equipped with functionality for measuring constant flowrates. Its small and lightweight design is suitable for personal exposure measurements. Due to a wide range of flow rates, it can also be used for a variety of other purposes such as air sampling in each of occupational health, indoor and atmospheric environments.

## ■ Specifications

| Item Code                | -                                                           |
|--------------------------|-------------------------------------------------------------|
| Model                    | MP-W5P                                                      |
| Operable Flow Rate Range | 0.050 to 5.00 L/min                                         |
| Power Supply             | NiMH rechargeable battery, AC adapter, Size AA batteries x6 |
| Size                     | W95×D56×H95mm                                               |
| Weight                   | 450g (including NiMH rechargeable battery)                  |

## ■ Accessories and Options

| Item Code   | Item Name                              |
|-------------|----------------------------------------|
| 080860-5051 | NiMH Rechargeable Battery Model NI-W5  |
| 080860-5052 | Battery Holder for MP-W5P Model SN3-6B |
| 080860-5053 | Color Caps/ 3pcs (red, blue, yellow)   |
| 090860-5064 | Quick Charger Model QCA-W5             |
| 080860-5055 | Soft Case for MP-W5P                   |
| 080860-5056 | Intake Port Set for MP-W5P             |
| 080860-5057 | Filter Element Model VFE-2, 5pcs       |

## Personal Mini Pump



Model PMP-001

The PMP-001 is a small, lightweight, portable air sampling pump equipped with a pressure loss correction function and a constant flow rate function. The flow rate for this pump is 10mL/min to 300mL/min, which is a particularly low flow rate range. The pump can be used for measurements of work environments, indoor environments and personal exposure.

## ■ Specifications

| Item Code                | 080870-001                              |
|--------------------------|-----------------------------------------|
| Model                    | PMP-001                                 |
| Operable Flow Rate Range | 10 to 300 mL/min                        |
| Power Supply             | Size AA batteries×2, 5V DC (microB USB) |
| Size                     | W63×D29×H115mm                          |
| Weight                   | 190g (including batteries)              |

## ■ Options

| Item Code   | Item Name                      |
|-------------|--------------------------------|
| 080870-0017 | Soft Case and Tripod Mount Set |
| 080870-0016 | Rubber Adapter for MP series   |

## Standard Flowmeter for Mini Pumps



Model FC-M1

The FC-M1 flow calibrator can be used to automatically calibrate Sibata MP-ΣNII series and MP-W5P model mini pumps. The measured flowrate is automatically corrected to standard conditions (25°C, 1 atm; 20°C, 1 atm; 0°C, 1 atm; or actual flowrate), so the digital flowrate display can be used as a standard flowrate as is.

## ■ Specifications

| Item Code                           | 080120-158                                        |
|-------------------------------------|---------------------------------------------------|
| Model                               | FC-M1                                             |
| Measurement Range                   | 0.05 to 5.00L/min                                 |
| Accumulated Flow Rate Display Range | 0.0 to 9999.9L                                    |
| Power Supply                        | 9V DC (size AA batteries x4), AC adapter (option) |
| Size                                | W105×D170×H100mm                                  |
| Weight                              | 900g (including batteries)                        |

## Cyclone

### Cyclone for Respirable Dust



37mm Aluminum Cyclone with Holder  
\*cassette not included



37mm Aluminum Cyclone  
\* Spare Cyclone

The 37mm Aluminum Cyclone is used in conjunction with 37mm 3-piece Cassettes to separate and remove larger particles from the respirable particles collected on the cassette's filter. As a result, the collection efficiency curve meets the standards set forth in ISO 7708 for a respirable curve with a median 50% cut point of 4 µm at 2.5 L/min flowrate.

#### Specifications

|           |                                                      |
|-----------|------------------------------------------------------|
| Item Code | 090010-010 (with Holder) / 090010-011 (Cyclone only) |
| Cut Point | 4 µm                                                 |
| Flow Rate | 2.5 L/min                                            |
| Material  | Aluminum                                             |
| Type      | Aluminum                                             |
| Weight    | 18g*Cyclone itself                                   |

### Cyclone for Silica Dust



10mm Conductive Nylon Cyclone with Holder  
Dorr-Oliver Style \*cassette not included



10mm Conductive Nylon Cyclone  
Dorr-Oliver Style \* Spare Cyclone

The 10mm Conductive Nylon Cyclone is used in conjunction with a 37mm 2-piece Conductive Cassette for silica dust sampling. The cyclone separates and removes larger particles from the respirable particles collected on the cassette's filter. As a result, the collection efficiency curve meets the standards set forth in ISO 7708 for a respirable curve with a median 50% cut point of 4 µm at a flow rate of 1.7 L/min.

#### Specifications

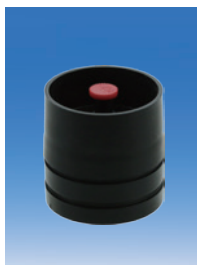
|           |                                                      |
|-----------|------------------------------------------------------|
| Item Code | 090010-020 (with Holder) / 090010-021 (Cyclone only) |
| Cut Point | 4 µm                                                 |
| Flow Rate | 1.7 L/min                                            |
| Material  | Conductive Nylon                                     |
| Type      | Dorr-Oliver                                          |
| Weight    | 18g*Cyclone itself                                   |

## Sampling Media

### Sampling Media for Total and Respirable Dust



37mm 3-Piece Styrene Cassette  
with 5.0µm PVC Filter, 50/box



47mm 3-Piece Conductive Cassette  
with 5.0µm PVC Prewieghed Filter, 32/box

Preloaded air sampling filter cassettes are easy to use and carry to and from the sampling site. The cassettes, membrane filters, and support pads meet the requirements specified in the Circular 02/2019/TT-BYT issued by MOH and international standards NIOSH 0500 for total dust sampling and 0600 for respirable dust sampling.

#### Specifications

|                  |                |                  |            |
|------------------|----------------|------------------|------------|
| Item Code        | 090010-030     | Item Code        | 090010-040 |
| Filter Material  | PVC            | Filter Material  | PVC        |
| Filter Pore Size | 5.0 µm         | Filter Pore Size | 5.0 µm     |
| Gravimetric      | Not Weighed    | Gravimetric      | Prewieghed |
| Housing Style    | 3-Piece        | Housing Style    | 3-Piece    |
| Pad Material     | Cellulose      | Filter Diameter  | 47mm       |
| Filter Diameter  | 37mm           | Housing Material | Conductive |
| Housing Material | Styrene -Clear |                  |            |

#### Accessories

| Item Code   | Item Name                           |
|-------------|-------------------------------------|
| 090010-090  | Universal Cassette/Cyclone Holder   |
| 080140-603  | Cassette Holder for Minipump MP-W5P |
| 090140-1001 | 47mm Filter Cassette Holder         |
| 080160-3    | Tripod                              |
| 080140-1002 | Extension Pole 30cm                 |
| 090140-1003 | Tripod Mount for MP-W5P and LD-6N2  |

### Sampling Media for Asbestos Dust



25mm Asbestos PCM Cassette  
0.8µm MCE with Grids, 50/box

The 25mm Asbestos PCM Cassettes are preloaded with membrane filters and support pads. The housing configurations, membrane filters, and support pads all meet the requirements specified in the Circular 02/2019/TT-BYT issued by MOH and an international standard, US NIOSH Method 7400 "ASBESTOS and OTHER FIBERS by PCM."

#### Specifications

|                  |             |                  |                        |
|------------------|-------------|------------------|------------------------|
| Item Code        | 080140-62   | Pad Material     | Cellulose              |
| Filter Material  | MCE         | Filter Diameter  | 25mm                   |
| Filter Pore Size | 0.8 µm      | Housing Material | Styrene -Clear         |
| Gravimetric      | Not Weighed | Note             | Filter with Grid Lines |
| Housing Style    | 3-Piece     |                  |                        |

| Item Code     | Item Name                          |
|---------------|------------------------------------|
| 080800-10145  | ID7mm/OD10mm PVC Tube 10m/box      |
| 080040-010509 | ID5mm/OD9mm ConductiveTube 10m/box |
| 090010-031    | 37mm Cassette Housing 50/box       |
| 090010-080    | 25mm/37mm Cassette Opener          |
| 090010-081    | 47mm Cassette Opener               |

### Sampling Media for Silica Dust



37mm 2-Piece Conductive Cassette Housing  
50/box \*filter not preloaded

The 37mm 2-piece Conductive Cassette Housings, the 37 mm PVC membrane filters, and the 37mm Cellulose Support Pads meet the requirements specified in the Circular 02/2019/TT-BYT issued by MOH and the international standard US NIOSH 7602 for silica dust sampling. The leak free construction of the cassette eliminates sample loss, and the membrane filters and support pads are of finest quality.

#### Specifications

|               |            |
|---------------|------------|
| Item Code     | 090010-050 |
| Diameter      | 37mm       |
| Material      | Conductive |
| Housing Style | 2-piece    |

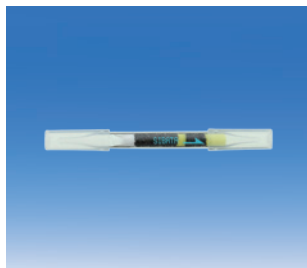
37mm PVC Membrane  
Filters 5µm 100/pk

37mm Cellulose Support  
Pad 100/pk

#### Specifications

|                             |                                                                      |           |             |
|-----------------------------|----------------------------------------------------------------------|-----------|-------------|
| Item Code                   | 090010-060                                                           | Item Code | 090010-070  |
| Diameter                    | 37mm                                                                 | Diameter  | 37mm        |
| Pore Size                   | 5.0 µm                                                               | Material  | Cellulose   |
| Gravimetric Stability       | < 0.5% after 24 hrs at 48% relative humidity at 50 °C                | Color     | Plane White |
| Air Flow Rate               | 53 L/min at 70 kPa                                                   |           |             |
| Aerosol Retention (typical) | 99.94% 0.3 µm (DOP) at 32 L/min /100 cm <sup>2</sup> of filter media |           |             |

## Charcoal Sorbent Tube



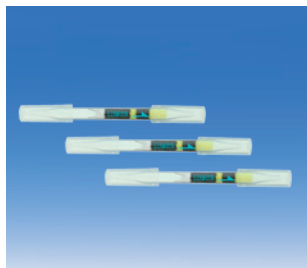
Standard Model

The standard type is filled with two layers and highly absorbent with respect to many nonpolar organic solvents. The single layer type is used in the same way as the standard model and is convenient when the back up second layer of activated charcoal is not necessary. The jumbo type contains a large amount of activated charcoal, so it is particularly suitable for sampling vapors from strongly volatile organic compounds and is also convenient for long sampling times.

## ■ Specifications

| Item Code      | 080150-054                                            | 080150-0541  | 080150-0532                                            |
|----------------|-------------------------------------------------------|--------------|--------------------------------------------------------|
| Product Name   | Standard                                              | Single Layer | Jumbo                                                  |
| Usage          | Nonpolar organic solvent collection                   |              |                                                        |
| Filler         | Active charcoal                                       |              |                                                        |
| Filling Amount | 100mg for the front layer and 50mg for the back layer | 200mg        | 400mg for the front layer and 200mg for the back layer |
| Quantity       | 24pcs/set                                             | 24pcs/set    | 60pcs/set                                              |

## Carbon Beads Active Sampling Tube



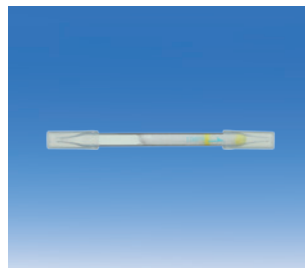
Carbon Beads Active(CBA) Standard Model

This gas sampling tube for nonpolar organic solvents uses synthetic petroleum carbon beads as the sorbent. The standard and Jumbo types are filled with two layers of 20-40 mesh carbon beads (sorbent), the front layer weighing 100mg and 400mg, and the back layer weighing 50mg and 200mg respectively. The single layer type is filled with one layer of 20-40 mesh carbon beads (sorbent) weighing 200mg.

## ■ Specifications

| Item Code      | 080150-090                                            | 080150-094       | 080150-093                                             |
|----------------|-------------------------------------------------------|------------------|--------------------------------------------------------|
| Product Name   | CBA Standard                                          | CBA Single Layer | CBA Jumbo                                              |
| Usage          | Nonpolar organic solvent collection                   |                  |                                                        |
| Filler         | Active carbon beads                                   |                  |                                                        |
| Filling Amount | 100mg for the front layer and 50mg for the back layer | 200mg            | 400mg for the front layer and 200mg for the back layer |
| Quantity       | 24pcs/set                                             | 24pcs/set        | 12pcs/set                                              |

## Silica Gel Sorbent Tube



Standard Model

This Silica Gel Tube strongly absorbs polar compounds, so it can be used for measuring the concentration of organic solvents in work environments. The standard type has two layers, so the amount of breakthrough during measurement can be determined. The small type is comparable to the items designated for measurements of amines and NIOSH.

## ■ Specifications

| Item Code      | 080150-061                                             | 080150-0631                                           |
|----------------|--------------------------------------------------------|-------------------------------------------------------|
| Product Name   | Standard                                               | Small                                                 |
| Usage          | Polar compound collection                              |                                                       |
| Filler         | Silica Gel                                             |                                                       |
| Filling Amount | 520mg for the front layer and 260mg for the back layer | 150mg for the front layer and 75mg for the back layer |
| Quantity       | 12pcs/set                                              | 60pcs/set                                             |

## DNPH Active Gas Tube



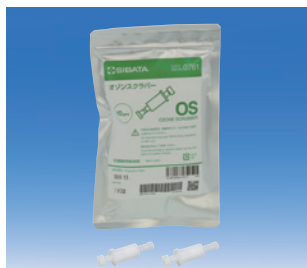
For Aldehydes and Ketones

This sampling tube is filled with silica gel (sorbent) impregnated with 2,4-dinitrophenylhydrazine (DNPH) and is suitable for the active sampling of aldehydes and ketones. It is a low blank type capable of high accuracy sampling. In addition, it can connect to other brands of product.

## ■ Specifications

| Item Code      | 080150-076                                                |
|----------------|-----------------------------------------------------------|
| Usage          | For aldehydes and ketones                                 |
| Filler         | 2,4-dinitrophenylhydrazine (DNPH), Impregnated silica gel |
| Filling Amount | 350mg                                                     |
| Quantity       | 10pcs/set                                                 |

## Ozone Scrubber



For DNPH Active Gas Tube

An ozone scrubber is a cartridge capable of removing ozone from the air. Ozone that inadvertently decomposes a DNPH derivative is removed by the potassium iodide filling the polyethylene tube main unit. This can be used for measurement with the DNPH active gas tube in the environment where ozone exists.

## ■ Specifications

| Item Code      | 080150-0761                                        |
|----------------|----------------------------------------------------|
| Usage          | Removal of ozone that decomposes a DNPH derivative |
| Filler         | Potassium iodide                                   |
| Filling Amount | 1.2g                                               |
| Quantity       | 10pcs/set                                          |

## Passive Gas Tube



For Organic Solvent

This omni-directional gas sampler can collect organic solvent gases in air in a simplified manner and determine the concentrations of the substances. Simply leave it for a set time in the measurement environment for the gas to be spontaneously adsorbed. Pumps and other devices are not required, so it is lightweight and easy to handle.

## ■ Specifications

| Item Code      | 080150-066                          |
|----------------|-------------------------------------|
| Usage          | Nonpolar organic solvent collection |
| Filler         | Active charcoal                     |
| Filling Amount | 200mg                               |
| Quantity       | 12pcs/set                           |

## Low Blank Carbon Beads Passive Gas Tube



For CBP Organic Solvent

This omni-directional passive gas sampling agent is filled with petroleum carbon beads. It is enclosed in a glass container, so it is a low blank type. This tube is suitable for screenings of indoor environment measurements.

## ■ Specifications

| Item Code      | 080150-097                          |
|----------------|-------------------------------------|
| Usage          | Nonpolar organic solvent collection |
| Filler         | Active carbon beads                 |
| Filling Amount | 300mg                               |
| Quantity       | 10pcs/set                           |

## DNPH Passive Gas Tube



For Aldehydes and Ketones

This passive sampler does not require a pump. It consists of a dispersion tube filled with silica gel (sorbent) impregnated with DNPH. During analysis, it becomes a Luer taper that a syringe can connect to directly, so extraction is easy.

## ■ Specifications

| Item Code      | 080150-075                                                |
|----------------|-----------------------------------------------------------|
| Usage          | For Aldehydes and Ketones                                 |
| Filler         | 2,4-dinitrophenylhydrazine (DNPH), Impregnated silica gel |
| Filling Amount | 200mg                                                     |
| Quantity       | 10pcs/set                                                 |

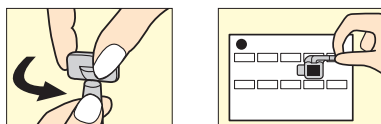
## Simplified Water Quality Testing Kit Simple Pack



Free Residual Chlorine

Simple Pack® was developed based on the colorimetric method used in official measurement methods such as JIS methods and standard methods of analysis for hygienic chemists. Results can be obtained simply by aspirating sample water into a Simple Pack®, mixing it by shaking and comparing the color against the provided standard color chart.

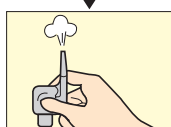
### How to Use



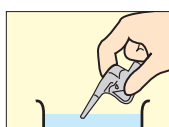
Hold nozzle between fingers and twist knob off.



Shake pack well to mix the active chemical ingredient with test solution. After 10 seconds compare resulting solution color to color chart to determine density level.



Squeeze pump once by fingers to remove any trapped air from within pump.



Dip nozzle into test solution. Squeeze pump then slowly release your fingers drawing the solution.

### Specifications

| Measured Item                                      | Measurement Range                 | Color Reaction                   | Item Code  | Quantity  |
|----------------------------------------------------|-----------------------------------|----------------------------------|------------|-----------|
| pH5                                                | pH 5.0 to 9.5                     | Orange→yellow→green→blue         | 080520-302 | 48pcs/set |
| pH36                                               | pH 3.6 to 6.2                     | Yellow→green→blue→purple         | 080520-303 |           |
| pH48                                               | pH 4.8 to 8.2                     | Orange→yellow→green→blue         | 080520-305 |           |
| Free Residual Chlorine                             | 0.1 to 5mg/L                      | Pale pink→dark pink              | 080520-306 |           |
| (Total) Residual Chlorine                          | 0.1 to 5mg/L                      | Pale pink→dark pink              | 080520-307 |           |
| Residual Chlorine 100                              | 5 to 100mg/L                      | Light yellow→yellow→yellow ochre | 080520-315 |           |
| Residual Chlorine 300                              | 50 to 300mg/L                     | Yellow→brown                     | 080520-316 | 24pcs/set |
| Nitrous Acid<br>*Nitrite Ions<br>*Nitrite Nitrogen | 0.02 to 1mg/L<br>0.006 to 0.3mg/L | Pale pink→pinkish red            | 080520-308 |           |
| Nitric Acid<br>*Nitrite Ion<br>*Nitrate Nitrogen   | 1 to 45mg/L<br>0.2 to 10mg/L      | Pale pink→light red              | 080520-322 |           |
| Free Cyanide                                       | 0.02 to 2mg/L                     | Light blue→purple                | 080520-309 |           |
| Iron (II)                                          | 0.3 to 10mg/L                     | Light orange→orange              | 080520-310 |           |
| Ion (Fe <sup>2+</sup> +Fe <sup>3+</sup> )          | 0.3 to 10mg/L                     | Light orange→orange              | 080520-311 | 48pcs/set |
| Copper Cu                                          | 0.5 to 10mg/L                     | Light brown→brown                | 080520-312 |           |
| Fluorine F                                         | 0 to 5mg/L                        | Reddish purple→purple            | 080520-313 |           |
| Hexavalent Chromium Cr                             | 0.05 to 2mg/L                     | Pale pink→reddish purple         | 080520-317 |           |
| Total Hardness                                     | 0 to 200mg/L                      | Pale pink→reddish purple         | 080520-318 |           |
| Manganese                                          | 0.5 to 20mg/L                     | Pale pink→pinkish red            | 080520-319 |           |
| Phosphate                                          | 0.2 to 10mg/L                     | Light blue→dark blue             | 080520-321 |           |

## Simplified Water Quality Testing Kit Simple Pack



Mini Series

This simplified water quality testing kit Simple Pack comes in a small box containing 6 pieces. Each pack is individually packaged with desiccant, so it can be carried easily. As this 6-piece package is reasonable, it is convenient if you do not use the product very frequently or when using Simple Pack for the first time.

### Specifications

| Item Code   | Measured Item          | Quantity |
|-------------|------------------------|----------|
| 080520-3062 | Free Residual Chlorine | 6pcs/set |
| 080520-3112 | Iron                   | 6pcs/set |
| 080520-3182 | Total hardness         | 6pcs/set |

## Simplified Water Quality Testing Kit Simple Pack



Water Check Ranger Series



This simplified water quality testing kit "Simple Pack" includes items for environmental education. The items are explained in an easy-to-understand story-like format. Each pack is individually packaged with desiccant, so it can be carried easily.

### Specifications

| Item Code  | Measuring Object | Measured Item                                                   | Quantity                                  |
|------------|------------------|-----------------------------------------------------------------|-------------------------------------------|
| 080520-461 | Tap Water        | pH5, Free residual chlorine, Nitrous acid, Iron, Total hardness | 2pcs each for five items (Total 10cs/set) |
| 080520-463 | Acid Rain        | pH36                                                            | 5pcs/set                                  |

## Handy Water Meter AQUAB Series



Model AQ-201/ AQ-202

The AQUAB series handy water quality meters are easy-to-operate water quality photometers. As the concentration conversion curves are pre-programmed, measurements can be performed immediately after zero-point adjustment using sample water. Up to 99 measurement values can be stored in memory.

## ■ Specifications

|                       |                                                                                      |                                                                |
|-----------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------|
| Item Code             | 080560-201                                                                           | 080560-202                                                     |
| Measurement Item      | Residual chlorine/ Total residual chlorine                                           | High-concentration residual chlorine (Total residual chlorine) |
| Model                 | AQ-201                                                                               | AQ-202                                                         |
| Measurement Range     | 0.00 to 2.00 mg/L                                                                    | 0 to 300mg/L                                                   |
| Measurement Principle | Absorption spectrophotometry using DPD reagents                                      | Absorption spectrophotometry using iodine reagents             |
| Light Source          | LED                                                                                  |                                                                |
| Test Water Amount     | 10mL                                                                                 |                                                                |
| Size                  | W70×D142×H63 mm                                                                      |                                                                |
| Weight                | Approx. 250g                                                                         |                                                                |
| Power Supply          | Size AAA alkaline batteries x4                                                       |                                                                |
| Accessories           | Carrying case, Sample cells (glass) x2, Size AAA alkaline batteries x4, Quick manual |                                                                |

## ■ Consumables and Options

|           |                                                                 |                                                                 |                                                                         |                                                    |                                                 |
|-----------|-----------------------------------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------|
| Item Code | 080540-501                                                      | 080540-503                                                      | 080560-1021A                                                            | 080520-0058                                        | 080560-2001                                     |
| Item Name | Powder Reagent for Residual Chlorine (DPD Method), 100packs/set | Powder Reagent for Residual Chlorine (DPD Method), 500packs/set | Powder Reagent for Residual Chlorine (High Concentration), 100packs/set | Potassium Iodide, with spoon (20g: about 50 times) | Sample Cell (Glass) for AQ-201/AQ202, 2 pcs/set |

## Residual Chlorine Comparator



DPD Method

This comparator uses a simplified measurement method based on the unique reaction that occurs when a DPD reagent is added to water containing residual chlorine, and the color of the water changes to light reddish purple depending on the amount of residual chlorine. You add the reagent once. (When measuring total residual chlorine, you add reagents twice as the optional potassium iodide is also used.)

## ■ Specifications

|                             |                                                                                                                              |                                     |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Item Code                   | 080540-520                                                                                                                   | 080540-521                          |
| Measuring Method            | DPD (N, N-Diethyl-p-Phenylene Diamine) Method                                                                                |                                     |
| Standard Colorimetry Scales | 0.05 to 2.0mg/L (12 levels)                                                                                                  |                                     |
| Component                   | Residual chlorine comparator with standard colorimetry scales with vinyl case x1, Rectangular test tubes with silicon cap x3 |                                     |
|                             | Without reagent                                                                                                              | With DPD reagent (080540-501) 1 set |

## pH/Residual Chlorine Comparator Kit



pH/Residual Chlorine Comparator Kit with Reagent

Using this product, both pH and residual chlorine can be measured easily when controlling drinking water, water in swimming pool, etc. The BTB/PR method is used for pH, and the DPD method is used for residual chlorine. As the color comparison plate can be removed, it can be changed when its colors are faded.

## ■ Specifications

|               |                   |                                                                                                                                                                                                                                                                                                   |
|---------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Item Code     |                   | 080540-23                                                                                                                                                                                                                                                                                         |
| Measured Item | pH                | BTB method 5.8 to 7.0 (7 levels)<br>PR method 7.2 to 8.4 (7 levels)                                                                                                                                                                                                                               |
|               | Residual chlorine | DPD method 0.05 to 2.0mg/L (12 levels)                                                                                                                                                                                                                                                            |
| Component     |                   | Comparator for measuring the pH of water x1 (with 3 rectangular test tubes and 2 screw cap dropper bottles), Plastic color comparison plate for residual chlorine comparators, DPD method x1, BTB indicator reagent 50 mL x1, PR indicator reagent 50 mL x1, DPD powder reagent for 100 packs/set |

## Turbidity Meter



Model S-100

The turbidity standard solution is added to one of the two color comparison tubes, and the liquid sample is added to the other tube. The volume of liquid is adjusted until the turbidity in the two tubes appears the same, at which point, the turbidity of the sample is determined from a formula.

## ■ Specifications

|           |                                                                                                                     |
|-----------|---------------------------------------------------------------------------------------------------------------------|
| Item Code | 080520-06                                                                                                           |
| Model     | S-100                                                                                                               |
| Component | Color comparison tube x2, Plastic bottle x1, Case x1, Pipette (10 mL) x1, Light shielding box x1, Washing bottle x1 |
| Size      | W162×D120×H450 mm                                                                                                   |

## ■ Options

|             |                                                       |
|-------------|-------------------------------------------------------|
| Item Code   | Item Name                                             |
| 080520-0010 | Turbidity Standard Solution (Polystyrene 100), 100 mL |
| 080520-0012 | Chromaticity Standard Solution (1000), 50 mL          |

## Transparency Meter



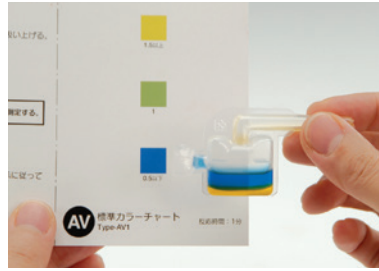
Standard Model

Transparency meters are equipment for measuring the degree of transparency of various types of water. The height (cm) of the water column at which the marker that has sunk to the bottom can be just clearly recognized is used as the degree.

## ■ Specifications

|                       |                                    |
|-----------------------|------------------------------------|
| Item Code             | 080530-052                         |
| Model                 | Standard Model                     |
| Standard              | In accordance with JIS K 0102-1998 |
| Color Comparison Tube | Inner Dia. 31×L320 mm              |
| Size                  | W100×D100×H327 mm                  |

## Simplified Acid Value Testing Kit Simple Pack



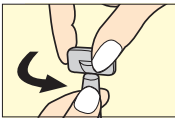
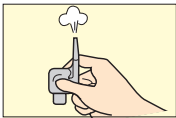
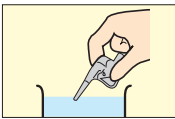
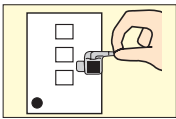
### For Measuring Oil Degradation

This simplified oil testing kit can measure the rancidity of heated oil (plant oil) in a simple procedure. As the test solution is contained in the pack, the acid value can be measured easily by aspirating the oil to be tested into the pack and comparing the color against the provided color chart.

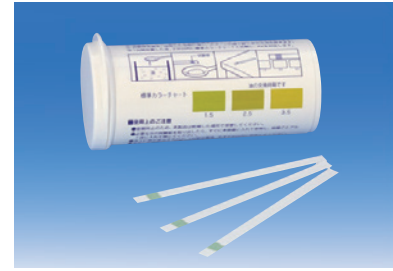
#### ■ Specifications

| Item Code   | Measurement Value                  | Quantity              |
|-------------|------------------------------------|-----------------------|
| 080520-351  | 0.5 or smaller, 1.0, 1.5 or larger | 48 pcs (12pcs/bag x4) |
| 080520-352  | 1.5 or smaller, 2.0, 2.5 or larger | 48 pcs (12pcs/bag x4) |
| 080520-3525 | 2.0 or smaller, 2.5, 3.0 or larger | 48 pcs (12pcs/bag x4) |
| 080520-353  | 2.5 or smaller, 3.0, 3.5 or larger | 48 pcs (12pcs/bag x4) |

#### How to Use

-  Hold nozzle between fingers and twist knob off.
-  Squeeze pump once by fingers to remove any trapped air from within pump.
-  Dip nozzle into test solution. Squeeze pump then slowly release your fingers drawing the solution.
-  Shake pack well to mix the active chemical ingredient with test solution. After 10 seconds compare resulting solution color to color chart to determine density level.

## Acid Value Test Paper



### Oil and Acid Value Test Paper

Using this testing paper, you can easily measure the acid value that indicates the degradation level of oil in a fryer and check the time of replacement. Determination is provided in three levels: 1.5, 2.5, and 3.5. The level can be measured without being heavily influenced by the color of the oil.

#### ■ Specifications

|                   |                          |
|-------------------|--------------------------|
| Item Code         | 080570-55                |
| Measurement Range | 1.5, 2.5, 3.5 (3 levels) |
| Quantity          | 50 sheets/set            |

## Peroxide Value Test Paper



### Peroxide Value Test Paper

This product can directly test the peroxide value of liquid-state, room-temperature edible plant oils such as fatty oil and cooking oil being used. It is extremely effective in checking products in the manufacturing stage and grasping distribution status.

#### ■ Specifications

|                   |                 |
|-------------------|-----------------|
| Item Code         | 080570-811      |
| Measurement Value | 0, 10, 30 to 50 |
| Quantity          | 50 sheets/set   |

## Peroxide Value Test Kit



### Peroxide Value Tester Model 5

You can easily measure the peroxide value of foods processed with oil as well as nuts and seeds. It can significantly reduce work time and measurement costs compared to the official peroxide value measurement procedure (titration method).

- Foods processed with oil/fat that can be measured using the product are below.
- Snack food processed with oil : potato chips, etc.
- Nuts and seeds: peanut, walnut, etc.

#### ■ Specifications

|                       |                                                                                                  |
|-----------------------|--------------------------------------------------------------------------------------------------|
| Item Code             | 080570-85                                                                                        |
| Measurement Range     | 5, 10, 20, 30 meq/kg                                                                             |
| Measurement Principle | Iodo-starch reaction                                                                             |
| Accessories           | Coloring filter paper x100 sheets, Reagent 9 mL, Aluminum foil x250 sheets, Color chart x1 piece |

## Peroxide Value Test Kit



### Peroxide Value Tester Low-Concentration Model

This product is more suitable for measurements of POV 10 or lower than the conventional peroxide value tester model 5 and can be used to check raw ingredients that just arrived or products before being shipped.

- Foods processed with oil/fat that can be measured using the product are the same as ones measured by POV model 5.

#### ■ Specifications

|                       |                                                                                                                                |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Item Code             | 080570-86                                                                                                                      |
| Measurement Range     | 2, 4, 8 meq/kg                                                                                                                 |
| Measurement Principle | Iodo-starch reaction                                                                                                           |
| Accessories           | Coloring filter paper x100 sheets, Reagent 9 mL, Aluminum foil x250 sheets, Color chart (integrated with a container) x1 piece |

## Nitrite Test Paper



### For Food

A nitrite test strip detects nitrite (nitrite ion) in food using the Griess reaction. Soak the strip in food, compare the color against the color comparison table precisely one minute after and check the result. It is suitable for testing ham, sausages and pickles.

#### ■ Specifications

|                   |                             |
|-------------------|-----------------------------|
| Item Code         | 080570-71                   |
| Measurement Value | 0, 5, 10, 30, 50, 100 mg/kg |
| Quantity          | 50 sheets/set               |

## Handy Water Meter AQUAB Series



Model AQ-201P/ AQ-202P

The AQ-201P can measure low-concentration residual chlorine in tap water, etc. in work sites as a food sanitation measure. The AQ-202P can measure the available chlorine concentration (total residual chlorine concentration) of sodium hypochlorite solution and hypochlorous acid water used as sterile water for cooking ingredients and utensils as a food sanitary control measure.

## ■ Specifications

|                       |                                                                                    |                                                                 |
|-----------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Item Code             | 080560-2010                                                                        | 080560-2020                                                     |
| Measurement Item      | Residual chlorine/ total residual chlorine                                         | High -concentration residual chlorine (Total residual chlorine) |
| Model                 | AQ-201P                                                                            | AQ-202P                                                         |
| Measurement Range     | 0.00 to 2.00mg/L                                                                   | 0 to 300mg/L                                                    |
| Measurement Principle | Absorption spectrophotometry using DPD reagents                                    | Absorption spectrophotometry using iodine reagents              |
| Light Source          | LED                                                                                |                                                                 |
| Test Water Amount     | 10mL                                                                               |                                                                 |
| Size                  | W70×D142×H63 mm                                                                    |                                                                 |
| Weight                | Approx. 250g                                                                       |                                                                 |
| Power Supply          | Size AAA alkaline batteries x4                                                     |                                                                 |
| Accessories           | Carrying case, Sample cells (PET) x2, Size AAA alkaline batteries x4, Quick manual |                                                                 |

## CALBOX



Model CB-101

The installation footprint of this device is smaller than a sheet of B5 paper, and it is designed to be kept at 37°C(fixed) in a thermostatic bath. In addition to cultivating bacteria testing sheets, this personal mini incubator can accommodate 10 mini petri dishes (dia. 35 mm) at one time.

## ■ Specifications

|                 |                  |
|-----------------|------------------|
| Item Code       | 080510-32        |
| Model           | CB-101           |
| Set Temperature | 37°C (fixed)     |
| Power Supply    | 100 V AC, 0.5 A  |
| Size            | W240×D160×H82 mm |
| Weight          | Approx. 1 kg     |

## Compact Incubator



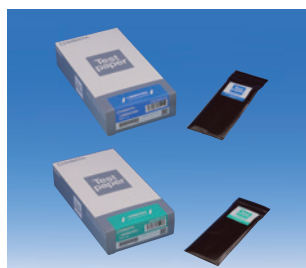
Model SCI-13

This compact incubator is used for culturing micro organism and bacteria for general test of bacteria and contamination index by bacteria and for testing food poisoning by bacteria. It can accommodate up to 12 petri dishes (dia. 100 mm).

## ■ Specifications

|                              |                            |
|------------------------------|----------------------------|
| Item Code                    | 051620-13                  |
| Model                        | SCI-13                     |
| Temperature Adjustment Range | Room temperature +5°C-60°C |
| Setting System               | Analog setting             |
| Display                      | Digital display (LED)      |
| Temperature Control System   | +/-1°C                     |
| Inner Size                   | W310×D205×H200 mm          |

## Bacteria Test Paper



Coliform Group Testing Sheet / General Bacteria Testing Sheet

This simplified test method for bacteria uses specially treated testing sheets. A 1mL liquid sample is dripped onto the sheet, or the sheet is immersed in the sample, and then the bacteria are cultivated in an incubator (at 37°C). After that, the operation consists simply of determining the average number of spots.

## ■ Specifications

| Item Code   | Item Name                   | Quantity       |
|-------------|-----------------------------|----------------|
| 080510-3010 | Coliform Group Test Paper   | 25 sheets/set  |
| 080510-301  | Test Paper                  | 100 sheets/set |
| 080510-3020 | General Bacteria Test Paper | 25 sheets/set  |
| 080510-302  | Test Paper                  | 100 sheets/set |

## Colony Counter



Colony Counter Pen

## ■ Specifications

|                            |                                  |
|----------------------------|----------------------------------|
| Item Code                  | 051280-04                        |
| Display                    | 5-digit digital liquid crystal   |
| Power supply               | 1.5V LR41 button cell            |
| Accessories                | Pen (black), LR41 button cell x1 |
| Display                    | Digital display (LED),           |
| Temperature Control System | +/-1°C                           |



Model CL-570

## ■ Specifications

|                       |                                 |
|-----------------------|---------------------------------|
| Item Code             | 051270-02                       |
| Model                 | CL-570                          |
| Display               | 0000 to 9999 (LED)              |
| Petri Dishes Diameter | Up to 150 mm                    |
| Lens                  | Dia.100 mm, magnification 1.5 x |
| Fluorescent Lamps     | Ring type 30 watt               |
| Power Supply          | 100V AC, 0.5 A                  |
| Size                  | W300×D330×H100 mm               |
| Weight                | 5.5kg                           |

## Indoor Pollution Evaluating System



Model IES-5000

The IES-5000 is measurement instrument developed based on the Japanese Ministry of Health, Labor and Welfare notification—"Act on Maintenance of Sanitation in Buildings" It enables you to measure the six main items related to the air environment, namely airborne dust, air flow, carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), temperature, and relative humidity simultaneously, and create an "Air Environment Measurement Results Report."

### Specifications

|                   |                                  |             |                   |                  |                 |                 |
|-------------------|----------------------------------|-------------|-------------------|------------------|-----------------|-----------------|
| Item Code         | 080610-5002                      |             |                   |                  |                 |                 |
| Model             | IES-5000                         |             |                   |                  |                 |                 |
| Measurement Item  | Airborne dust                    | Temperature | Relative humidity | Air flow         | Carbon monoxide | Carbon dioxide  |
| Measurement Range | 0.000 to 4.000 mg/m <sup>3</sup> | -10 to 60°C | 5 to 95% rh       | 0.05 to 2.00 m/s | 0 to 100 ppm    | 0 to 10,000 ppm |

\*Decibel meters, illuminometers, globe thermometers, and temperature sensors for measuring the temperature 10 cm above the floor are optional.

## Illuminometer



Model CANA-0010

The illuminance is indicated with large digits, there is one switch on the side, and light buttons are used to switch between on, hold, and off. In addition, it is equipped with function that automatically turns it off after approximately 5 minutes. The special cable (optionally available) enables data output to a computer.

### Specifications

|                   |                                            |
|-------------------|--------------------------------------------|
| Item Code         | 080240-0010                                |
| Model             | CANA-0010                                  |
| Standard          | In accordance with Class A of JIS C 1609-1 |
| Measurement Range | 0 to 39,999 lx                             |

## Assmann Aspiratory Psychrometer



Assmann Aspiratory Psychrometer

This psychrometer determines the air temperature and humidity of the ambient air.

- Temperature is measured at constant wind velocity of 3.7m/s.
- Wind-up type and electromotor type are available.
- This instrument is suitable for meteorological observation and environmental measurements in buildings and factories.
- The maintenance is easy, so long hours of both indoor and outdoor measurements are possible.

### Specifications

| Item Code  | Drive System                                              |
|------------|-----------------------------------------------------------|
| 080310-01  | Wind-up Type Set                                          |
| 080310-02  | Wind-up Type, Main Body Only                              |
| 080310-06  | Electromotor Type Set with JMA Certificate                |
| 080310-061 | Electromotor Type Set without JMA Certificate             |
| 080310-07  | Electromotor Type, Main Body Only with JMA Certificate    |
| 080310-071 | Electromotor Type, Main Body Only without JMA Certificate |

## Anemometer



Model ISA-700

This is a handy and low cost thermal anemometer. It is capable of high accuracy wind speed measurements with the fixed temperature differential method as the driving principle for wind speed detection.

### Specifications

|                                |                                            |
|--------------------------------|--------------------------------------------|
| Item Code                      | 080280-7002                                |
| Model                          | ISA-700                                    |
| Measurement Range              | 0.05 to 10.00 m/s                          |
| Temperature Compensatory Range | 5 to 50°C                                  |
| Power Supply                   | Size AAA batteries x4, AC adapter (Option) |
| Size                           | W76×D27×H135 mm                            |
| Weight                         | Approx. 210g (including batteries)         |

## Wireless Anemometer



Model ISA-101

The ISA-101 has a separate probe. On-site operability is improved by Bluetooth communications, and the air speed and temperature can be checked at hand using the special large screen display unit.

### Specifications

|                                 |                                                                                                                                          |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Item Code                       | 080280-101                                                                                                                               |
| Model                           | ISA-101                                                                                                                                  |
| Wind Velocity Measurement Range | 0.01 to 30 m/s                                                                                                                           |
| Temperature Measurement Range   | -20 to 70°C                                                                                                                              |
| Power Supply                    | Probe: Size AA batteries x2, or USB cable through the display unit when connected by cable<br>Display unit: Size AA batteries x2, or USB |
| Size                            | Probe(grip): W25×D38.5×H148 mm<br>Probe (Sensor): Dia. 8(Dia. 10 max.)×177 to 608mm<br>Display unit: W62×D23.5×H100 mm                   |
| Weight                          | Probe: Approx. 150g (incl. batteries)<br>Display Unit: Approx. 125g (incl. batteries)                                                    |

## Mask Fitting Tester



Model MT-05U

The MT-05U is a measuring device for determining the dust penetration rate (leak ratio %) into a mask from the results of tallying the number of particles inside and outside the mask respectively. It can be used in medical sites, construction sites and other worksites.

### Specifications

|                   |                                                                                                  |
|-------------------|--------------------------------------------------------------------------------------------------|
| Item Code         | 090200-081                                                                                       |
| Model             | MT-05U                                                                                           |
| Measurement Range | Counting range: 0 to 9999999 counts<br>Leakage percentage: 0 to 100%<br>Fit factor: 1 to 1000000 |
| Power Supply      | 100 to 240V AC, Approx. 0.5A                                                                     |
| Size              | W210×D240×H232 mm (excluding protrusions)                                                        |
| Weight            | Approx. 3kg                                                                                      |

### Options

|           |                    |                         |
|-----------|--------------------|-------------------------|
| Item Code | 080200-075         | 080200-0751             |
| Item Name | Particle Generator | Salt Tablet, 100pcs/set |

Specifications, and appearance described in this document are based on information as of Aug, 2021. They are subject to change without notice for improvement of the product. The color of actual products may differ to that of color in this data sheet.