

#### **Environmental Measurement**

For Indoor Air Quality control; to measure low level toxic substances in indoor and working environments

AIR SAMPLER S-23E

**AIR SAMPLER S-27** 





**AIR SAMPLER ASP-250** 





#### **SPECIFICATIONS**

MODEL	S-23E
Air Pump	Diaphragm
Maximum suction pressure	More than 40 kPa (at full load)
Gas Sampling control mode	Time mode: Automatic pump stop by timer presetting (Accumulated volume indication available) Accumulated mode: Automatic pump stop by accumulated volume (Suctioning time indication available).
Display	Digital display by LCD
Measuring and display at momentary flow	Flow setting by needle valve Measuring range: 0.00-1.10L Minimum display: 0.01L
Measuring and display at sampling flow	Measuring range: 0.00-9999L Minimum display: 0.01L
Time setting range (Resolution)	Measuring range: 0.00-99.59 (hour, minute) Minimum display: 1 min Remaining time display: Display subtraction/addition (Preset value when shipped from factory is subtraction)
Operating Temperature Range	0-40°C
Power Source	AC100V 50/60Hz (AC220V as an option)
Main body dimensions	130(W)x270(H)x283(D)mm
Main body weight	Approx. 4kg
Height for measuring	930mm (without detector tube and connecting tube) 1,000-1,050mm (with detector tube)

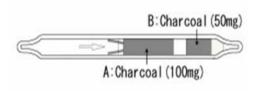
MODEL	S-27
Air Pump	Double diaphragm
Range of flow volume setting	0.100-0.500L/min
Range of flow volume display	0.000-0.750L/min
Flow volume ranges	0.2L/min: 15-40kPa, 0.3L/min: 10-30kPa, 0.4L/min: 5-25kPa, 0.5L/min: 5-20kPa
Flow volume accuracy	±5% against setting flow volume
Time setting/display	Year/Month/Date/Time
Built-in flow meter	Mass-flow sensor
Operating Temperature Range	0~40°C
Humidity	10-90%RH (without condensation)
Power Source	Lithium ion secondary battery (option) 8xAlkaline AA size battery AC adaptor (option)
Main body dimensions	145(W)x95(H)x67(D)mm (without protection part)
Main body weight	Approx. 0.65kg (including Alkaline AA size battery)
Standard accessory	Model DB-10N Battery unit for Alkaline battery Suction holder for low flow volume



### **SPECIFICATIONS** (continued)

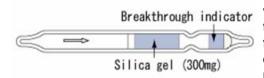
MODEL	ASP-250
Flow volume setting range	10-250mL/min (constant flow function)
Flow volume accuracy	Either±2mL/min or within ±5% against flow volume setting, whichever bigger
Range of constant flow volume	10mL/min: 0-2.3kPa 50mL/min: 0-2.2kPa 100mL/min 0-1.9kPa 150mL/min: 0-1.7kPa 200mL/min: 0-1.4kPa 250mL/min: 0-1.1kPa
Accumulated flow volume indication range	0.00-99.99L (at 25 degrees C conversion)
Accumulated time indication range	00:00:99:59 (hour: minutes)
Timer function	Set start time and end time
Flow volume calibration function	Flow calibration at any rate is adjustable by using a flow meter for calibration
Operating temp. and humidity	0-40 degrees C; 90%RH (non condensing)
Power supply	2 x size AA battery Alkaline dry battery or Nickel metal-hydride battery
Operating time	With Alkaline dry battery (at 20 degrees C) At 50mL/min: approx. 8 hours At 100mL/min: approx. 5 hours With Kitagawa tube no. 800B charcoal tube
Size and weight	120(W)x68(D)x19(H)mm: 166g (including 2 x dry batteries)

#### 800B



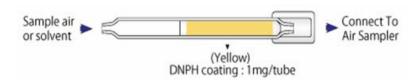
800B is designed for sampling and measurement of organic solvents in air, using a Personal Air Sampler or AP20 Sampling Pump, for industrial hygiene (conforms to NIOSH requirements). An air sample containing organic solvent vapour is passed through a charcoal-filled glass tube, which adsorbs the solvent. The adsorbed solvent is recovered with desorption solvent leeching followed by gas chromatographic analysis. Useful for sampling organic solvent vapours.

801



801 is designed for sampling organic solvents in environmental air, particularly for polar solvents such as Methanol and Acetone which cannot be sufficiently adsorbed onto charcoal. Organic solvent vapour is adsorbed onto the silica gel while passing through the tube. Adsorbed solvent is recovered with a desorption solvent followed by gaschromatographic analysis. When sample air corresponding to 60 to 80% of the amount causing breakthrough is passed, the colour begins to change from blue to pink by the moisture from the silica gel side predicting breakthrough.

The special sorbent tube contains silica gel crystals treated with 2,4-Dinitrophenylhydrazine (DNPH), designed to collect Formaldehyde, MEK and other Aldehydes and Ketones in indoor and industrial atmospheres. \*Capacity: 2.3µmoL as a Carbonyl compound (70µg in case of Formaldehyde). In case of an analysis of normal indoor air, 0.005 to 5ppm Formaldehyde can be analysed at 6-10L sampling.



The special sorbent tube contains silica gel crystals treated with 2,4-Dinitrophenylhydrazine (DNPH), designed to collect Formaldehyde, MEK and other Aldehydes and Ketones in indoor and industrial atmospheres. The 2<sup>nd</sup> section tells you the breakthrough of the 1<sup>st</sup> section. \*Capacity: 1.7µmoL as a Carbonyl compound (50µg in case of Formaldehyde). In case of an analysis of normal indoor air, 0.004 to 3.5ppm Formaldehyde can be analyzed at 10L sampling.

