



### AIS-1/2/3, Air Samplers

#### Application:

Widely used in pharmaceutical company, milk product plant, clinical operation room, fermentation industry et al, where microbial contamination need to be strictly monitored and controlled. Also it is applicable in institutes that need study the air microbial condition.

#### How to use:

- Soak medical absorbent cotton in 75% ethanol, and use it to swab air sampler surface, Petri dish pedestal and sampling head et al.
- Start the sampler and let it work not less than 5 minutes, making above mentioned disinfectant residue evaporate.
- According to cleanliness requirements to set sampling parameters, then put Petri dish (with medium) inside, & cover the multi-hole sampling head.
- Put the air sampler on flat surface 0.8-1.5m above the ground, and then start it begin sampling.

#### Features:

- **Automatic air flow compensation:** With built in real time air flow monitor sensor, automatically compensate air flow, avoid air flow divergence caused by medium volume in Petri dish et al. (AIS-3)
- **Constant sampling speed:** Sampling opening wind speed almost same with clean room wind speed, which more accurately reflect microbial concentration of the clean room, and optimizes impact speed, making false positive result get controlled and guarantees microbial sampling efficiency.
- **User friendly interface:** Simple keypad making menu navigation easy, with all sampling information clearly displayed on LCD. The LCD can also monitor sampling amount (0.01-6.0 m<sup>3</sup>). And user can easily set sampling place code, sampling rate, language, time etc.
- **High efficiency:** Not need to buy and use special test paper or filter membrane.
- **Sampling direction adjustable:** Sampling head adjustable from horizontal to vertical, can meet multi-angle sampling requirements. Also it is light enough to hold while sampling, or can be mounted on a tripod (tripod is optional by order).
- **Data traceability:** Every sampling run generates a unique record, which is stored in the unit (holds up to 2000 records). The data is easily accessed and read on the LCD. For AIS-2 and AIS-3 sampler, also built in software which allows data to be downloaded to computer for reporting, printing and analysis.
- **Long time working:** When fully charged, it can work up to 15 hours continuously using battery, which is high volume rechargeable polymeric lithium battery, it has no memory effect, is safe and durable.
- **95% sampling efficiency:** Validation work according to BS EN ISO 14698-1:2003 Annex B and Annex C, as carried out by an independent laboratory, which has shown the air sampler have a physical efficiency of 95% for particles 0.8 to 19.0 micron in size.

#### Principle:

This microbial air sampler works based on Andersen collision principle. Air is aspirated (at a fixed speed for variable times) through small holes in the instrument's head. The resulting laminar air flow is directed onto the surface of an agar plate. At the end of the sampling cycle, the plate is removed & incubated and the visible colonies are then counted for an assessment of the level of contamination.

Model	AIS-1	AIS-2	AIS-3
<b>Air flow</b>	100 liter/min		
<b>Impactor nozzle number</b>	300		
<b>Air sample volume</b>	10~6000 liter		
<b>Air flow sensor</b>	No	No	Automatically compensate
<b>Data transfer</b>	No	Using AIS Sampler software	
<b>Applicable Petri dish</b>	Φ90mm		
<b>Error range</b>	±2.5%		±2%
<b>Weight</b>	2.6Kg		
<b>Dimension</b>	110×135×330mm		
<b>Cover material</b>	Silvery, bright blue aluminum alloy		
<b>Screen</b>	LCD, Chinese and English language		
<b>Battery</b>	7.4V rechargeable polymeric lithium battery (can use up to 15 hours)		
<b>Charger</b>	110~240V, 50~60HZ (Universal voltage lithium battery charger)		