

# BAS-PRO

## BioAerosol Sampler-Professional



### CAPABILITY & FEATURE

- Highly portable, impaction based microbial air sampler
- 28.3LPM, 100LPM, 200LPM low rate pre-selectable
- Built in, high efficiency exhaust air filter
- Complies with ISO 14698-1 and meets EU GMP Annex 1

## PRODUCT INTRODUCTION

- Sealed 316L stainless steel enclosure protects against moisture, dust and chemical ingress, resistant to disinfectants commonly used in cleanrooms.
- Based on the principle of Andersen impact method, air is impacted on the agar surface through the perforated cover at a speed of nearly 21m/s.
- In the event that there's a change in inlet pressure or resistance, built-in high precision mass flowmeter that will detect the air flow automatically and adjust the blower speed in real-time with millisecond frequency to ensure  $\pm 4\%$  (28.3L/min) ,  $\pm 2.5\%$ (100L/min) and  $\pm 3\%$  (200L/min) flow accuracy.
- Built in HEPA filtered exhaust prevents re-contamination from the environment to the end product.

## SAMPLING

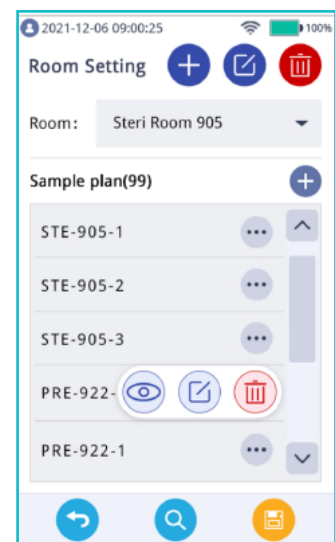
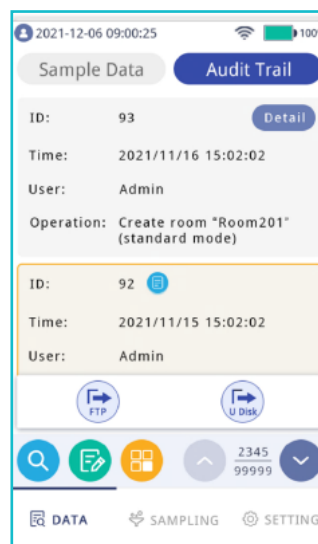
### DISTINCT AND DIRECT

- Small size, easy to carry and place
- 5.0 "Rapid response touch screen
- Intelligent sampling mode enables continuous, cyclic and remote sampling

## DATA

### SIMPLE AND FLEXIBLE

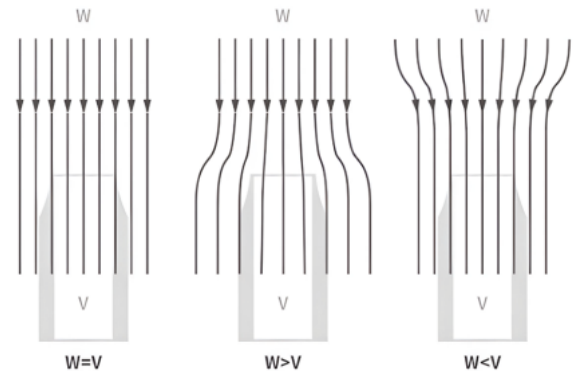
- Available audit trails provide a record of all critical events that occur on the instrument.
- One-click report export and printing.
- Wireless connection with the APC and BAMS to support automatic sampling.



## PRODUCT APPLICATION

### ISOKINETIC SAMPLING

When performing isokinetic sampling, the sampler is designed so that the airflow direction into the inlet of the sampling head is consistent with the average velocity of the unidirectional flow through the sampling head.



The flow velocity above the sampling head is 0.4m/s, consistent with isokinetic sampling.

$V$  = Sampling speed of sampling head

$W$  = Speed of unidirectional flow

### REMOTE SAMPLING (UP TO 8M)

Used for sampling in an isolator, biological safety cabinet, horizontal laminar flow clean workbench and other significant zones.



Remote sampling head

Vertical flow sampling

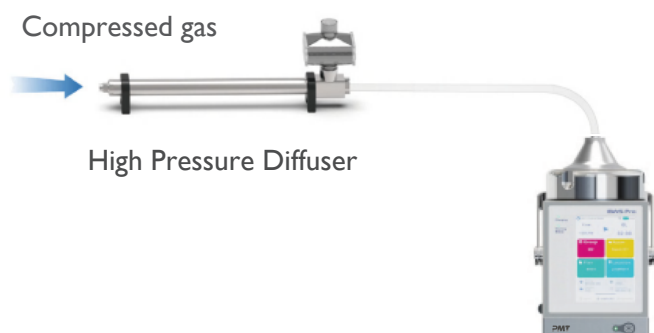


Remote sampling head

Horizontal flow sampling

### COMPRESSED GAS SAMPLING

Compressed gas is decompressed to atmospheric pressure by the High Pressure Diffuser (HPD) and transported to the BioAerosol Sampler-Professional for sampling.



## SPECIFICATION SHEET

| Specification                             |                                                                                                                                  |                             |                                | BioAerosol Sampler-Professional   BAS-Pro |                                |  |  |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------|-------------------------------------------|--------------------------------|--|--|
| Flow                                      | 28.3L/min ±4%                                                                                                                    |                             | 100L/min ±2.5%                 |                                           | 200L/min ±3%                   |  |  |
| Flow rate control                         | Built-in mass flow meter                                                                                                         |                             |                                |                                           |                                |  |  |
| Sampling plan                             | 20,000 groups, 20,000 rooms, 500 locations for each room, up to 20,000 locations                                                 |                             |                                |                                           |                                |  |  |
| Sampling volumes                          | 1-6,000L                                                                                                                         |                             |                                |                                           |                                |  |  |
| Delay                                     | 0-23 hours 59 minutes 59 seconds                                                                                                 |                             |                                |                                           |                                |  |  |
| Cycles                                    | 1-999 cycles                                                                                                                     |                             |                                |                                           |                                |  |  |
| Interval                                  | 00:00:00, 00:00:05-23 hours 59 minutes 59 seconds                                                                                |                             |                                |                                           |                                |  |  |
| Sampling head                             | Φ 0.32 mm*280 holes (28.3LPM)                                                                                                    |                             | Φ 0.60 mm*280 holes (100LPM)   |                                           | Φ 0.70 mm*400 holes (200LPM)   |  |  |
|                                           | Anodized Aluminum (316L stainless steel available, customizable sampling head)                                                   |                             |                                |                                           |                                |  |  |
| D50                                       | 0.79μm (28.3LPM; Φ 0.32 mm*280 holes); 1.08μm (100LPM; Φ 0.60 mm*280 holes); 1.15μm (200LPM; Φ 0.70 mm*400 holes)                |                             |                                |                                           |                                |  |  |
| HEPA                                      | Exhaust HEPA filter efficiency > 99.999% @ 0.3μm                                                                                 |                             |                                |                                           |                                |  |  |
| Weight / Dimenssions (HXWXD)              | Weight: 3.6kg(7.9lbs)(with battery); Battery weight: 0.3Kg(0.7lbs); Dimensions: 186×115×204mm; 7.32×4.53×8.04in(without footmat) |                             |                                |                                           |                                |  |  |
| External surface                          | 316L stainless steel                                                                                                             |                             |                                |                                           |                                |  |  |
| Power                                     | AC 100-240V, 50 Hz/60 Hz                                                                                                         |                             |                                |                                           |                                |  |  |
| Battery                                   | 10.8V, 6800mAh rechargeable lithium battery                                                                                      |                             |                                |                                           |                                |  |  |
|                                           | Battery last ≥7 hours (28.3LPM)                                                                                                  |                             | Battery last ≥7 hours (100LPM) |                                           | Battery last ≥3 hours (200LPM) |  |  |
| Communication                             | USB, WIFI                                                                                                                        |                             |                                |                                           |                                |  |  |
| Application extension                     | Wireless connection with the APC and BAMS to support triggerd sampling                                                           |                             |                                |                                           |                                |  |  |
| Data storage                              | 20,000 sets of records                                                                                                           |                             |                                |                                           |                                |  |  |
| Alarm                                     | LED lighting and beep                                                                                                            |                             |                                |                                           |                                |  |  |
| Display                                   | 5"capacitive touch screen                                                                                                        |                             |                                |                                           |                                |  |  |
| Language                                  | English, Chinese                                                                                                                 |                             |                                |                                           |                                |  |  |
| Calibration frequency                     | Annual calibration is recommended                                                                                                |                             |                                |                                           |                                |  |  |
| Operation conditions                      | Temperature: 5°C-35°C(41°F-95°F), 5-90% RH non-condensing                                                                        |                             |                                |                                           |                                |  |  |
| Storage conditions                        | Temperature: 0°C-40°C(32°F-104°F), 5-95% RH non-condensing                                                                       |                             |                                |                                           |                                |  |  |
| Safety                                    | EN 61010-1:2010+A1:2019, EN 61326-1:2013, EN IEC 61326-1:2021, EN 61000-6-1:2007, EN 61000-6-3:2007+A1                           |                             |                                |                                           |                                |  |  |
| Warranty                                  | 24 months (calculated from the date of product activation or six months after the date of manufacture, whichever comes first)    |                             |                                |                                           |                                |  |  |
| Name                                      |                                                                                                                                  | Model                       |                                | Flow rate                                 |                                |  |  |
| BioAerosol Sampler-Professional   BAS-Pro |                                                                                                                                  | C212I                       |                                | 28.3LPM; 100LPM; 200LPM                   |                                |  |  |
| Sampling Head                             |                                                                                                                                  | Order No. (Stainless steel) |                                |                                           |                                |  |  |
| Φ 0.32mm*280 holes (28.3L/min)            |                                                                                                                                  | J04A010150b                 |                                |                                           |                                |  |  |
| Φ 0.60mm*280 holes (100L/min)             |                                                                                                                                  | J04A010151a                 |                                |                                           |                                |  |  |
| Φ 0.70mm*400 holes (200L/min)             |                                                                                                                                  | J04A010152a                 |                                |                                           |                                |  |  |