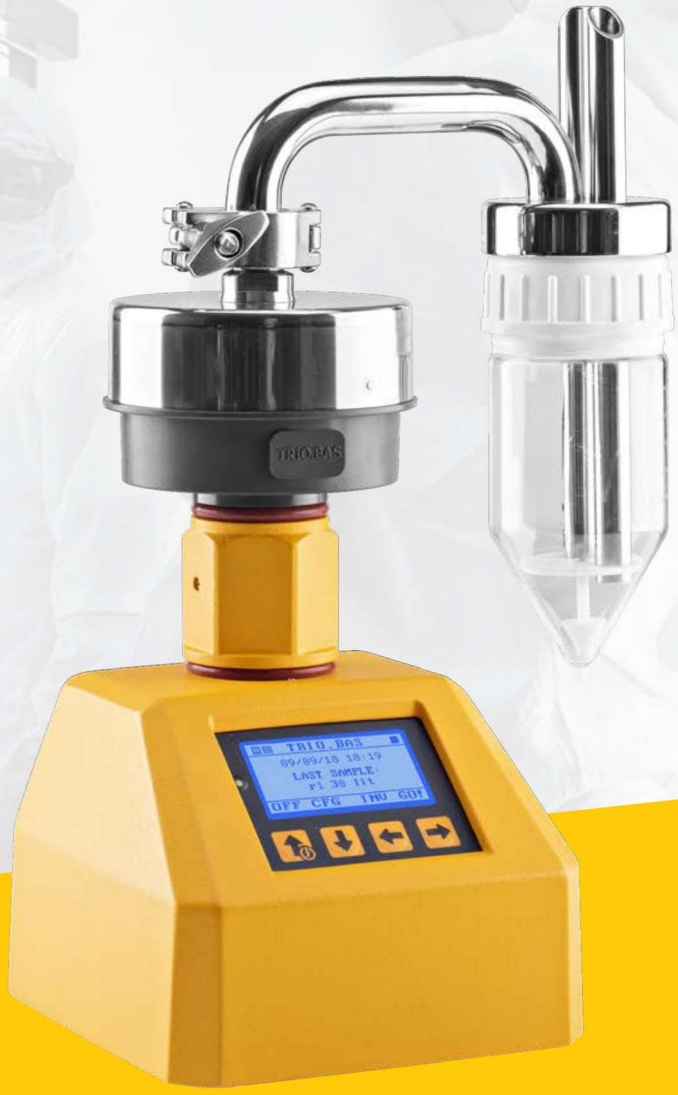
AIRBIO ONE RAPID-VIRUS

TRIO.BAS™

AIRBIO ONE RAPID-VIRUS instrument is for airborne viable particle sampling.
It is specifically designed for total pathogen surveillance of bacteria, fungi, yeast and viruses.
The instrument has two options:

- **Use to collect samples in liquid for subsequent rapid analytical identification steps by PCR, etc.**
- **Use with the traditional impact on agar culture media plate method to count the colonies (CFU).**



Notable Features Include:

- Collection unit is completely sterilizable
- The tri-clamp stainless steel tube system facilitates cleaning and sterilization
- Liquid sampling permits rapid methods (e.g.:PCR), while traditional agar sampling requires incubation of media plates to obtain sample results.

TRIO.BAS®
BIOLOGICAL AIR SAMPLER

HARDY DIAGNOSTICS
A Culture of Service™

Description

The collection of microorganisms and viruses on culture media requires adequate incubation time prior to reporting results. Much faster results are achievable when applying the liquid collection method included in the AIRBIO ONE RAPID-VIRUS instrument.

This faster method has important advantages when used in the following fields:

- Industrial segments (pharma, food, beverage, etc.): for quick reaction to address contamination
- Military branches: for timely responses to possible biological attacks
- Hospitals: to hasten the correct pharmacological product and treatment for patients
- Public sector (school, restaurant, bar, underground, train, municipality buildings, etc.): for disease/pandemic surveillance in public buildings and transport

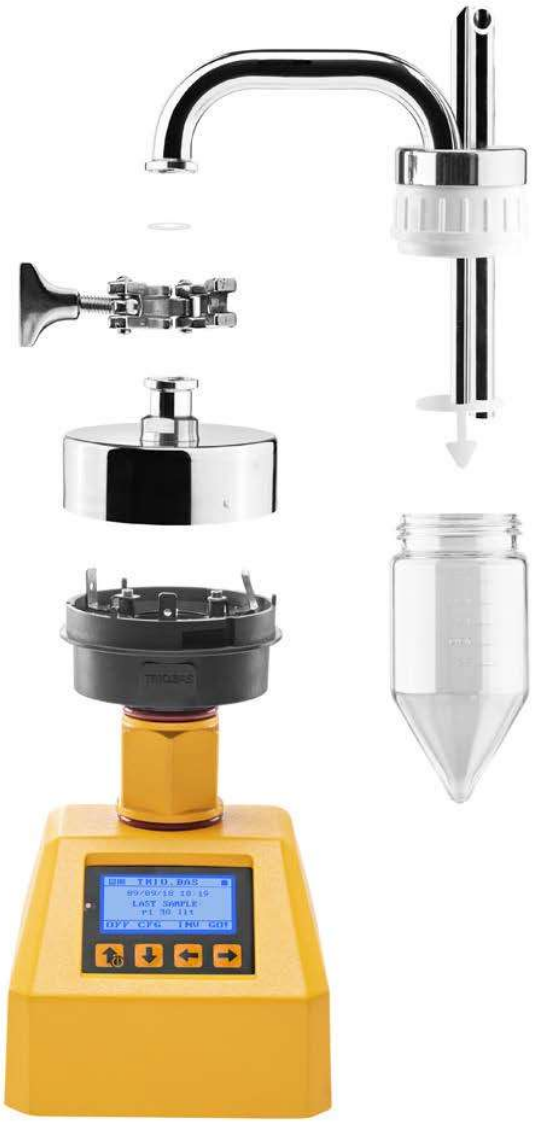
Overall, the AIRBIO ONE RAPID-VIRUS allows prompt assessment of the efficacy of disinfection protocols.

This instrument is the result of the European NATO project EUCLID CEPA 13 "Protection of personnel against pathogenic micro-organisms via air sampling and rapid detection and identification".

Performances

The principle: A known volume of air is aspirated and mixed with a pre-analytical liquid.

- Type of collection: water, buffer, nutrient broth
- For active air flow rate: 200 lit / min
- Display: Four line-LCD screen
- Instrument Dimensions: 12X16X33h cm
- Instrument weight: 1600 grams
- Collection device weight: 200 grams
- Power Source: Battery and main operated
- Operating Conditions: T° 0-45°C / RH 10/60%
- Transport case: IP 65



Identification Codes

Code	AIRBIO ONE RAPID-VIRUS
BAS2448K	AIRBIO ONE RAPID VIRUS system pack includes: AIRBIO ONE RAPID VIRUS system pack includes: AIRBIO ONE instrument; s/s aspirating head and cover for traditional impact on agar; s/s blind head with connection tubes and 4 pp bottles with caps for collecting in liquid; battery charger; robustus carrying case.
	Accessory
BAS183	Polypropylene autoclavable bottle collection devices and caps for liquid (4 bottles per box)

1. Remove the protective cover head from AIRBIO

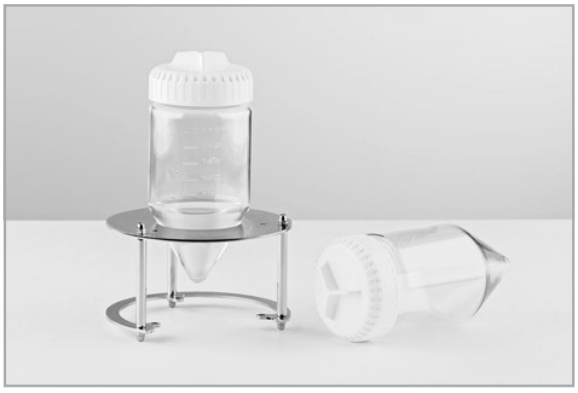
2. Connect the sterile virus system to the aspirating chamber of AIRBIO

3. Disconnect the protective bottle

4. Connect the bottle with the collection liquid

5. The air sampler is ready

6. Start sampling



7. The sample is transferred to the laboratory

8. The sample is analysed via PCR System

Sampling Protocol

01 AIR SAMPLING STRATEGY – PLACE, TIME, FREQUENCY (Refer to validated S.O.P.)

02 AIR SAMPLER PREPARATION - VOLUME OF AIR, TYPE OF LIQUID (according to the analytical laboratory)

03 AIR SAMPLER PROGRAMMING – AIR SAMPLING PROTOCOL (Refer to manual & validated S.O.P.)

04 SAMPLES COLLECTION
a) sampler with sample bottle
b) sampling is started
c) when sample is complete, use a second sterilized cap

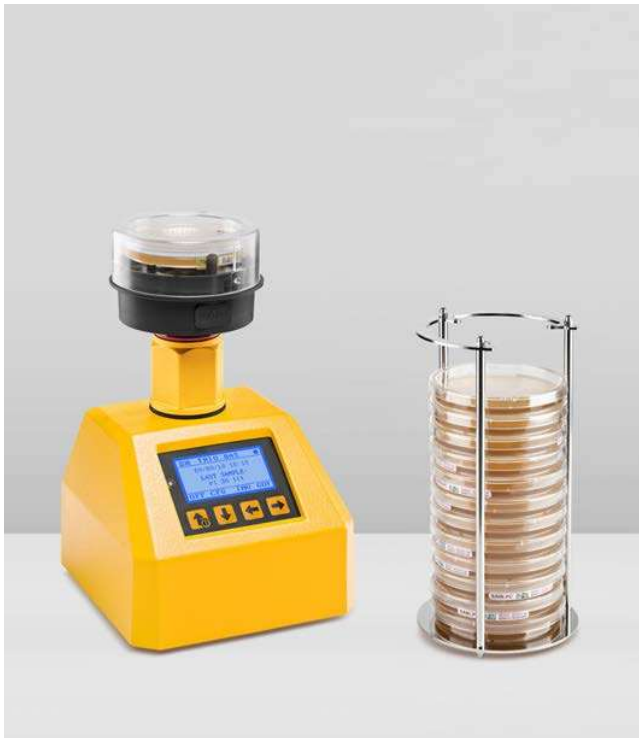
05 SAMPLES – PCR TEST qPCR RT - qPCR

06 AIR SAMPLER DECONTAMINATION – 70% IPA

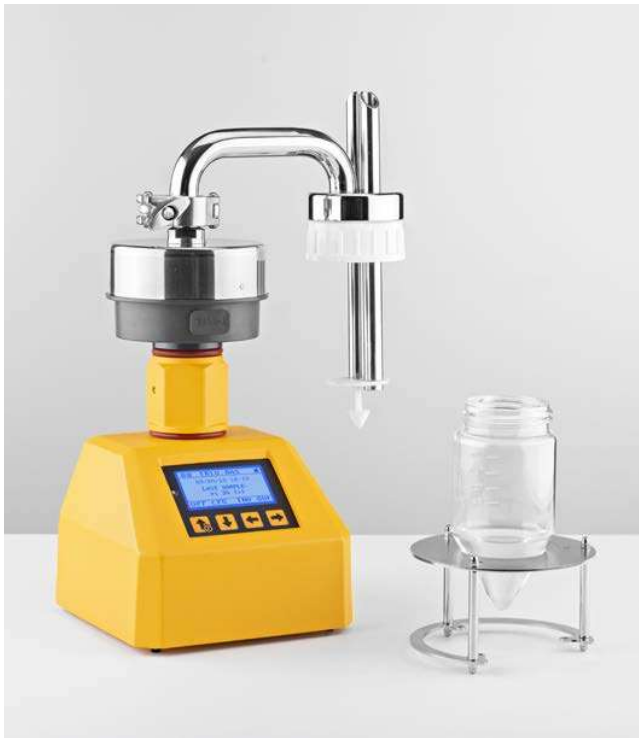
07 AIR SAMPLER READY FOR A NEW TEST

Sampling Strategy

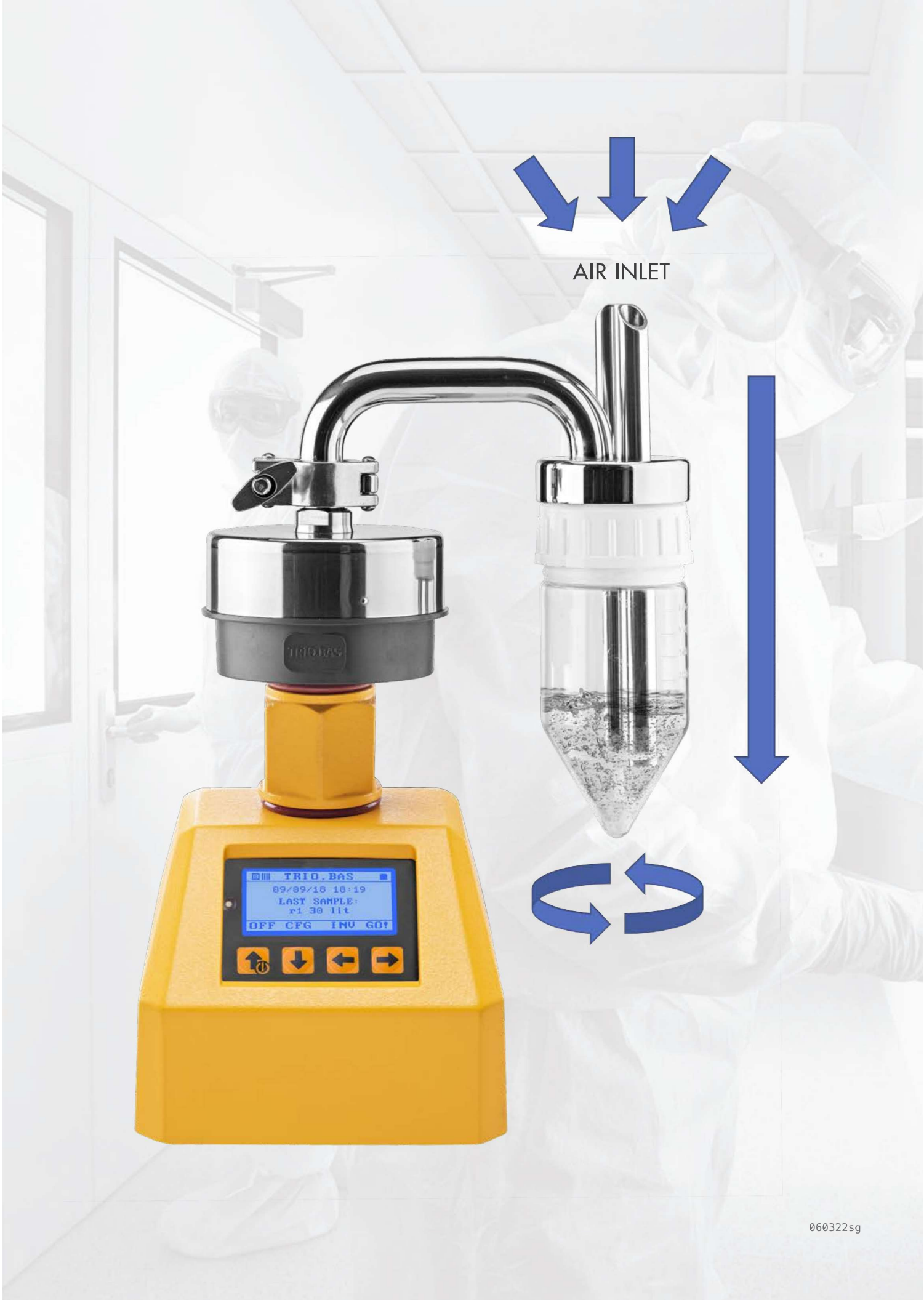
Air Flow rate	• 100 lt/min.
Sampling air volumes	• With an air flow of 100 l/m, 1,000 liters of air is collected in 10 minutes; • The suggested volume of air is 2,000/3,000/4,000 liters; • The air sampler has authonomy of 60,000 liters but can also be connected to the main power.
Sampling place	• The air sampler should be positioned along the direction of the air flow in the room (e.g.: between door and windows, close to the air conditioning system or HVAC). In hospital setting, the sampler should be positioned near to, and at the same height as, the patient bed. In public spaces, position the sampler where the highest concentration of people is expected.
Sampling Protocol	• A specific SOP (Standard Operative Procedure) should be prepared.
Collection liquid	• The most common collection liquid is Phosphate Buffer or Saline Buffer. The volume should be around 30/50 ml. If the aspirating time is long, using the PBS, it could be necessary to add sterile water to avoid salt concentration.
Sample Storage	• The sample should be stored at +4°C if the analytical sample is not processed right away.
Sample transfer	• The sample should be transferred at +4°C unless different indications are requested from the analytical laboratory.
Sample processing	• Several protocols indicate a concentration step (e.g.: by tangential flow filtration).



AIRBIO ONE use with the traditional impact of agar culture plate to count the colonies (CFU)



AIRBIO ONE use for collecting liquid samples for molecular testing methods


AIR INLET
TRIO.BAS
09/09/18 18:19
LAST SAMPLE:
r1 30 lit
OFF CFG INV GO!

060322sg