iVAS ROAM

User Instructions

Quick start guide | Version 1.0

PHARMAGRAPH
Pharmaceutical Monitoring Systems

The iVAS Roam is a battery powered compact microbiological air sampler with integral flow measurement for use in Grade B, C, and D cleanrooms. It is intended to be used to draw air across a 90mm petri-dish at volumetric flow rates of 100 l/min and 50 l/min. Sample information is stored in internal memory to be transferred to a PC later.

The iVAS Roam includes a 2D barcode reader (e.g., for reading petri-dish IDs) and two NFC RFID readers for inputting user and location information.

Safety notices

	**DANGER** Risk of fire or explosion. Plugging the power supply into the AC mains in the presence of flammable substances or vapours can cause a fire. To prevent fire or explosion do not plug the power supply into the AC mains in the presence of flammable substances or vapours.
	**WARNING** California Proposition 65: This product can expose you to chemicals including carbon black, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov
	**WARNING** The iVAS Roam contains moving parts. Risk of operator injury if the device is operated with the aluminium mounting plate not secured in place. To avoid injury do not remove the aluminium mounting plate.
	**WARNING** The iVAS Roam should only be charged using the power supply that it is provided with. PCs or other mains powered connected devices must be either a Class I protectively earthed device with basic insulation, or a Class II device with double/reinforced insulation, with working voltage at least 230V, with a USB Type-C cable rated to at least 20V, 3A.

Radio compliance

This device complies with Part 15 of the FCC Rules, and contains licence-exempt transmitters/receivers that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

No changes shall be made to the equipment without the manufacturer's permission as this may void the user's authority to operate the equipment.

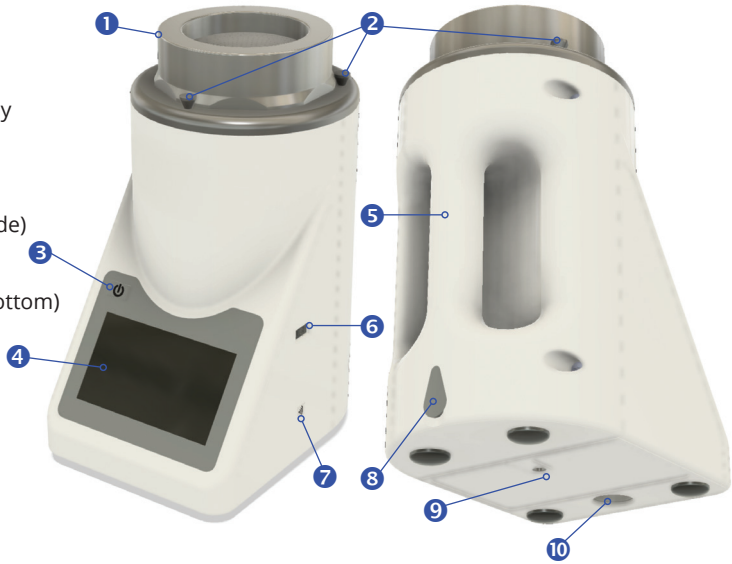
L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Part Identification

1. Sieve Head
2. Bayonet Pins
3. Power Button
4. Touch Screen Display
5. Carrying Handle
6. Barcode Reader
7. NFC RFID Reader (side)
8. USB-C Port
9. NFC RFID Reader (bottom)
10. Exhaust Port



Technical specification

- Flow rate: 100 l/min or 50 l/min ± 4%
- Sample plates: 90mm diameter +1mm/-5mm, 13mm to 17mm height.
- Calculated D50: 1.1µm @ 100 l/min, 1.6µm @ 50 l/min
- 20 programmable sample recipes
- 50 programmable users
- HEPA filtered exhaust
- Internal 14.4V, 96 Wh Li-ion battery
- Power supply: 20V d.c., 45W USB-C
- 4.3” capacitive touch screen display
- 2D barcode reader
- 2x NFC RFID readers
- Operating temperature: 0 to +40°C
- Storage temperature: -20 to +60°C
- Relative humidity: 5 – 95% (non-condensing)
- Altitude: Up to 5000m
- Dimensions: 26 x 20 x 14 cm
- Weight: 2.6kg

Manufacturer

Pharmagraph
(a division of Acquisition Systems Ltd.)
39 Ivanhoe Road
Hogwood Industrial Estate
Finchampstead
Berkshire.
RG40 4QQ
United Kingdom

Initial Power On

To protect the battery life the iVAS Roam is put into a low power mode for shipment, whilst in this mode the Power button on the front of the unit is deactivated.

On receipt of the unit plug the iVAS Roam into the USB-C Charger to bring the unit out of this mode. The unit can then be powered ON and OFF using the Power Button.

Installation

To fit the sieve head, align the flat spots at the bottom of the sieve head with the bayonet pins on the top of the iVAS Roam, then lower the sieve head onto the iVAS Roam and twist until the sieve head is held securely. To remove the sieve head, twist until it becomes loose and lift off.

The iVAS Roam should be carried using the carrying handle. When carrying the iVAS Roam, ensure the sieve head is either properly secured or removed.

Before use, ensure the iVAS Roam is placed on a hard, flat, and level surface. Do not block the exhaust port.

Operation

WARNING

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

The iVAS Roam is turned on and off using the power button.

The iVAS Roam is operated using the Touch Screen Display.

Recharge the battery by connecting a 20V d.c. supply to the USB-C Port. A supply of at least 45W is recommended. All functions of the iVAS Roam can be used while the battery is being charged, but this will increase the time taken to fully charge the battery.

Connect the iVAS Roam to a PC using a USB 3.0 type C to type A cable to transfer data out of the internal memory and to configure the unit. The battery will not be charged when connected to a PC.

Cleaning

WARNINGS

- Do not submerge any components of the iVAS Roam in any liquids
- Do not spray disinfectant solution directly into the iVAS Roam enclosure
- Do not use gases to disinfect the iVAS Roam
- Damage due to the use of an unsuitable disinfectant solution or method is not covered by warranty

The Sieve Head of the iVAS Roam is easily removed from rest of the unit and can be cleaned using an Autoclave. None of the other parts of the iVAS Roam can be cleaned using an Autoclave as this could cause damage.

Before cleaning, disconnect any cables from the USB-C port, ensure the protective cover is pushed into the connector, and power the unit off using the power button.

To clean the external surface of the iVAS Roam, spray a mild non-chlorine based disinfectant solution (such as Klercide Sporicidal Low Residue Peroxide) or 60-80% isopropanol/water solution on a sterile tissue or wipe. Then wipe the iVAS Roam with the damp tissue/wipe.

Use another sterile tissue/wipe to dry the area before using the iVAS Roam.

Maintenance

There are no user serviceable parts. For any maintenance tasks (e.g., battery or filter replacement) please contact Pharmagraph, or one of Pharmagraph's authorised representatives.

iVAS Roam Manager App

Please use this link to install the iVAS Roam Manager App to your PC
https://www.a-s.co.uk/roam/setup.exe

Operator Manual

A full operational manual for the iVAS Roam can be accessed by scanning the QR code below or on the base of the iVAS Roam.

iVAS ROAM

Notes

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