SAMPLERS / COUNTERS

peo MEDICAL

Table of contents

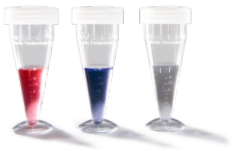
← Back to Table of Contents

Partner Bertin Technologies

Bertin Technologies is a global provider of advanced radiation detection and environmental monitoring solutions, specializing in handheld monitors, personal electronic dosimeters, environmental monitoring systems, and waste & recycling management technologies. Their instruments are designed to meet the rigorous demands of nuclear facilities, emergency response teams, and environmental agencies.

Product offering

Coriolis Consumables – Bertin Instruments

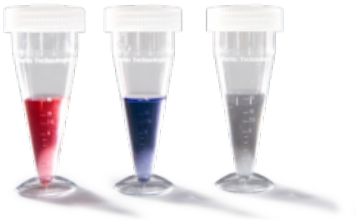


Coriolis RECON – Bertin Instruments

Coriolis Micro – Bertin Instruments

Coriolis Consumables – Bertin Instruments

Coriolis consumables are part of the cyclonic technology: the separation of the airborne particles from the air flow is due to the air flow rate, the air intake geometry, the design of the cones and the collection liquid (surfactant in low concentration).



Introduction video

Consumables

- cones & caps : The cones and caps are designed specifically for the use with the Coriolis µ
- collection liquid doses
- LTM consumables : collection liquid in bottle and tubing kit
- air intake : depending of your research you can adapt the air intake
- standard air intake : air take compatible with all Coriolis for classical samplin
- LTM air intake : dedicated to long time monitoring collection (only compatible with the LTM platform)
- 25 mm connection LTM : designed to propose a hose attachment (testing chamber, confined space …)

Advantages Coriolis consumables

- dedicated cones to perform high efficiency collection
- adaptor to connect to any 25 mm diameter connector
- easy set up with calibrated 15 ml collection liquid dose
- liquid collection compatible with any downstream experiment
- cones available sterile and non-sterile

Please contact our product specialist.

Coriolis RECON – Bertin Instruments

The Coriolis RECON is a portable, light and ruggedized bio-air sampler for biological warfare agents detection, dedicated to CBRN teams or first responders, with quick deployment in case of an event with biological attack suspicion. The Coriolis RECON have been designed to collect large concentrations of aerosols in the breathable range of 0.5 to 10 µm with an air flow rate at 600L/min, thus being more representative of the environment than traditional bio-aerosol samplers.
Thanks to its ability to collect bio-aerosol particles into liquid format, this system can be used with rapid identification techniques for biological agents (immunoassay, PCR, etc.) to provide an early warning of aerosolized biological warfare agents.

Introduction video

Advantages Coriolis RECON

- the most efficient concentration of biological warfare agent
- high air flow rate
- compatible with any downstream experiments for rapid identification
- bio surveillance with long time monitoring – up to 6 hours
- quick deployment in a military / first responder context

Download the datasheet or contact our product specialist.

Coriolis Micro – Bertin Instruments

Coriolis µ is an innovative biological air sampler for bio-contamination assessment, mainly dedicated to air quality control and air quality monitoring in environmental and pollution research, pharmaceutical, food and veterinary industries, biomedical and health environment...
Based on a cyclonic technology, combined to a high air flow rate, Coriolis µ offers the most efficient particles collection in 10 minutes. The biological particles such as toxins, virus, bacteria, molds, pollens, spores are collected and concentrated in a liquid ready to be analyzed with microbiological and cellular and molecular biology methods.

Introduction video

Advantages Coriolis Micro

- the most efficient concentration of biological particles
- high air flow rate & long time monitoring option – up to 6 hours
- compatible with any downstream experiments – divisible samples for several analysis in parallel
- flexible liquid sample output
- no saturation of the collection media for charged environment

Download the datasheet or contact our product specialist.

← Back to Table of Contents

Partner Spectrum Techniques

Spectrum Techniques

Spectrum Techniques is a U.S.-based provider of radiation detection and measurement solutions, offering a comprehensive range of detectors, quality assurance (QA) sources, alpha, beta, and gamma spectrometry systems, as well as samplers and counters. Their products are designed to support educational institutions, research laboratories, and industrial applications requiring precise and reliable radiation measurements.

Product offering

ST365 – Radiation counter

← Back to partner

ST365 – Radiation counter

The ST365 is a versatile radiation counter designed to excel in routine sample counting tasks across a wide spectrum of applications, including education, training, advanced research, radiation safety, and emerging technologies.

← Back to Table of Contents

Partner SDEC France

SDEC France is a leading provider of environmental monitoring technologies, offering a specialized range of samplers and counters designed to support radiological safety in medical settings. Their solutions assist hospitals, laboratories, and research facilities in monitoring airborne and surface contamination, ensuring compliance with health and safety regulations.

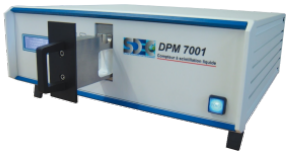
Product offering

Carbon 14 Sampler with 2 Vials – SDEC

Carbon 14 Sampler with 4 Vials – SDEC

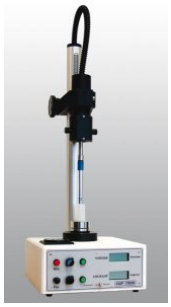
Tritium Sampler with 2 Vials – SDEC

DPM 7001 Liquid Scintillation Counter – SDEC



H3R 7000 Airborne Tritium Condenser – SDEC

Single Mast Electrodeposition Equipment – EDP 7000 – SDEC



AS 3000 AEROSOL & IODINE SAMPLER – SDEC

Tritium sampler 4 vials MARC 7000 – SDEC

AS 5000 Aerosol & Iodine Sampler – SDEC

Carbon 14 Sampler with 2 Vials – SDEC

The Carbon 14 Sampler with 2 Vials (SDEC) has been designed to capture CARBON gas (CO_2 or CO). It can be equipped with a cooling system that will prevent all sample loss due to evaporation in the feeding bottles.

Carbon 14 Sampler with 2 Vials features:

- in compliance with the nf m60-812-1 norm
- excellent trapping efficiency (close to 99%)
- cooling system to increase sampling length (option)
- good price
- constant evolution of the product
- easy to use
- connectable to all sampling lines

Read more about the Carbon 14 Sampler with 2 Vials on the SDEC website

Carbon 14 Sampler with 4 Vials – SDEC

The Carbon 14 Sampler with 4 Vials (SDEC) brings original solutions in the exploitation of sampling systems for carbon gas and carbon water. This sampler is mainly used for the detection of chimney rejects and carbon wastes degassing.

Carbon 14 Sampler with 4 Vials features:

- excellent trapping efficiency (close to 99%)
- cooling system to increase sampling length (option)
- good price
- constant evolution of the product
- easy to use
- connectable to all sampling lines
- in compliance with the NF M60-812-1 norm

Read more about the Carbon 14 Sampler with 4 Vials on the SDEC website

Tritium Sampler with 2 Vials – SDEC

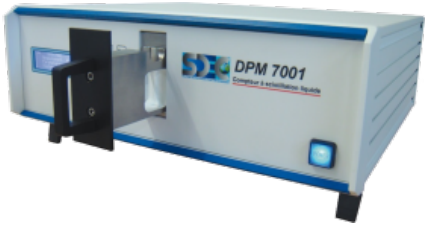
The Tritium Sampler with 2 Vials (SDEC) brings original solutions in the exploitation of trapping systems for tritium gas and tritiated water. This collection system is mainly used for the detection of chimney rejects and tritium wastes degassing.

Tritium Sampler with 2 Vials features:

- goodtrapping efficiency
- cooling system to increase sampling length (option)
- good price
- constant evolution of the product
- very robust
- easy to use
- connectable to all sampling lines

Read more about the Tritium Sampler with 2 Vials on the SDEC website

DPM 7001 Liquid Scintillation Counter – SDEC



The DPM 7001 Liquid Scintillation Counter (SDEC) is a mobile liquid scintillation counter equipped with two photomultipliers, giving it a high counting efficiency and low background noise. It is specially designed for the counting of tritium and carbone-14. Due to its small size and its light weight (16kg), it can be transported easily on monitoring sites for quick measurements.

DPM 7001 Liquid Scintillation Counter features:

- high counting efficiency (H3 > 37%, C14 > 94%)
- low background noise (< 40 CPM)
- light weight : 16 kg
- control and reading on LCD display or on PC (optional software)
- data export in excel format
- two counting channels for two simultaneous countings

Read more about the DPM 7001 Liquid Scintillation Counter on the SDEC website

H3R 7000 Airborne Tritium Condenser – SDEC

The H3R 7000 Airborne Tritium Condenser (SDEC) is an innovative instrument in the field of Tritium in air sampling. It collects samples of Tritium in its vapor form and produces results in less than 40 minutes. The sample obtained can be measured down to a detection limit of 0.01 Bq/m3 by deferred measurement using liquid scintillation.

H3R 7000 Airborne Tritium Condenser features:

- quick start mode
- measurement and calculation in real time of the absolute humidity in ambient air in g/m3
- automatic calculation of trapping time depending on the required water quantitya
- automatic drying under high temperature of the trapping circuit to avoid a crossed contamination
- selection of the drying time
- USB output : data recuperation on USB key
- thermic printer integrated : printing of data on sticker to place on to sample vial

Read more about the H3R 7000 Airborne Tritium Condenser on the SDEC website

Single Mast Electrodeposition Equipment – EDP 7000 – SDEC

The measure of radio-isotopes is used in nuclear medicine to control and follow the contamination level of a patient who has manipuled radio-isotopes. Usally when measuring a radio-isotope, the first thing to do is to trap it and make it deposit on a support.

The Single Mast Electrodeposition Equipment – EDP 7000 system is the most efficient principle for trapping a radio-element in liquid solution.This principle allow to deposit the radio-isotopes contained in a solution onto a metallic plate. To measure the quantity of radio-element trapped, the metallic plate is afterwards placed into a suitable machine (spectrometer or other one).

single mast electrodeposition equipment – EDP 7000 features:

- synthetic materials.
- temperature control of the solution.
- three sizes of solution containers.
- quick screw/unscrew.
- easy maintenance by operator.
- reverse polarity switch.
- independent timer.

Read more about the Single Mast Electrodeposition Equipment on the SDEC website

AS 3000 AEROSOL & IODINE SAMPLER – SDEC

The AS 3000 Aerosol & Iodine Sampler (SDEC) has been designed to make sampling of aerosols and iodine on filter papers and/or carbon cartridges. It has many technological innovations like the automatic regulation of air flow and the data report on USB key.

AS 3000 Aerosol & Iodine Sampler features:

- automatic regulation of air flow from 10 to 50 LPM
- diaphragm pump (no maintenance)
- compatible with all paper filters and cartridges
- automatic recognition of filter paper or cartridge per drive scanner option
- independent pump (easy dismantling in case of contamination)
- installation of the filter holder by quick system on horizontal or vertical axis
- operating on power supply or battery
- waterproof keyboard

Read more about the AS 3000 Aerosol & Iodine Sampler on the SDEC website

Tritium sampler 4 vials MARC 7000 – SDEC

The Tritium sampler 4 vials (MARC 7000) equipment is designed to sample the tritium which is contained in a volume of air (gas H3, tritiated water HTO or organically combined). Tritiated water vapor is trapped in the first two feeding bottles by means of the bubbling principle. To trap the tritium which is combined to organic materials, an oxidation reaction is created in the oven. A catalyser is used to lower the combustion level. This causes tritium to react chemically to form tritiated water vapor which is trapped in feeding bottles n°3 & 4. After a certain time, the tritiated water contained in the bottles is measured in a laboratory. The quantity of tritium measured is related to the volume of air which has passed through the equipment.

Tritium sampler 4 vials features:

- excellent trapping efficiency (close to 99%)
- cooling system to increase sampling length (option)
- good price
- constant evolution of the product
- easy to use
- connectable to all sampling lines

Read more about the Tritium sampler 4 vials (MARC 7000) on the SDEC website

← Back to partner

Nuclear Medicine › Samplers / counters

AS 5000 Aerosol & Iodine Sampler – SDEC

The AS 5000 Aerosol & Iodine Sampler (SDEC) is a stationary equipment made for the sampling of aerosols and airborne iodine at high flow on paper filters and cartridges. It is particularly adapted for continuous sampling in stacks according to ISO 2889 standard.

AS 5000 Aerosol & Iodine Sampler features:

- automatic air flow regulation up to 100 liters per minute (6 Nm3/h)
- mass flow-meter with pressure and temperature compensation : display of the air flow in Nm3
- sampling compartment and electrical separated
- detection of filter clogging or accidental leakages
- safety : sampling head access door with key lock, differential circuit breaker
- alarm report via relay output, (optional Ethernet output)
- sampling parameters settings and clogging level threshold protected by access code
- stationary installation (wall mount) or mobile installation on trolley

Read more about the AS 5000 Aerosol & Iodine Sampler on the SDEC website