

autoCOLLECT



autoCOLLECT 

MOBILE SAMPLING

AT ANY LOCATION

FOR GASES

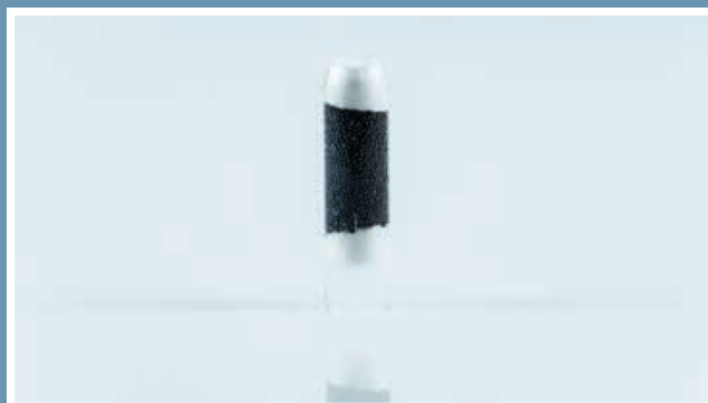
THINK AHEAD

Our solutions for
laboratories

swiss innotech ag
Auerstrasse 19
9435 Heerbrugg
Switzerland
Phone: +41 (0)71 520 75 85
info@swiss-innotech.com
www.swiss-innotech.com

The samples are collected by default on our adsoQUICK cartridges. The adsorption material adsoQUICK is used in quartz tubes for elemental analysis such as heavy metal determination etc. Specially designed aluminum tubes are used for organic species. The retention of samples from gases is ensured by the highly active pyrographite beads (active carbon) with a surface volume of 1200 m² / g. This enables a very accurate trace analysis. The adsorptive binding of the species to the surface can be carried out by thermal desorption (after a digestion process) in various detection systems such as AAS, ICP or for organic molecules in chromatography instruments (GCMS, HPLC, etc.). In addition, the quartz tubes can be used without sample preparation for direct Hg determination in the extremely powerful DMA systems.

adsoQUICK-CARTRIDGE



Hg-GOLD-CARTRIDGE



As a further variant, our specially developed Hg-Gold cartridges can be used for sample collection in the autoCOLLECT system. The unique feature is the direct use for Hg determination in our CV-AAS mercurio CV device. In just a few minutes and without additional sample preparation, the gas sample can be collected and analyzed for mercury in only two steps. The metallic mercury (Hg⁰) is collected on this special gold-coated quartz cartridges. The Hg-Gold cartridges are burnt out and activated once in a muffle furnace at approx. 750 to 800 °C. Then the Hg blank values in the amalgam traps lie between 0.028 and 0.105 ng Hg (1a to 1d). Methods: HJ 910 - 2017 (China) and EPA Method IO - 5.0

autoCOLLECT-G

FACTS/PROPERTIES

Working principle	Collecting
Number of samples	1 sample per cartridge set
Promotional volume	2 to 25 l/min
Supplies	adsoQUICK-cartridge
Battery	up to 8 hours for usage in the field
Control	via Touchscreen
Conformity	CE-sign
Warranty	12 month

TECHNICAL DATA

Power supply	Battery, line independent operation
Battery	12 Volt lead-battery
Screen	High Resolution (coloured)
Charging	USB-Interface
Accessories	Power supply, USB-cable
Dimensions WxDxH	22 x 8 x 21 cm
Weight	1.7 kg

autoCOLLECT



MOBILE SAMPLE COLLECTING OF GASES AT ANY LOCATION

- Mobile collection system for organic and inorganic substances
- Universal and easy handling, on site
- Automatic temperature and pressure correction for accurate results
- Lowest blank values
- Direct data transfer to analysis systems
- Extension for heavy metal analysis
- Off-line operation with automatic recharge

HIGH PRECISION AT THE LOWEST COST

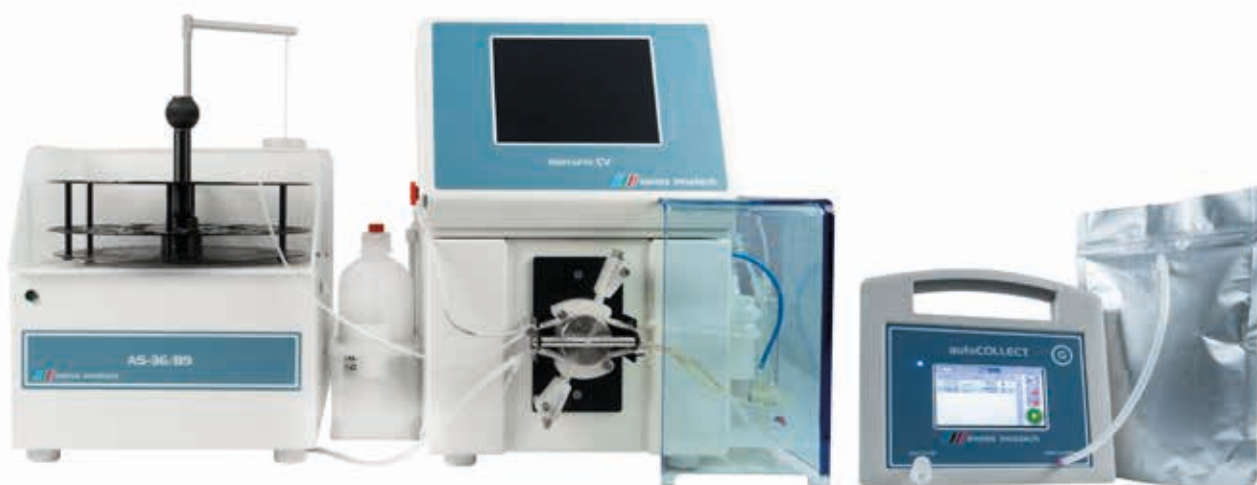
The autoCOLLECT-G system is used as a mobile sample collector for air and gases. The low weight of the device and the compact design make the autoCOLLECT an ideal instrument for on-site sample collection. Whether a sampling takes place at the industrial chimney, on a busy street, on a mountain or in a room, the handy autoCOLLECT-G accompanies you, no matter how difficult the hurdles. Easily exchangeable volume measuring bags allow different gas volumes to be precisely measured and automatically converted to normal temperature and pressure conditions.

The collection takes place on our specially developed adsoQUICK or Hg-Gold cartridges, in which not only mercury but also all other heavy metals can be collected and later analysed in the laboratory. The operation takes place in a few steps, directly on the touchscreen. The built-in battery storage allows a sampling with up to 8 hours of continuous use. These features make the autoCOLLECT a perfect sampler for all types of air measurements, whether it is outside, indoors, various gases or toxic substances.

Applications

Environmental Technology, Coal industry, Fossil Fuels, Emission Measurement, Waste Technology, General Industry, Building material manufacturing, Power plants, Petroleum refineries, Mineral building material production, etc.

UNIQUE WORLDWIDE



Hg-Gold-Cartridge



autoCOLLECT-G



adsoQUICK-Cartridge

With the Hg-Gold cartridges, the autoCOLLECT-G together with the mercurio CV make it a perfect workplace for the determination of mercury. In a few minutes, the collected samples of the autoCOLLECT-G can be analyzed directly in the mercurio CV device. The mercury in gases is collected very easily and directly with the autoCOLLECT system in mobile use at any location. The gas volume and the conditions (temperature and air pressure) are automatically recorded and the sample volumes are calculated at normal pressure and 20° C.



Amalgam-Unit



mercurio CV

By using an active gold cartridge, only metallic mercury in the form of Au amalgam is retained. Specially developed Hg-Gold cartridges are used according to the methods HJ 910 - 2017 (China) and EPA Method IO - 5.0. The resulting data, such as the sample name or the volume of gas collected, are imported directly from the autoCOLLECT into the dataset of the mercurio CV via USB interface. The Hg-Gold cartridge is used on the gas AAC-unit of mercurio CV and the analysis can be started.



HIGHLIGHTS

COMPLETE SET IN PRACTICAL TRANSPORT CASE

The autoCOLLECT-G comes with a transport case that protects the instruments from external influences. In addition to the base unit there is room for power cables, USB cables, sample cartridges, measuring bags and other accessories. All protected and practically stowed in one system and thus ready to use the transport case to visit the designated locations for sampling.

LIGHTWEIGHT AND MOBILE

The autoCOLLECT-G is very light and handy with its 1.7 kg. The shape and mass make it universally applicable, even in places that are difficult to reach. Thanks to the practical transport case, the system can be used at any place.

BATTERY

Due to an extremely powerful battery storage, the autoCOLLECT-G can be used for up to 8 hours in continuous operation.

DISPLAY & SOFTWARE

The touchscreen of the autoCOLLECT-G is high-resolution, clear and simple. With a sophisticated operating system, we offer every user an optimal desktop.

The easyCONTROL is an operating and evaluation program developed in-house and optimally adapted to the requirements. User-friendly - multilingual - and equipped with matching icon symbols. Simply enter the sample name, quantity and working modes and start sample collection at the touch of a button („Touch“). After sampling, the stored data can be transferred directly to the mercurio CV System or a PC. The high-resolution screen with touch screen in combination with the easyCONTROL operating system ensures clear and simple operation.