

autoCOLLECT



autoCOLLECT 

MOBILE SAMPLING  
**AT ANY PLACE**  
TO COLLECT GASES

# autoCOLLECT



## EASY CAPTURE 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 elemental analysis and mixtures
- 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 in addition to mercury, all other types of heavy metals, elements and organic species can be collected and later analyzed in the laboratory. The operation takes place in a few steps, directly on the touch-screen. The built-in battery storage allows a sampling with up to 8 hours of continuous use. These features make the autoCOLLECT-G a perfect sampler for all types of air measurements, whether outside air, indoor air, 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 becomes a perfect workplace for the determination of mercury. In a few minutes, the collected samples from the autoCOLLECT-G can be analyzed directly in the mercurio CV device. The mercury in gases is taken 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 to normal pressure and 20°C.



Gas-ACC-Unit



mercurio CV

By using an active gold coating, only metallic mercury ( $\text{Hg}^0$ ) in the form of Au amalgam is retained. For this purpose, specially developed Hg-Gold cartridges are used according to the methods DIN EN 15852/2010, US- EPA Method 30B and HJ-910 (2018). 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 inserted into the Gas-ACC-Unit of the mercurio CV and the analysis can be started.



# HIGHLIGHTS

## TRANSPORT CASE

The autoCOLLECT-G is stored in a storage system in suitcase form, which protects the instrument 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 conveniently stowed in one system, always ready 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 difficult to reach places. Thanks to the practical transport case, the system can be taken anywhere and used.

## BATTERY

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

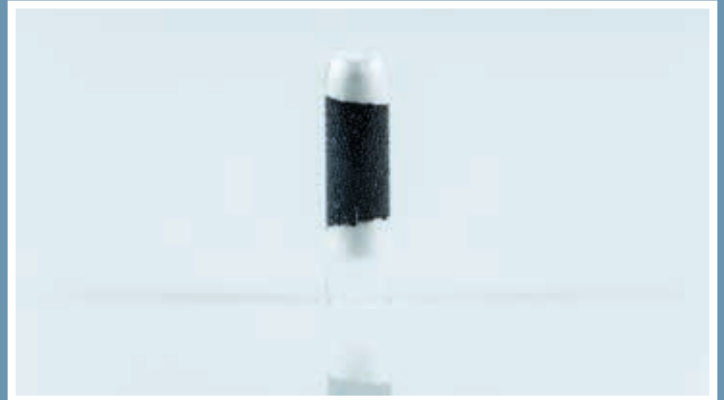
## DISPLAY & SOFTWARE

High-resolution, clear and simple is the touchscreen of the autoCOLLECT-G. With a well thought-out operating system, we offer every user an optimal working interface.

The easyCONTROL is a user-developed and optimally tailored to the needs operation and evaluation program. User-friendly - multilingual - and equipped with matching icon symbols. Simply enter the sample name, quantity and working modes and start the collection of samples with just one touch. The stored data can be transferred directly to the mercurio CV system or a PC after sampling. The high-resolution screen with touchscreen in combination with the easyCONTROL operating system ensures a clear and simple operation.

The samples are collected by default on our adsoQUICK cartridges. The adsorption material adsoQUICK is used for elemental analysis such as heavy metal determination or trace determination of organic species. The retention of samples from gases is ensured by highly active pyrographite beads with a surface area of 1500 m<sup>2</sup> / g. This allows a very accurate trace analysis. The sample cartridges are prepared in advance by a digestion or extraction procedure. In a second step, the thermal desorption for the subsequent analysis by means of atomic spectrometers such as AAS, ICP or for organic molecules with chromatography devices such as GC (eg with headspace technology) HPLC, etc. With the adsoQUICK cartridges, the autoCOLLECT system is a gas collector for analyzes of various kinds.

## 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 analyzer. In just a few minutes and without additional sample preparation, Hg traces in gases can be detected in just 2 steps and analyzed directly for mercury. The metallic mercury (Hg<sup>0</sup>) is collected on this special gold-coated quartz cartridges. The methods DIN EN 15852/2010, US-EPA Method 30B or HJ-910 (2018) are supported.

## 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	Touchscreen (coloured)
Charging	USB-Interface
Accessories	Power supply, USB-cable
Dimensions WxDxH	22 x 8 x 21 cm
Weight	1.7 kg

# THINK AHEAD

Our solutions for  
laboratories

**swiss innotech ag**  
Auerstrasse 19  
9435 Heerbrugg  
Switzerland

Phone: +41 (0)71 520 75 85  
Fax: +41 (0)71 520 75 86  
[info@swiss-innotech.com](mailto:info@swiss-innotech.com)  
[www.swiss-innotech.com](http://www.swiss-innotech.com)