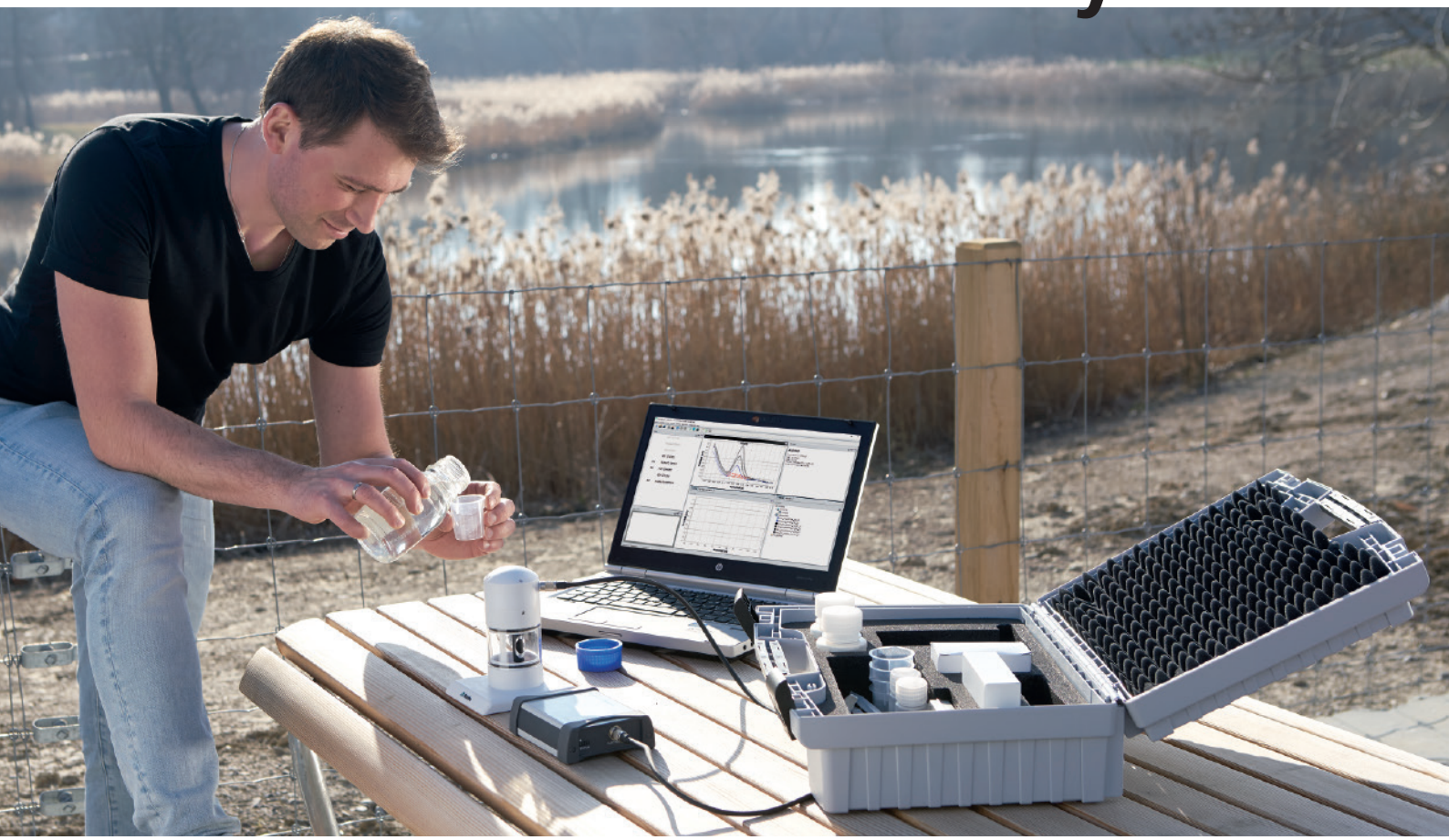
946 Portable VA Analyzer



Heavy metal analysis goes mobile

Metrohm

Rapid on-site monitoring of heavy metals in ground, surface, and drinking water

Safeguarding the quality of water for human consumption involves monitoring trace level concentrations of heavy metals. Such measurements have been routinely performed in the laboratory – mostly for lack of viable alternatives for field use.

The table below shows, which heavy metals can be determined using the 946 Portable VA Analyzer. Maximum concentrations currently recommended by the World Health Organization's (WHO) «Guidelines for Drinking-water Quality» are also given.

Heavy metal	Sensor	Detection limits	WHO limit concentrations
Arsenic	scTRACE Gold	1 µg/L	10 µg/L
Mercury	scTRACE Gold	0.5 µg/L	6 µg/L
Copper	scTRACE Gold	0.5 µg/L	2000 µg/L
Lead	scTRACE Gold	0.2 µg/L	10 µg/L
Zinc	scTRACE Gold	1 µg/L	–
Nickel	scTRACE Gold	1 µg/L	70 µg/L
Cobalt	scTRACE Gold	1 µg/L	–
Bismuth	scTRACE Gold	1 µg/L	–

Bring the laboratory to the sample!
With the 946 Portable VA Analyzer from Metrohm, there is now such an alternative. A dedicated solution for water analysis, the 946 Portable VA Analyzer enables fast and straightforward in-field determination of heavy metals typically determined in water with the sensitivity, accuracy, and reproducibility required to monitor the WHO guideline values.

The 946 Portable VA Analyzer is ...

- **ready to measure in minutes, anywhere** – portable carrying case complete with instrument, measuring stand, accessories, and bottles.
- **battery powered** – no access to power grid required!
- **straightforward to use** – simply start predefined methods and get the results shown a few minutes later.

Affordable, maintenance-free sensors with plug-in design

Two options
You can determine the mentioned heavy metals either on the scTRACE Gold sensor or screen-printed electrodes (SPEs), some of them can be determined on both sensors. DropSens SPEs are highly affordable and are available in various materials, depending on your application.

The scTRACE Gold sensor, on the other hand, offers a wider range of applications and features a longer working life. Both sensors are maintenance-free, and can be easily exchanged due to smart plug-in design.

Straightforward speciation analysis possible
Voltammetric trace analysis allows you to perform speciation analysis, i. e., discriminate between different oxidation states of the same element. Competing methods such as IC-ICP/MS are much more expensive and require a laboratory.

Ordering information

2.946.0010	946 Portable VA Analyzer for use with scTRACE Gold
	Optional
6.1245.020	Measuring head for use with SPE 2.946.0020

2.946.0020	946 Portable VA Analyzer for use with SPE
	Optional
6.1245.010	Measuring head for use with scTRACE Gold

The additional measuring head (for SPE 2.946.0020 or scTRACE Gold, respectively) is required, if both types of electrodes are to be used with the instrument. The carrying case offers space for a second measuring head.

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Subject to change
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