STL Gas Sampling System

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EMISSION MONITORING SYSTEMS

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STL Gas Sampling System

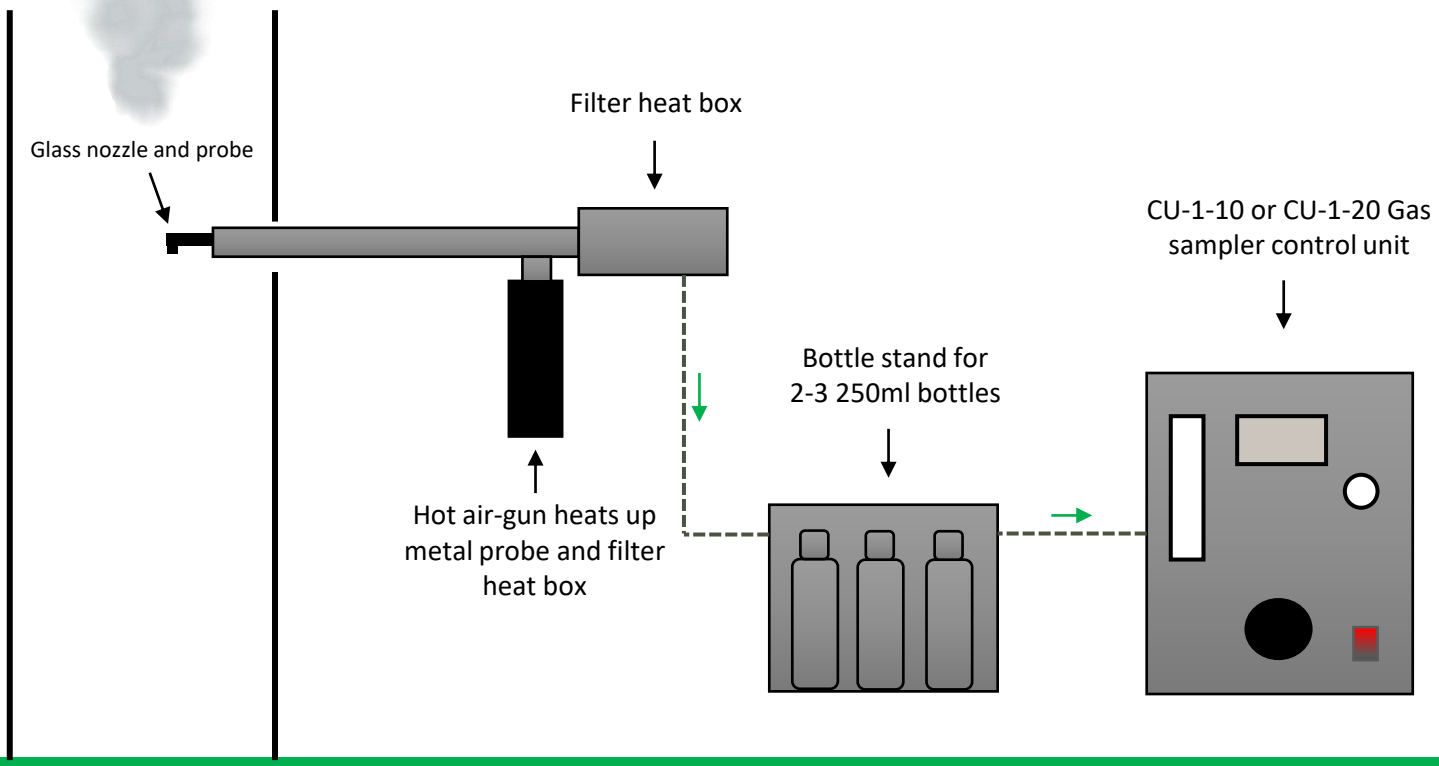
The STL Gas Sampler System is a robust and user-friendly solution for precise gas analysis using manual wet chemical methods. Designed in accordance with international standards, it enables accurate measurement of e.g. HCl, HF, SO_2, SO_3, NH_3, mercury, and other metals.

Engineered for both ease of handling and transport, the system features a reliable design with a flow capacity of up to 10 lpm—or 20 lpm with the CU-1-20 model. Absorption bottles are safely secured in practical bottle racks, accommodating flow rates up to 15 lpm. In addition to gas analysis, the system also supports simultaneous gravimetric determination of flue gas moisture, making it a comprehensive and dependable tool for demanding sampling environments.

The complete sampling system consists of

1. A heated glass sampling probe, e.g. EVA Light Gas probe
2. One or more parallel bottle racks with absorption bottles
3. One or more control units CU-1-10 (or CU-1-20)

System overview



EVA Light Probe – Gas sampling

EVA Light Gas Sampling Probe for Wet Chemical Methods

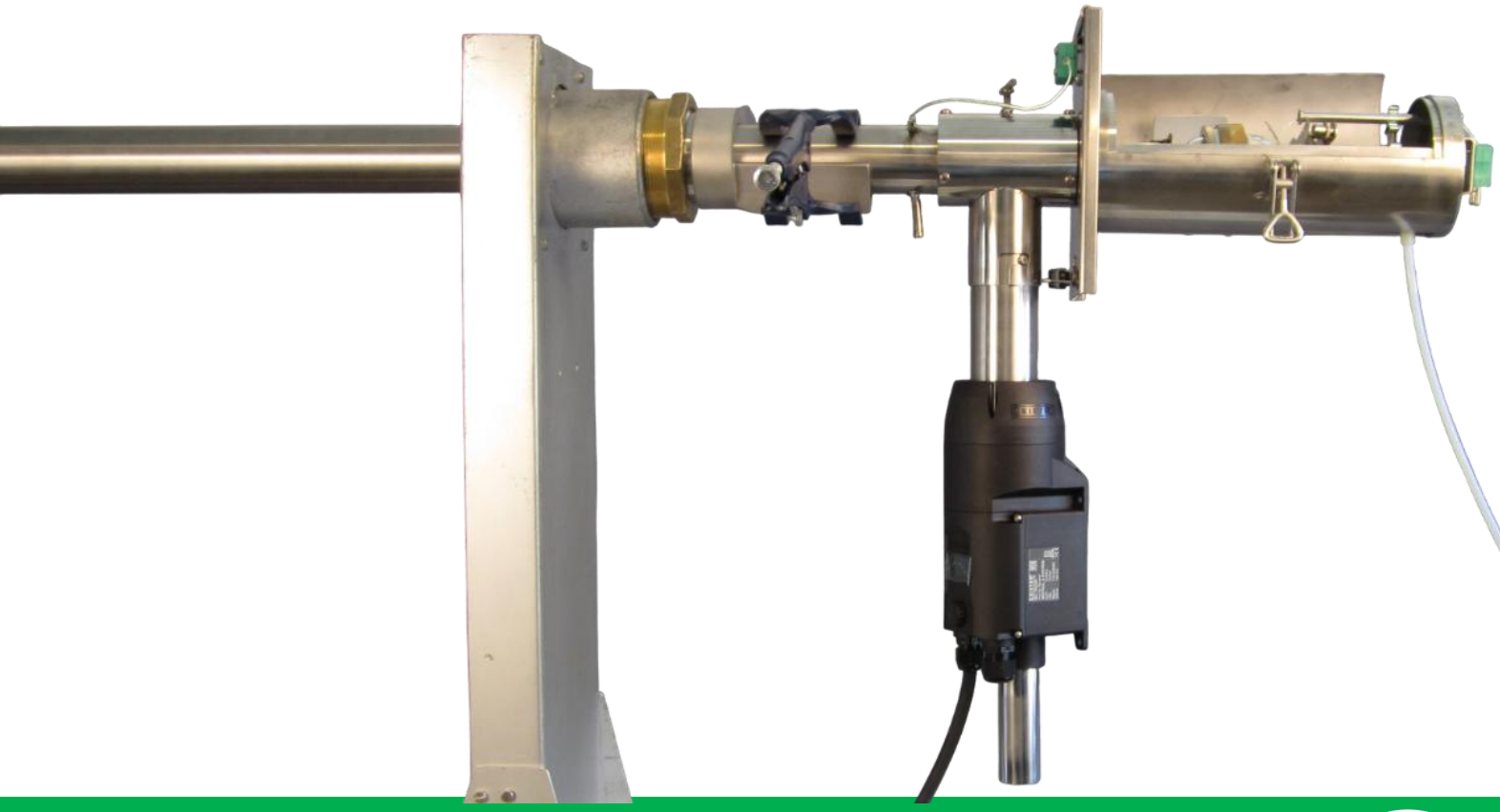
The EVA Light is a high-quality gas sampling probe designed specifically for wet chemical sampling methods in stack emission testing. Built with chemically resistant materials and precision components, it ensures reliable performance even in demanding conditions. the EVA Light offers durability, flexibility, and ease of use.

Key Features:

- Heated glass probe and filter box for optimal condensation prevention
- Chemically resistant glass filter holder and outlet
- Type-K thermocouple for monitoring filter temperature
- Available probe lengths: 1000 mm and 1500 mm
- Interchangeable nozzles (4–12 mm) for isokinetic sampling in velocity ranges of 5–35 m/s (with CU-1-10 control unit)

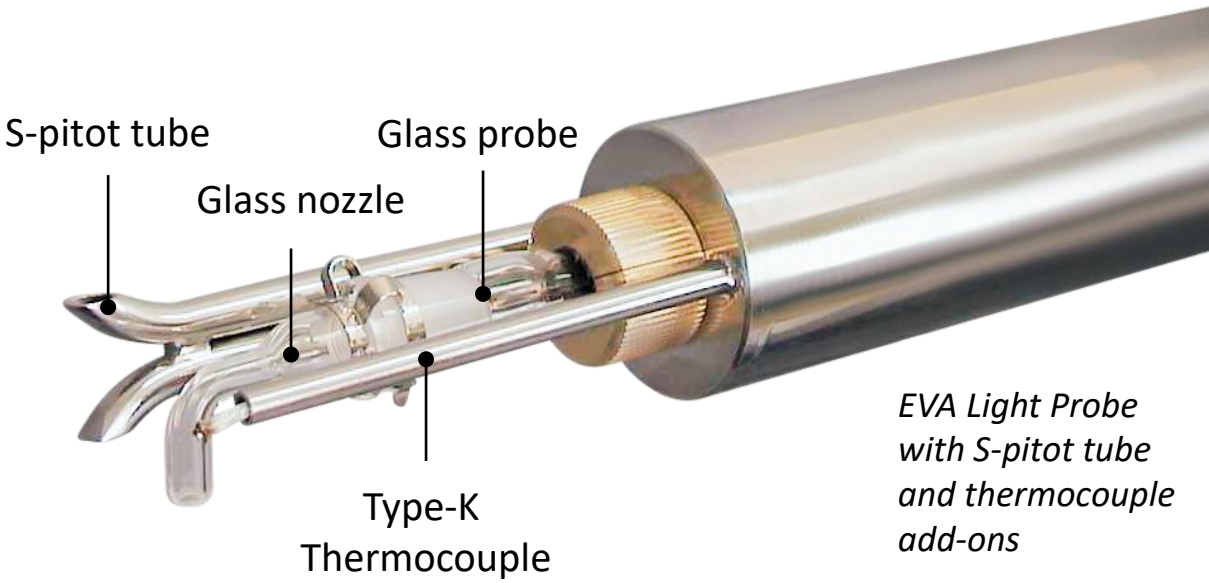
Available Add-ons:

- S-type Pitot tube for velocity measurement
- Type-K thermocouple for duct temperature measurement



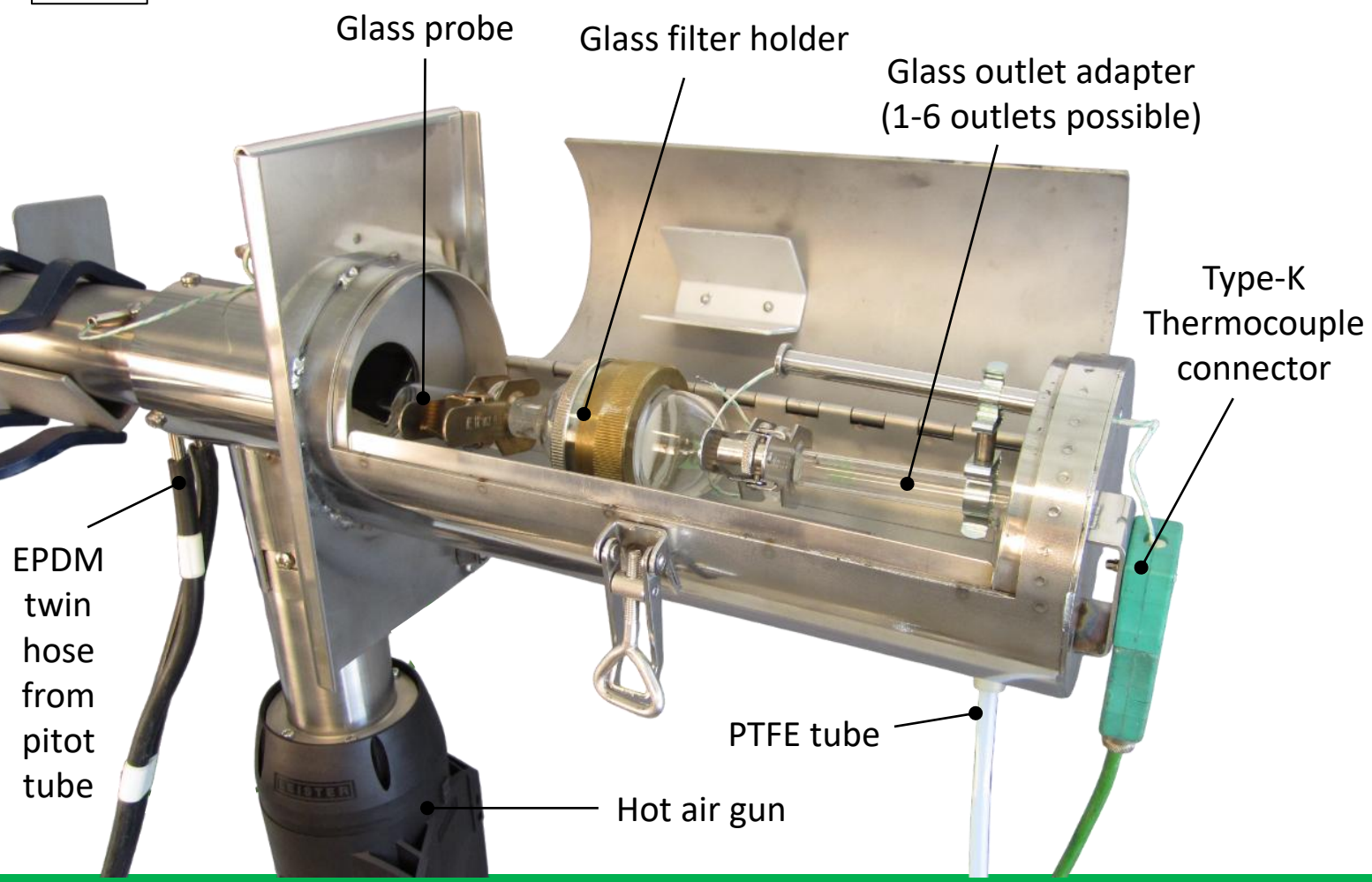
EVA Light Probe – Gas sampling - Overview

Front



EVA Light Probe with S-pitot tube and thermocouple add-ons

Rear

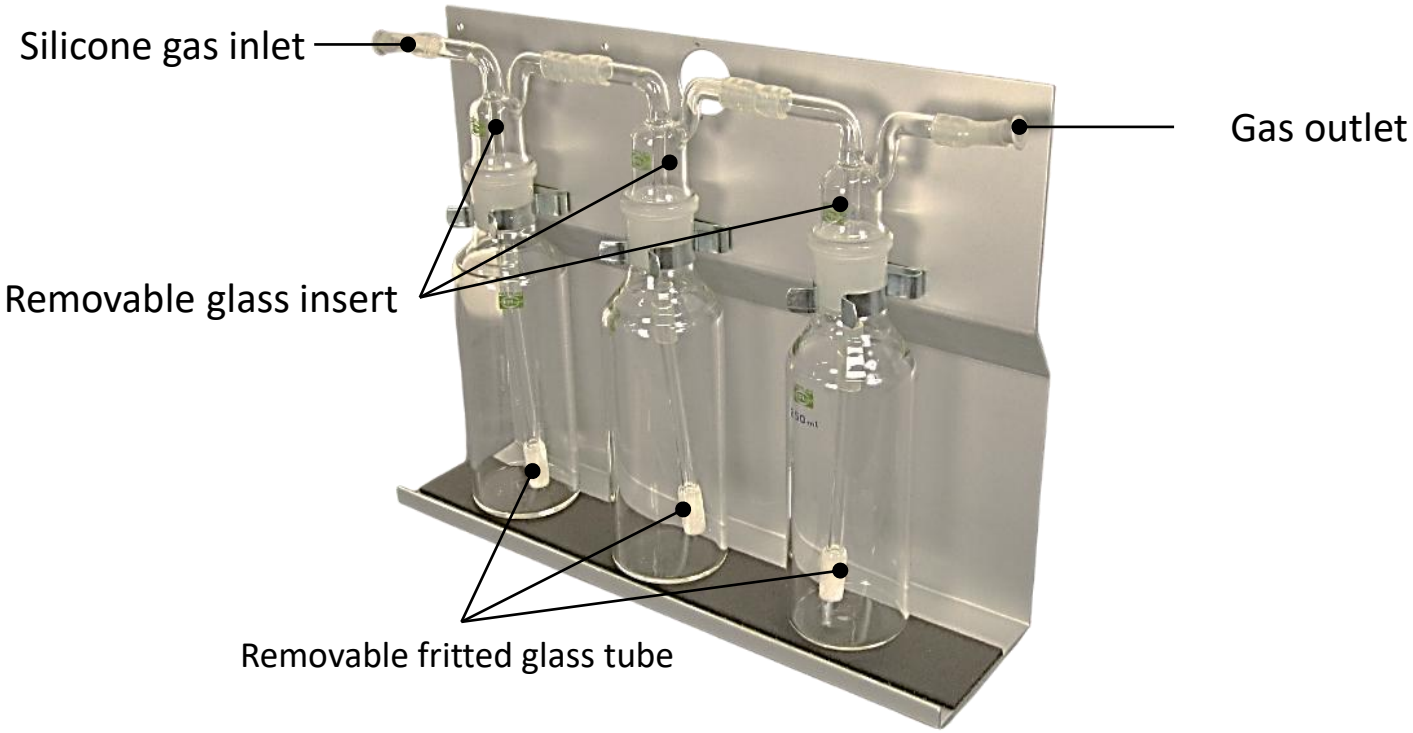


Absorption Bottle Set for Wet Chemical Sampling

This compact and user-friendly absorption bottle system is designed for efficient gas scrubbing and sample collection in wet chemical methods. Built with high-quality glass and mounted on a lightweight aluminum stand, it offers excellent chemical resistance and ease of handling in field or lab conditions. Ideal for use in conjunction with sampling probes and equipment for reliable, consistent results.

Key Features:

- 250 ml borosilicate glass bottles with high chemical resistance
- Glass inserts with P1 fritted glass for efficient gas-liquid contact
- Sturdy aluminum stand accommodates 2–3 bottles
- Modular design makes it easy to switch bottles between sample runs
- Quick and convenient setup for field and laboratory use
- Silicone tubing connectors between glass part for easy disassembly and cleaning



Control unit CU-1-10

The METLAB STL Gas Sampler CU-1-10 is purpose-built for the manual collection of pollutant gases using wet chemical sampling methods. Engineered for precision and reliability in harsh industrial environments, it is an essential tool for emission monitoring and compliance testing.

Key Features:

- Sampling Flow Rate: Up to 10 L/min (adjustable)
- Integrated Vacuum Pump: Achieves up to –0.8 bar, ensuring reliable sample collection
- High-Capacity Drying Tower: Pre-loaded with regenerable silica gel for efficient moisture control
- Real-Time Flow Control and Measurement: Easily monitor flow (0–10 L/min) and sampled volume using the built-in flow meter and gas meter
- Simple Leak Testing: Includes vacuum meter for quick detection of leaks or flow blockages
- Easy Maintenance and Transport: Compact, portable design with a removable rear cover for cooling and convenient access to internal components

With its robust construction, user-friendly interface, and compliance international sampling standards, the CU-1-10 delivers accuracy and dependability for professionals monitoring industrial emissions, conducting regulatory inspections, or performing research applications.

Absorption bottle train

EVA Light Probe with S-pitot tube and thermocouple add-ons

For more information

Please contact info@metlab.se

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