



Gas Sampling System

GSS²⁸

Specifications

Use

GSS²⁸ is an active sorbent tube gas/air sampling system designed to collect samples onto commercially available sorbent tubes. GSS²⁸ consists of two pumps which can be controlled separately and a manifold that holds up to 28 tubes. The pumps are energy-efficient and are supplied with Flow Tamer™ technology for pulsation free sampling.

The sampler can collect multiple samples on a pre-programmed schedule. Two discrete flow paths allow duplicate sampling at two distinct flow rates (often specified by standard air analysis methods). Each sorbent tube is individually sealed within the sampler manifold, ensuring sample integrity. GSS²⁸ is housed in a Hardigg case and is therefore ideal for use in the field.

Capacity

• 28 sorbent tubes

Sorbent Tubes

- TDU tubes (length 60 mm, OD 6.0 mm)
- Other sorbent tubes up to 89 mm length, 6.0 or 6.35 mm OD
- Detailed information on TD tubes and sorbents available separately

Gas Flow

- 2 independent flow paths with 14 positions each
- 2 pumps with independently adjustable flows
- Flow paths can be used simultaneously or separately
- Inlet filter with 5 µm pore size to protect the pump

Flow Range is Factory Set for each Flow Path

- 5 ... 30 mL/min (Low range), or
- 20 ... 200 mL/min (Mid range), or
- 50 ... 750 mL/min (High range)

Flow Accuracy

• ± 5% of set-point (set-point calibration required)

Flow Control

Mass Flow Meter utilizing Flow Tamer™ technology for pulsation free sampling

Operation Modes

- Parallel sampling of two samples
- Distributive pair samples (two samples concurrent at different flow rates).
- Minimum measurement time resolution: 1 min

System Requirements

Computer with Windows® XP, Windows® 7 or Windows® 8 operating system

External Power

- 85...240 VAC 50/60 Hz or
- 12 VDC

Internal Battery Power

- rechargeable Lead-Acid battery
- 2-10 W, depending on application



Data Output

- Start times
- Tube position
- Set point
- Sampling duration
- Average flow rate
- Total collected volume for each collection
- Meteorological measurements also possible

Operation Conditions

- -10 ... 60 °C
- relative humidity 95 % max, non-condensing

Dimensions and Weight

- $21 \times 28 \times 25.4$ cm (H × W × D)
- 9 kg (including manifold)