

HORIBA ASGU-370S

Span Gas Generator for Serial Operation in Reference Laboratories Data Sheet



Abstract

The multipoint calibration unit ASGU-370S is designed for step by step (serial) checking of several gas analyzers. It is installed in air pollution monitoring stations, in laboratories for quality assurance and is also used for the production of gas analyzers.

Overview

The calibration unit ASGU-370S will be used for the dynamic and continual manufacture of zero and span gas to perform among other things all ongoing quality control procedures according to EN 14211, EN 14212, EN14626 and EN 14625. To produce various span gas the unit uses technologies like dilution, permeation, UV irradiation or Gas Phase Titration.

Features

- ✓ Multipoint calibration acc. EN 14211, EN 14212, EN14625 and EN 14626
- ✓ High accuracy of span gas in cause of usage of factory calibrated digital thermal mass flow controllers in high quality
- ✓ One 3 HU unit for calibration of several analyzers. Low space requirement.
- ✓ Serial (time shifted) operation in cause of common Zero gas MFC for all span gas channels (modules).
- ✓ Comfortable operation via big illuminated Touch-Screen-Display or externally from analyzer
- ✓ Operation via RS232 and Ethernet interface (Bayern Hessen protocol)
- ✓ Delivery scope includes remote software for easy external handling (LAN)
- ✓ High flexibility by free definable span points (up to 20)
- ✓ High flexibility by free definable cycles (8 pre-defined with the option to add more)
- ✓ High flexibility by free definable sequences (stringing cycles together)
- ✓ Programmable timer allows time shifted start of calibration process
- ✓ Internal data logger (option) stores raw values from calibration procedure (set value and actual value, status) for reporting with evaluation software (included in scope of delivery)
- ✓ Adaptable to customers request
- ✓ Modular Layout enables later upgrade with additional span gas modules

Specifications

Principle	Dilution, Permeation, UV irradiation, Gas Phase Titration, Mixed gas dilution
Application	Quality control in Station Quality control in Laboratory
Stage of extension	Up to 6 independent modules possible (serial operation)
Flow regulation	Digital Mass Flow Controllers: Accuracy +/- 1% (f.s.) Linearity +/- 0.5 % (f.s.) Repeatability +/- 0.2 % (f.s.)
Span gas flow	0 - 5 lpm
Span gas repeatability	+/- 1%
Span gas linearity	+/- 2% (minimum flow \geq 20% f.s.)
Permeation System (NO ₂ , SO ₂ , NH ₃ , H ₂ S, BTX)	PID temperature controller with Pt 100 sensor Temperature: 50 °C Accuracy \pm 0,1 °C Indication of actual temperature on display
Ozone generator by UV Irradiation	PID temperature controller with Pt 100 sensor Temperature: 70 °C Accuracy \pm 0,1 °C Indication of actual temperature on display
Zero Air Supply	Internal/External
Operation	Manual (Touch Screen Display) External from Analyzer (Contact, 24VDC) External via RS232 (Bayern Hessen Protocol) External via Ethernet (Remote Software or Bayern Hessen Protocol)
Power	230 VAC, 50Hz Power consumption depends on stage of extension
Dimensions	19"(W), 570 mm(D), 3 HU(H)
Mass	Depends on stage of extension