

HORIBA APSA-370

SO₂-Immission Monitor

Data sheet



Abstract

Our type approved instrument APSA-370 is a continuously operating analyzer for the determination of SO₂ in the ambient air. Other applications exist in different areas of the process and trace analysis.

Overview

The HORIBA instrument APSA-370 is a UV fluorescence monitor. The sample gas is irradiated by a UV lamp (Xe) and stimulates the SO₂ molecules to vibrate. The emitted UV light is proportional to the SO₂ concentration of the sample gas. An electronic signal processing to correct variations in light intensity. Known cross-sensitivities are eliminated. The instrument has implemented an internal sample gas pump. Type approved according to EN-14212 (Continuous ambient air quality measurements in stationary use).

Features

- ✓ Approval according to EN 14212: TÜV 936/21204643/D and 0000028757_03 Continuous measurement of SO₂
- ✓ in ambient air
- ✓ Xenon flash lamp with no moving parts to wear
- ✓ Mirror unit instead of optical filters for better light transmission
- ✓ HC-cutter reduces interference from hydrocarbons
- ✓ Critical orifice for constant flow
- ✓ Pressure and temperature compensated
- ✓ Optimized components to reduce maintenance costs and power consumption
- ✓ Reduced weight design allows easier handling
- ✓ Internal sample gas pump
- ✓ Optional module for internal function control
- ✓ Large touch-screen display
- ✓ Password protection against unauthorized access
- ✓ Remote software for an external operation
- ✓ High connectivity via RS232, Ethernet or analog (optional)
- ✓ Build-in alarm system for troubleshooting and predictive diagnostics
- ✓ Internal memory for different average values, calibration history and alarm history
- ✓ CF slot allows for memory expansion

Specifications

Principle	UV fluorescence (UVF)
Application	SO ₂ in ambient air
Range	Standard ranges: 0-0.05/0.1/0.2/0.5 ppm; auto range ~ manual range selectable; can be operated by remote switching. Optional: Extension of range: 0-10 ppm, within 10 times range ratio;
Certified Range	0- 1000 µg/m ³ (0- 376 ppb)
Lowest Detection Limit (LDL)	0,5 ppb (3σ)
Repeatability	±1.0% of F.S.
Linearity	±1.0 % of F.S. (± 0,3 % of F.S. according to type test)
Zero Point Drift	< LDL/Day, < LDL/Month (according to type test)
Span Point Drift	< LDL/Day, < LDL/Month (according to type test)
Flow Rate	approx. 0,7 l/min
Response Time (T ₉₀)	< 120 sec. (minimum measurement range) (< 86 sec. according to type test)
Indication	Large TFT touch-screen display with simultaneous display of all current values, and the status information of the instrument.
Readings	Concentration in ppm (ppb) or mg (µg)/m ³
Compensation	Pressure and temperature
Languages	English, German, French, and Japanese.
Interfaces	RS-232C (Bayern Hessen / HORIBA Protocol) Ethernet (HORIBA Protocol)
Options	Analog output 0-1/10 V or 0(4) - 20 mA Long-term data storage Calibration units Further options on request
Operating Temperature	0-40°C Note: The sample gas has to pass through the system without condensation
Power	230 VAC +/-10%, 50 Hz, ca.150 VA (130 VA according to type test)
Dimensions	430(B) x 550(T) x 221(H) mm (5HE)
Housing	19" incl. telescopic rails
Mass	approx. 19 kg
Standard auxiliary equipment	Delivery includes rails and mounting brackets for 19 "rack mount, switching valve for sample gas / calibration gas, potential free contacts for control of SGG