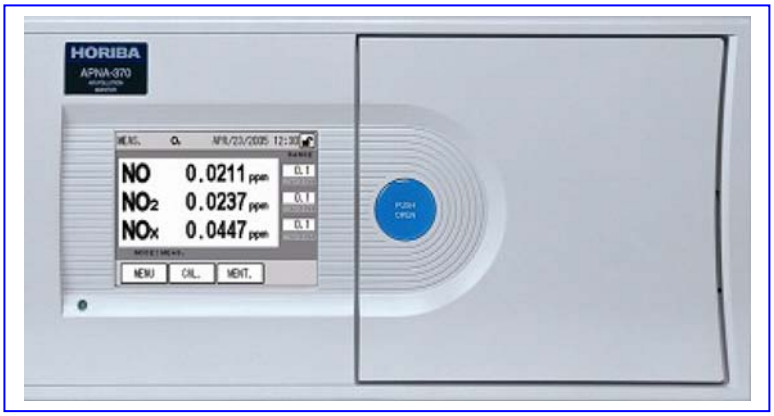
HORIBA APNA-370

NO_x-Immission Monitor

Data Sheet



Abstract

Our type approved instrument APNA-370 is a continuously operating analyzer for the determination of NO, NO_2, NO_x in the ambient air. Other applications exist in different areas of the process and trace analysis.

Overview

The measuring instrument HORIBA APNA-370 is a chemiluminescence monitor using the "crossflow" modulation principle. Sample gas and reference gas are alternately supplied to the measuring cell. Sample gas with eliminated NO_x concentration will be used as reference gas. This results in a low-maintenance operation and extremely stable measurements can be guaranteed. The analyzer is virtually interference-free and has an internal sample gas pump. Type approved according to EN 14211 (Continuous ambient air quality measurements in stationary use).

Features

- ✓ Approval according to EN 14211: TÜV 936/21204643/C
- ✓ Continuous measurement NO, NO_2, NO_x in ambient air
- ✓ The detector is a silicon - photodiode with a long lifetime
- ✓ "Cross Flow" Modulation principle for stable measurements
- ✓ Regenerative drying unit for ozone generator
- ✓ 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 LCD touch-screen display (117 x 88 mm)
- ✓ Password protection against unauthorized access
- ✓ Remote software for an external operation
- ✓ High connectivity via RS232, Ethernet or analog (optional)
- ✓ Internal memory for different average values, calibration history and alarm history
- ✓ CF slot allows for memory expansion

Specifications

Principle	Chemiluminescence method (CLD)
Application	NO, NO_2, NO_x Measurement in ambient air
Range	Standard ranges: 0-0.1/0.2/0.5/1.0 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	NO: 0- 1200 µg/m³ (0- 960 ppb) NO2: 0- 500 µg/m³ (0- 260 ppb)
Lowest Detection Limit (LDL)	0,5 ppb (3δ)
Repeatability	±1.0 % of F.S.
Linearity	±1.0 % of F.S. (± 0,62% of F.S. at NO_2 according to type test)
Zero Point Drift	< LDL/Day, < LDL/Month (according to type test)
Span Point Drift	< LDL/Day, < 0,58 ppb/Month (according to type test)
Flow Rate	approx. 0,8 l/min
Response Time (T_{90})	< 90 sec. (minimum measurement range)
Indication	Large LCD touch-screen display (117x88 mm) 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	240 VAC, 50 Hz, ca.170 VA
Dimensions	430(B) x 550(T) x 221(H) mm (5HE)
Housing	19" incl. telescopic rails
Mass	approx. 21 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