

Příloha č.1

HORIBA APHA-370

THC-Immission Monitor

Data sheet



Abstract

Our instrument APHA-370 is a continuously operating analyzer for the determination of THC, CH₄, and non-CH₄ in the ambient air. Other applications exist in different areas of the process and trace analysis.

Overview

The HORIBA instrument APHA-370 is a FID (Flame ionization detector) monitor which uses the "crossflow" modulation principle. Sample gas and reference gas are alternately supplied to the measuring cell. Sample gas with eliminated THC 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. The burner air generated from ambient air and fed to the detector.

Features

- ✓ Continuous measurement of THC, CH₄, NMHC in ambient air
- ✓ "Cross Flow" Modulation principle for stable measurements
- ✓ Regenerative dryer unit for burner air and reference gas
- ✓ 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 TFT touch-screen display
- ✓ 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	Flame ionization detection (FID)
Application	THC, CH ₄ , NMHC Measurement in ambient air
Range	Standard ranges: 0-5/10/20/50 ppmC; auto range ~ manual range selectable; can be operated by remote switching. Optional: extension of range: 0-100 ppmC, within 10 times range ratio;
Lowest Detection Limit (LDL)	0,022 ppmC (3σ)
Repeatability	±1.0 % of F.S.
Linearity	±1.0 % of F.S.
Zero Point Drift	< LDL/Day at lowest range < 0,05 ppmC/Week at lowest range
Span Point Drift	< LDL/Day at lowest range < 0,5% of F.S./Week at F.S.
Flow Rate	approx. 0,9 l/min
Response Time (T ₉₀)	< 60 sec. (minimum measurement range)
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.200 VA
Dimensions	430(B) x 550(T) x 221(H) mm (5HE)
Housing	19" incl. telescopic rails
Mass	approx. 33 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

Dodatečné body technické specifikace

vlastní úprava vzduchu pro provoz FID (vzduch je nasáván z okolí přístroje)

možnost připojení měřeného plynu pomocí teflonové hadičky – průměr 6 mm

možnost napojení na PC pomocí rozhraní USB, možnost ukládání naměřených dat

napojení přístroje na stávající rozvod tlakového H₂ (kapilára 1/8“)

software umožňující záznam okamžitých hodnot naměřených dat v závislosti na čase

možnost exportu naměřených dat do formátu .csv a jejich dalšího zpracování ve vhodném tabulkovém kalkulátoru, např. MS Excel