

# HORIBA APMA-370

## CO-Immission Monitor

### Data Sheet



### Abstract

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

### Overview

The HORIBA instrument APMA-370 is a non-dispersive IR absorption monitor (NDIR) which uses the "crossflow" modulation principle. Sample gas and reference gas are alternately supplied to the measuring cell. Sample gas with eliminated CO 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 14626 (Continuous ambient air quality measurements in stationary use).

### Features

- ✓ Approval according to EN 14626: TÜV 936/21204643/B and TÜV 0000028754\_03
- ✓ Continuous measurement of CO in ambient air
- ✓ "Cross Flow" Modulation principle for stable measurements
- ✓ Interference-compensating detector to suppress the influences of moisture
- ✓ 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	Non-dispersive infrared (NDIR) absorption technology
Application	CO in ambient air
Range	Standard ranges: 0-10/20/50/100 ppm; 0-5/10/20/50 ppm; auto range ~ manual range selectable; can be operated by remote switching. Optional: extension of range: 0-100 ppm, within 10 times range ratio;
Certified Range	0- 100 mg/m <sup>3</sup> (0- 86 ppm)
Lowest Detection Limit (LDL)	< 0,02 ppm (3 $\delta$ )
Repeatability	$\pm$ 1.0 % of F.S.
Linearity	$\pm$ 1.0 % of F.S. ( $\pm$ 0,55% 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. 1,5 l/min
Response Time (T <sub>90</sub> )	< 50 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 ( $\mu$ g)/m <sup>3</sup>
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 (115 VA according to type test)
Dimensions	430(B) x 550(T) x 221(H) mm (5HE)
Housing	19" incl. telescopic rails
Mass	approx. 16 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