

CO-Analyzer, HORIBA Model APMA-370



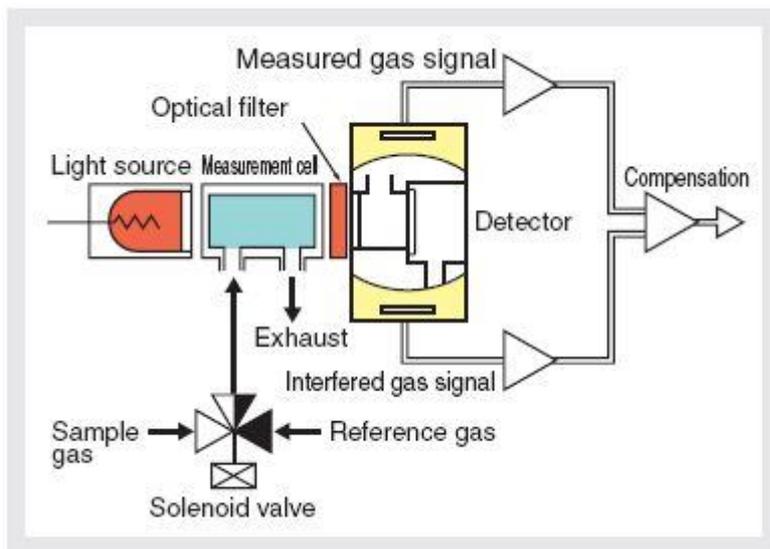
SPECIFICATIONS

Application:	CO-measurement in ambient air	Display:	big fluorescence display in ppm (ppb) or mg (μg)/m ³
Ranges:	0 - 5 / 10 / 20 / 50 ppm (max. 200 ppm)	Language:	English, French or German
Optional (measurable) ranges:	4 ranges selectable from 0 - 200 ppm, within 10 times range ratio	Output signal: digital:	serial interface RS-232C/Gesytec/ HORIBA-Protocol/Env. SA, Mode 4
Ranging:	manual, automatic or remote controlled	Option analog:	0(4) - 20 mA or 0 - 1 V or 0 - 10 V
Lower detectable limit:	0,02 ppm (3 σ)	Compensation:	Pressure and temperature
Repeatability:	$\pm 1,0$ % F.S.	Monitoring of analyzer function alarms: flow alarm	power off pressure alarm catalyzer temperature battery alarm cal. Alarm
Linearity:	$\pm 1,0$ % F.S.	Ambient temperature:	0 - 40 °C
Zero drift:	< LDL/day at lowest range < 0,2 ppm /week at lowest range	Power:	230 V AC, 50 Hz, approx. 150 VA
Span drift:	< LDL/day at lowest range $\pm 1,0$ % F.S./week	Dimensions:	width: 430 mm (19") height: 221 mm (5 HU) depth: 550 mm
Sample gas flow rate:	1,5 l/min	Housing:	19"-case with telescopic slides
Response time (T ₉₀):	within 50 sec	Weight:	approx. 16 kg
OPTIONS:	integrated valves, internal zero gas system		

HORIBA

Principle: Cross flow modulation, infrared (NDIR) absorption technology

Conventional technology uses an optical chopper to obtain modulation signals. Instead, the APMA-370 uses solenoid valve cross flow modulation. Fixed amounts of the sample gas and the reference gas are injected alternately into the measurement cell. With the cross flow-modulation method, if the same gas is used for both the sample gas and the reference gas (e.g., zero gas could be used for both), no modulation signal will be generated. This has the great advantage that, in principle, when analyzing minute amounts of gas there is no generation of zero-drift. An additional advantage is that the elimination of rotary sectors precludes the need for optical adjustment. These features assure greatly improved stability over long periods of measurement. A further improvement is that in the front chamber of the detector, the measurable components, including interference components, are detected; in the rear chamber, only interference components are detected. By means of subtraction processing, the actual signal obtained is one that has very little interference.



Type approval: According to EN14626 and VDI 4202/4203 (TUEV Rheinland, Germany)
Institute for Energy- and Environmental Technology Cologne.
U.S. EPA CONDUCTING FINAL REVIEW OF DESIGNATION NUMBER
APPLICATION