

Ambient Air Quality Monitoring System

AQMS-400 Carbon Monoxide Analyzer

FPI AQMS-400 carbon monoxide (CO) analyzer measures ambient CO concentration by employing non-dispersive infrared with gas filter correlation method technology



Key Features

- ❖ 14 meters optical path to perform high reliability
- ❖ Five years guarantee on GFC wheel
- ❖ Compliance with US EPA reference method
- ❖ Various outputs include ethernet and Rs232
- ❖ User friendly interface with large screen
- ❖ Continuous system diagnosis with alarm
- ❖ Multi-tasking software allows viewing test variables while operating
- ❖ Temperature and pressure compensation
- ❖ Internal data logging with 1 min to 365 day multiple averages

Principle

Infrared energy emitted by light source is passed through gas chamber containing the air sample, and the quantitative absorption of energy by CO in the sample cell is measured by corresponding detector.

GFC

GFC (Gas filter correlation) technology is utilized to remove interference caused by moisture and other backgrounds.

Two gas filled chambers are mounted on a rotating disc, which pass through an IR beam alternately. The measure chamber is filled with nitrogen while the reference chamber is filled with high concentration CO. IR beam then passes through the sample gas cell. The difference in absorbance is measured and provides a direct output of the gas concentration.

Data storage and analysis

Stored data are easily retrievable through the serial or ethernet port via PC client software, allowing operators to perform predictive diagnostics and enhanced data analysis by tracking parameter trends.

Technical Data

Standard Range	Min: 0~50 ppm F.S. Max: 0~1,000 ppm F.S. (Selectable)
Zero Noise	< 0.04 ppm (RMS)
Span Noise	< 0.25 ppm
Lower Detectable limit	< 0.08 ppm
Zero Drift (24 hours)	< 0.1 ppm
Span Drift	< 1% F.S.
Response Time	< 60s (T90)
Precision	< 0.5%
Linearity	< 1% F.S.
Sample Flow Rate	800 cc/min \pm 10%
Operating Temperature	20~30°C range (per US EPA guidelines). Instrument may be safely operated over the range of 5~40°C
Power Requirement	100~240 VAC, Converter applicable
Dimensions and Weight	178mm x 432mm x 609mm, 25kg

System Drawing

