AQMS-450 Carbon Dioxide Analyzer

FPI AQMS-450 carbon dioxide (CO_2) analyzer measures ambient CO_2 concentration by employing Non-dispersive infrared (NDIR) with gas filter correlation (GFC) method technology to realize ppm level CO_2 concentration measurement.

Features

01. The integrated purging device which eliminates the interference of environmental CO_2 to the instrument measurement

02. The White cavity design and special anti-corrosion technology on the surface of optical devices to give better stability and longer lifetime

03. Wide measurement range with low detection limit, which can meet the needs of CO_2 monitoring in most application.

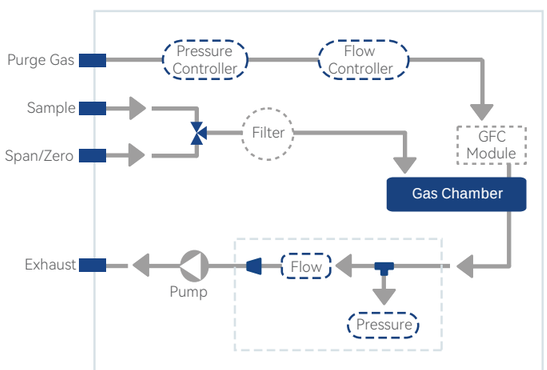
04. Adopting GFC NDIR technology, measuring range is up to 2000 ppm

05. High response, high repeatability, high accuracy and simple operation

06. Support classified operation, automatically storing the calibration data and alarm information, etc

Principle

The infrared energy emitted by the light source is passed through the gas chamber containing the air sample, and the corresponding detector measures the quantitative absorption of energy by CO_2 in the sample cell.

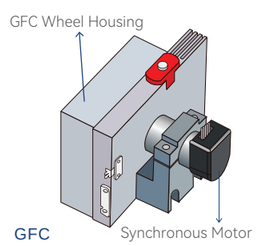


Data Storage and Analysis

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.

GFC

The gas filter correlation (GFC) adopts non-dispersive infrared technology and includes two parts, one for reference and the other for measurement.



Specifications

Standard Range	0~2000ppm
Zero Noise	≤0.1ppm
Span Noise	≤5ppm
Lower Detectable Limit	<0.2ppm
Zero Drift (24 hours)	±0.25ppm
Span Drift (24 hours)	1% of reading
Precision	≤5ppm
Response Time	≤90s (T90)
Sample Flow Rate	800cc/min±10%
Data Transmission	4~20mA
Output	RS232, RS485, Ethernet
Operating Temperature	0~40°C
Operating Humidity	0~95%RH (No condensation)
Power Requirement	220V AC, 50Hz, ≤350W
Dimensions and Weight	178(H)x432(W)x604(D)mm, ≤28kg