SPECIFICATION SHEET

TOA DKK

CARBON MONOXIDE ANALYZER

GFC-390

This is the carbon monoxide (CO) analyzer in ambient air that adopts gas filter correlation method. The device ensures stable measurement of a small amount of CO in the atmosphere because of the principle that avoids the effects of vibration and interference components.

The device has obtained model approval for densitometers under the Measurement Act.
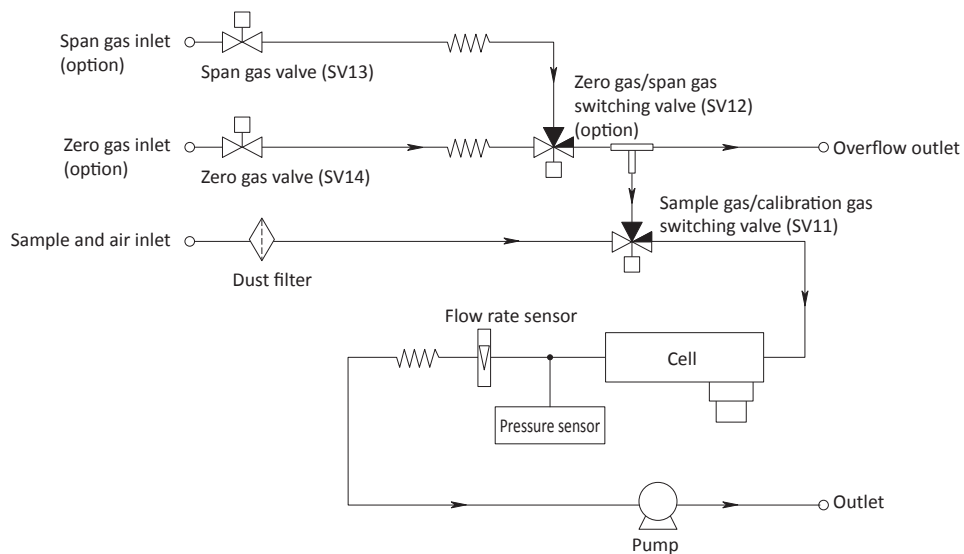
Characteristics

○ Adopts the gas filter correlation method for measurement. The method is almost free of the effects of interference components and optical stains.

○ Uses multiple-reflection measuring cell to enable high-sensitivity measurement in the 5-ppm range.

○ More resistant to vibration with the semiconductor infrared detector.

○ Enables stable measurement with the original digital signal processing technology.

○ The optional Ethernet interface unit enables data collection and remote control via LAN.

○ The optional CF card records measurements recorded by an analyzer (instantaneous values and hourly average values), the status within an analyzer (temperature, pressure and flow rate), and history of zero deviations, span coefficients, alarms and events.* Data is kept as CSV files in the CF card to facilitate data editing. Various types of data (e.g. minute values, hourly values, alarms and events) are classified into year- or month-wise groups for convenient data organizing.

○ A CF card can record the following data volume (the device only accepts our official CF cards that are to be used exclusively for the device.)

Example of storable data (256 MB): data for about 12 years (only usual recording)
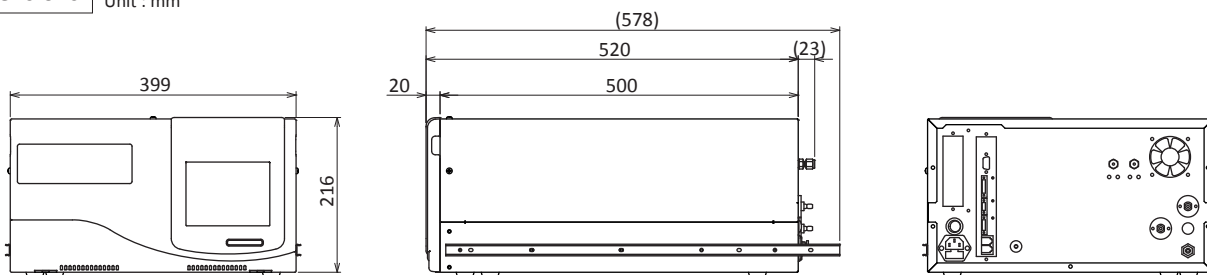
Standard specifications

Product name	: Carbon Monoxide Analyzer
Model	: GFC-390
Measurement object	: CO in ambient air
Measurement method	: Gas filter correlation method
Meas. range	: 0 to 5 / 10 / 20 / 50 / 100ppm (User selectable)
Unit	: ppm, ppb, mg/m³ (selectable)
Analog Output Ranges	: 0 to 1VDC, 0 to 10VDC, 4 to 20mA (selectable)
Commumication	: RS232C, Ethernet TCP/IP (option)
Linearity (indication error)	: Within ±1% FS
Repeatability	: Within ±1% FS
Minimum detection sensitivity	: 0.5% FS or less
Zero noise	: Within 0.5ppb
Stability	: Zero drift; within ±0.1ppm/day, within ±0.2ppm/week Span drift; within ±1% FS/day, within ±2% FS/week
Flow of sample in ambient air	: Approx. 1L/min
Response time	: Within 2minutes (90% response)
Effects of interference components	: Effects of moisture; ±0.3ppm or less Effects of CO_2; ±0.3ppm or less
Warm-up time	: Approx. 3hours
Ambient temperature/ humidity	: 0 to 40°C, RH 85% or less
Power source	: 220VAC, 50/60Hz
Power consumption	: 250VA at maximum; 110W on average
Flow of sample in ambient air	: Approx. 1.0L/min. (20°C, 1atm)
Outside dimensions	: 399 (W) x 520 (D) x 216 (H) mm without rubber legs
Weight	: Approx. 18kg

Measurement system diagram

Span gas inlet (option) — Span gas valve (SV13) — Zero gas/span gas switching valve (SV12) (option) — Overflow outlet

Zero gas inlet (option) — Zero gas valve (SV14)

Sample and air inlet — Dust filter — Sample gas/calibration gas switching valve (SV11)

Flow rate sensor — Cell

Pressure sensor

Pump — Outlet

Dimensions   Unit : mm

399

216

20

(578)

520

(23)

500

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⚠ **CAUTION**   Please read the operation manual carefully before using producuts.

https://www.toadkk.com/english/

Information and specifications are subject to change without notice.