SPECIFICATION SHEET



SULFUR DIOXIDE ANALYZER

GFS-390

This is the sulfide dioxide (SO₂) analyzer in ambient air that adopts the ultraviolet fluorescence method.

The original optical system and measurement system permit stable measurement of small amount of SO_2 in atmosphere.



Characteristics

- OThe analyzer has embedded a device for eliminating aromatic hydrocarbon and moisture based on our original technology. There are no effects of aromatic hydrocarbon and moisture that are interference components in the ultraviolet fluorescence method.
- OA dust filter is mounted on the panel on the front surface of the analyzer to facilitate dirt checking and filter replacement.
- OThe optional Ethernet interface unit enables data collection and remote control via LAN.
- OThe 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.
- OA 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 (regular recording only)
- OThe improved optical system decreases effect of interference components.

Standard specifications

Product name : Sulfur Dioxide Analyzer

Model : GFS-390

Measurement object : Sulfide dioxide (SO₂)

Measurement method: Ultraviolet fluorescence method Meas. range $\begin{array}{c} :0 \text{ to } 0.05 \text{ / } 0.1 \text{ / } 0.2 \text{ / } 0.5 \text{ / } 1.0 \text{ppm} \end{array}$

(User selectable)

(Optional; 2, 5, 10, 20 ppm)

Unit : ppm, ppb, mg/m 3 , μ g/m 3 (selectable) Analog Output : 0 to 1VDC, 0 to 10VDC, 4 to 20mA

Ranges (selectable)

Communication : RS232C, Ethernet TCP/IP (option)

Linearity : Within $\pm 1\%$ FS

(indication error)

Repeatability : Within $\pm 1\%$ FS

Minimum detection \div Within 0.5~ppb~(1%~FS)

limit

Zero noise : Within 0.5ppb

Stability : Zero drift; within ±1ppb/day; Within ±2

ppb/week

Span drift; within ±1% FS/day; Within

 $\pm 2\%$ FS/week

Response time $\,$: Within 3minutes (90% response)

Effects of interference: Effects of moisture; Effects of about $2.5\,$

components vol% are within $\pm 4\%$.

Effects of toluene; 2.5ppb (5% FS) or

less

Warm-up time : Approx. 3hours

Ambient temperature/: 0 to 40°C, RH 85% or less

humidity

Power source 220VAC, 50/60Hz

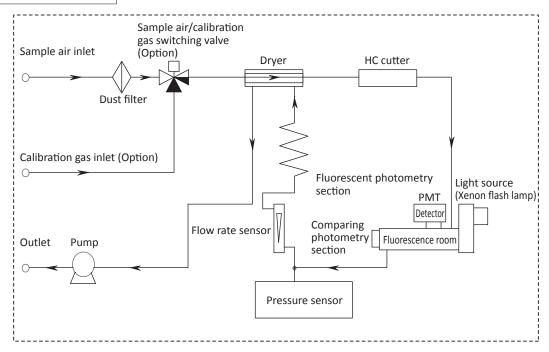
Power consumption: 120VA at maximum; 70W on average Flow of sample in 30 Approx; 30 Approx

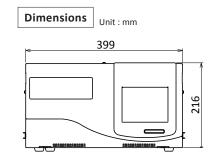
ambient air

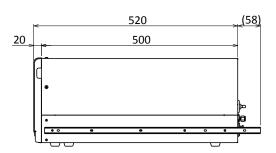
Outside dimensions : $399 \text{ (W)} \times 520 \text{ (D)} \times 216 \text{ (H)} \text{ mm}$

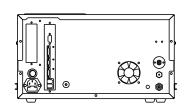
Weight : Approx. 16kg

Measurement system diagram













Please read the operation manual carefully before using producuts.

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