

# SPECIFICATION SHEET

**TOA DKK**

## SULFUR DIOXIDE ANALYZER

**GFS-390**

This is the sulfide dioxide (SO<sub>2</sub>) 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<sub>2</sub> in atmosphere.



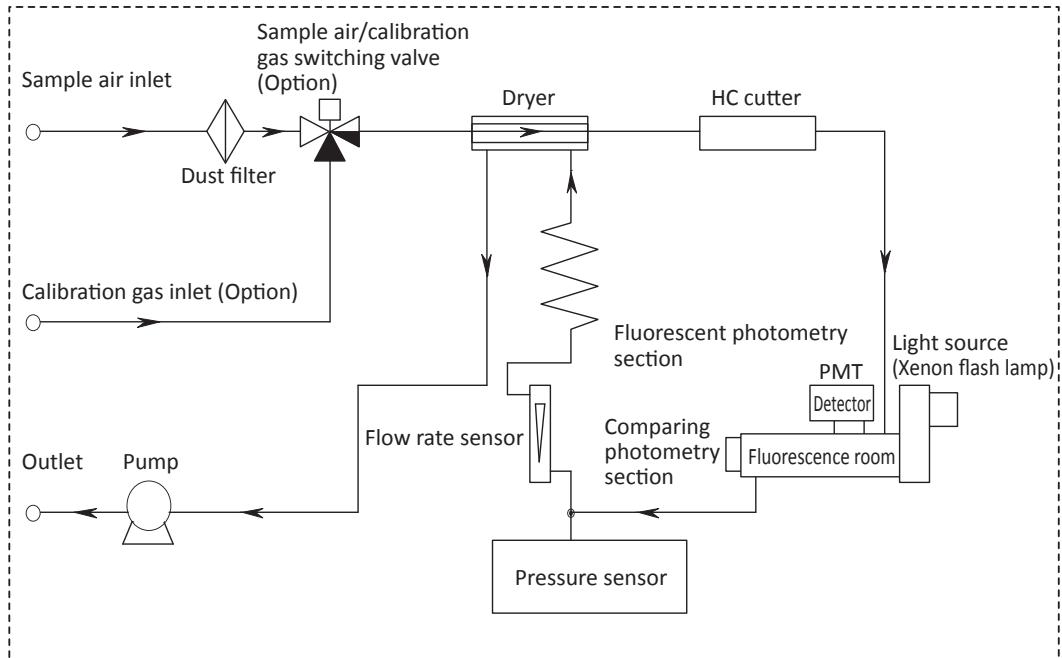
### Characteristics

- The 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.
- A dust filter is mounted on the panel on the front surface of the analyzer to facilitate dirt checking and filter replacement.
- 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 (regular recording only)
- The improved optical system decreases effect of interference components.

### Standard specifications

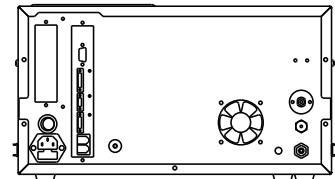
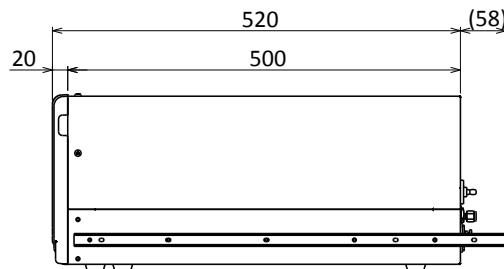
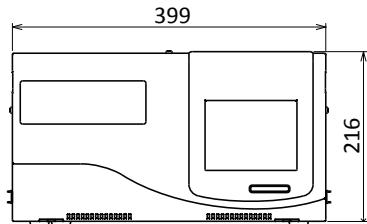
Product name	: Sulfur Dioxide Analyzer
Model	: GFS-390
Measurement object	: Sulfide dioxide (SO <sub>2</sub> )
Measurement method	: Ultraviolet fluorescence method
Meas. range	: 0 to 0.1 / 0.2 / 0.5 / 1.0ppm (User selectable) (Optional: 2, 5, 10, 20 ppm)
Unit	: ppm, ppb, mg/m <sup>3</sup> , µg/m <sup>3</sup> (selectable)
Analog Output	: 0 to 1VDC, 0 to 10VDC, 4 to 20mA (selectable)
Ranges	: RS232C, Ethernet TCP/IP (option)
Communication	: Within ±1% FS (indication error)
Linearity	: Within ±1% FS
Repeatability	: Within ±1% FS
Minimum detection limit	: Within 0.5 ppb (1% FS)
Zero noise	: Within 0.5ppb
Stability	: Zero drift; within ±1ppb/day; Within ±2ppb/week Span drift; within ±0.5% FS/day; Within ±2% FS/week
Response time	: Within 3minutes (90% response)
Effects of interference	: Effects of moisture; Effects of about 2.5 vol% are within ±4%. Effects of toluene ; 2.5ppb (5% FS) 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	: 120VA at maximum; 70W on average
Flow of sample in ambient air	: Approx. 0.8L/min. (20°C, 1atm)
Outside dimensions	: 399 (W) x 520 (D) x 216 (H) mm
Weight	: Approx. 16kg

### Measurement system diagram



### Dimensions

Unit : mm



**DKK-TOA CORPORATION**

**CAUTION**

Please read the operation manual carefully before using products.

Overseas Sales Division:  
DKK-TOA Corporation  
29-10, 1-Chome, Takadanobaba, Shinjuku-ku,  
Tokyo 169-8648 Japan  
Tel : +81-3-3202-0225 Fax : +81-3-3202-5685  
E-mail : intsales@dkktoa.com

