

## In-situ

### Technical Specification

Measured Component	NO <sub>x</sub> , NO <sub>2</sub> , SO <sub>2</sub> , NH <sub>3</sub>
Measurement Principle	Differential Optical Absorption Spectroscopy (DOAS)
Measuring Range	NO <sub>x</sub> : Min 0 ~ 40 / Max 0 ~ 2000 ppm SO <sub>2</sub> : Min 0 ~ 50 / Max 0 ~ 2000 ppm NH <sub>3</sub> : Min 0 ~ 10 / Max 0 ~ 50 ppm
Min. Measuring Unit	0.1 ppm
Zero Drift (168 hours)	< ±1 % FS
Span Drift (168 hours)	< ±1 % FS
Repeatability	< ±1 % FS
Linearity	< ±1 % FS
Response Time	< 5 seconds



System Component	Main Unit / Probe / Junction Box / Purge System / Cables / Master Flange
Option	Probe Protector / Teflon Coated Probe / Purge Motor Unit

Feature	<ol style="list-style-type: none"> <li>01 Explosion-proof model of the DGA-X</li> <li>02 In-situ explosion-proof design reduces the need for a explosion-proof shelter, saving costs and minimizing space constraints</li> <li>03 Measures in the low wavelength UV range (200 ~ 400 nm) for high precision and minimal moisture interference</li> <li>04 Utilizes the differential optical absorption spectroscopy (DOAS) method, eliminating the need for calibration</li> <li>05 Selectively measures two gases out of NO<sub>x</sub>, SO<sub>2</sub>, and NH<sub>3</sub> simultaneously</li> <li>06 Enables individual NO and NO<sub>2</sub> measurements without the need for a NO<sub>x</sub> converter</li> </ol>
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### Other Specification

Measurement Condition	Operating Temp. -20 ~ +55 °C Gas Temp. < +900 °C
Communication	Analog Output 2 Channel, 4 ~ 20 mA Digital Output 4 Channel Digital Input 2 Channel Display & Input Device 7 inch LCD Monitor (Touch Screen) / USB Interface RS232, 422, 485 / LAN (Ethernet) / Hart
Dimension & Power Supply	Material SUS 304 Dimension W 300 x D 380 x H 420 mm Weight 38 kg Enclosure Rating IP 65 (IP 66) Voltage 110 / 220 VAC, 50 / 60 Hz Power Consumption 500 W

Probe	Material 0.5 ~ 2.5 m Measurement Section Length 300 mm, 500 mm Weight 1.5 m : 20 kg / 2.0 m : 25 kg Gas Flow > 1 m/s Purge Necessary Temp. Sensor PT 1000 or PT 100
Purge System	Material SUS 304 Dimension W 185 x D 367.5 x H 153 mm Weight 13 kg Voltage 110 / 220 VAC, 50 / 60 Hz Power Consumption 100 W
Instrument Air Consumption	Analyzer 8.4 m <sup>3</sup> /h Probe 60 m <sup>3</sup> /h