

# DGA-XK

UV Absorption / Zirconia  
NO<sub>x</sub>, SO<sub>2</sub>, O<sub>2</sub>



www.thomsongroup.com.au

In-situ

## Technical Specifications

Measured Components	NO <sub>x</sub> , SO <sub>2</sub> , O <sub>2</sub>
Measurement Principles	UV (NO <sub>x</sub> , SO <sub>2</sub> ) / Zirconia (O <sub>2</sub> )
Measuring Ranges	NO <sub>x</sub> : Min 0 ~ 50 / Max 0 ~ 200 ppm SO <sub>2</sub> : Min 0 ~ 50 / Max 0 ~ 200 ppm O <sub>2</sub> : 0 ~ 25 %
Min. Measuring Unit	0.1 ppm (NO <sub>x</sub> , SO <sub>2</sub> ), 0.01 vol% (O <sub>2</sub> )
Zero Drift (168 hours)	< ±1 % FS
Span Drift (168 hours)	< ±1 % FS
Repeatability	< ±2 % FS
Linearity	< ±2 % FS
Response Time	< 5 seconds



<b>System Components</b>	Main Unit / Probe / Power Distribution Panel Purge Motor Unit / Master Flange / Cables
--------------------------	---

<b>Options</b>	Probe Protector / Teflon Coated Probe IP66 or NEMA 4X (Panel) Regulator & Valve / Calibration Gas Gas Panel / ACU (Auto-calibration Unit)
----------------	--

<b>Certificates &amp; Approvals</b>	Type Approval (Korea)
-------------------------------------	-----------------------

<b>Features</b>	<ol style="list-style-type: none"> <li>01 Integrates DGA-X and GGA-70-1 to simultaneously measure NO<sub>x</sub>, SO<sub>2</sub>, and O<sub>2</sub></li> <li>02 NO<sub>x</sub> and SO<sub>2</sub> measurements employ ultraviolet differential optical absorption spectroscopy (UV DOAS), while O<sub>2</sub> uses zirconia sensing method</li> <li>03 Optional addition of a standard gas calibration device</li> </ol>
-----------------	--

## Other Specifications

<b>Measurement Conditions</b>	Operating Temp.	-20 ~ +55 °C
	Gas Temp.	< +900 °C

<b>Communication</b>	Analog Outputs	3 Channel, 4 ~ 20 mA
	Digital Outputs	6 Channel
	Digital Inputs	3 Channel
	Display & Input Device	7 inch LCD Monitor (Touch Screen) / USB
	Interface	RS232, 422, 485 LAN (Ethernet) / Hart

<b>Dimension &amp; Power Supply</b>	Dimensions	W 300 x D 380 x H 420 mm
	Weight	22 kg
	Enclosure Rating	IP66
	Voltage	110 / 220 VAC, 50 / 60 Hz
	Power Consumption	500 W

<b>Probe</b>	Materials	SUS 316 L or SUS 316 Ti
	Length	0.5 ~ 2.5 m
	Measurement Section Length	500 mm
	Weight	1.5 m : 25 kg / 2.0 m : 30 kg
	Gas Flow Rate	> 1 m/s
	Purge Motor	Necessary
	Temp. Sensor	PT 1000

<b>Purge Motor Unit</b>	Dimensions	W 550 x D 350 x H 850 mm
	Weight	15 kg
	Voltage	3P 480 VAC or 1P 220 VAC
	Power Consumption	1.0 kW ~ 1.5 kW

<b>IA (Instrument Air) Consumption</b>	Analyzer	0.2 m <sup>3</sup> /h
--	----------	-----------------------