

# TGA-50

TDLS  
NH<sub>3</sub>



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## In-situ

### Technical Specification

Measured Component	NH <sub>3</sub>
Measurement Principle	TDLS (Tunable Diode Laser Spectroscopy)
Measuring Range	Min 0 ~ 10 / Max 0 ~ 500 ppm
Min. Measuring Unit	0.1 ppm
Zero Drift (168 hours)	< ±1 % FS
Span Drift (168 hours)	< ±1 % FS
Repeatability	< ±2 % FS
Linearity	< ±2 % FS
Response Time	< 5 seconds



**System Component** Main Unit / Probe / Power Distribution Panel / Cables / Master Flange

**Option** Probe Protector / Teflon Coated Probe / IP66 or NEMA 4X / Regulator & Valve / Calibration Gas / Compressure

**Certificate & Approval** Type Approval (Korea)

- Feature**
- 01 Utilizes tunable diode laser (TDL) technology to scan a narrow wavelength range, unaffected by gases other than NH<sub>3</sub>
  - 02 Semi-permanent use without light source replacement using a laser light source
  - 03 Enables standard gas calibration with calibration filter
  - 04 Incorporates SUS material in calibration filters to prevent damage from duct-related particles like dust and sand
  - 05 Simultaneous H<sub>2</sub>O measurement enables moisture correction

### Other Specifications

Measurement Condition	Operating Temp.	-20 ~ +55 °C
	Gas Temp.	< +450 °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	20 kg
	Enclosure Rating	IP 65 (IP 66)
	Voltage	110 / 220 VAC, 50 / 60 Hz
	Power Consumption	500 W

Probe	Material	SUS 316 L or SUS 316 Ti
	Length	0.5 ~ 2.5 m
	Measurement Section Length	500 mm
	Weight	1.5 m : 20 kg / 2.0 m : 25 kg
	Gas Flow Rate	> 1 m/s
	Instrument Air	Necessary
	Temp. Sensor	PT 1000
Instrument Air Consumption	Analyzer	0.5 m <sup>3</sup> /h