

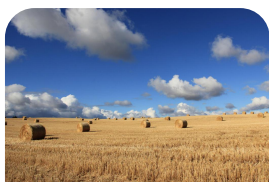
LGM1600 QC Laser-based Extractive NH_3 Analyzer — Rugged device for multi-purpose analysis



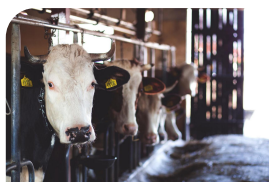
The LGM1600 delivers a highly integrated optical system in a compact chassis. Based on the state-of-the-art Quantum Cascade Laser Absorption Spectroscopy (QCLAS) technology, the analyzer utilizes the “fingerprint” absorption spectrum of ammonia molecules in the mid-infrared (MIR) region to achieve high-selectivity, anti-interference and high-precision measurement of NH_3 , specifically for industrial high-temperature flue gas analysis.



Industry



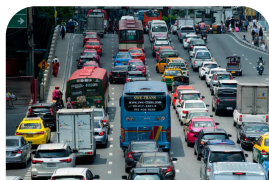
Fertilization



Livestock

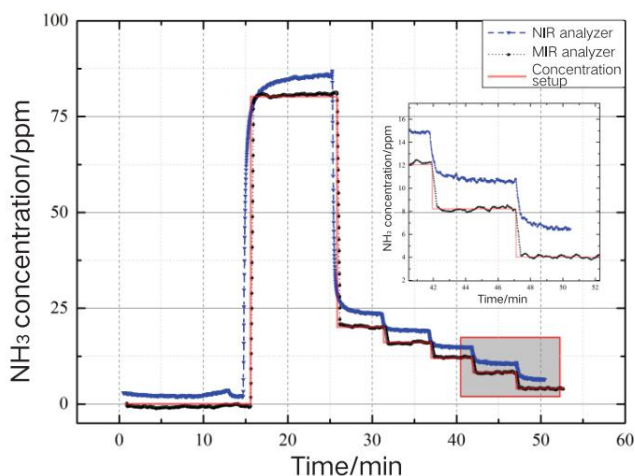


Environment



Vehicle exhaust

- **Anti-interference:** Free of interference from H_2O , SO_x , CO_x , C_xH_y , NO_x , etc.
- **High reliability** for various fields and easy maintenance
- **Direct measurement** ensuring high accuracy



Comparison against a commercial near-infrared (NIR) analyzer: faster response and smaller deviation

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Technical Data

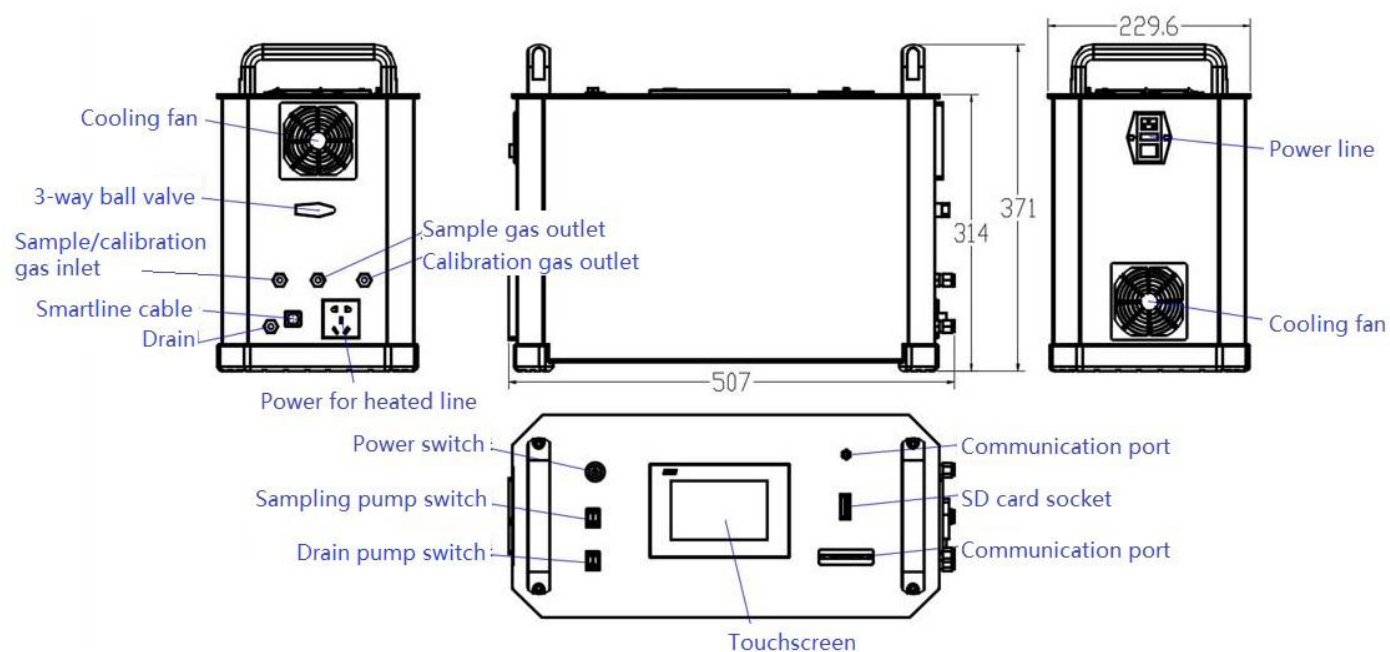
Technology	QCLAS	
Specifications	Target species	NH ₃ ; O ₂ (optional)
	Measuring range	NH ₃ : 0 ~ 20/50/100/200 ppm
		O ₂ : 0 - 25%
	Precision	NH ₃ : 0.1 ppm with 1s integration time
		O ₂ : 0.1%
	Response time	≤10s
	Linear error	±1%F.S.
	Zero drift	≤±1%F.S. /6 months
	Span drift	≤±2%F.S. /6 months
	Preheating time	<30 minutes
	Weight	~16kg (incl. the portable case)
Ports	UI	Touchscreen (HMI)
	Analog output	Two 4-20mA outputs (max. load 750Ω)
	Digital output	RS232/WIFI/SD card self-storage
Work condition	Gas cell temperature	120°C~230°C
	Power	200~240 VAC 50Hz <3 kW
	Temperature	-5°C~45°C

Sampling Accessories

LGM1600 is compatible with Smartline™ or JPES™ portable hot-and-wet sample probe and heated line. Upon request, we can provide Smartline™ or JPES™ accessories. Refer to Smartline™ and JPES™ documentations for more details.

Smartline	JPES
	

Drawings



Ordering Information

Ordering code					
LGM1600-	X	X	X	X	Product feature
					Including O₂ measurement
	1				Yes
	2				No
					NH₃ measuring range
		1			0 ~ 20 ppm
		2			0 ~ 50 ppm
		3			0 ~ 100 ppm
		4			0 ~ 200 ppm
					With external pump (10L/min)
			1		Yes
			2		No
					With insulating sleeves
				1	Yes
				2	No