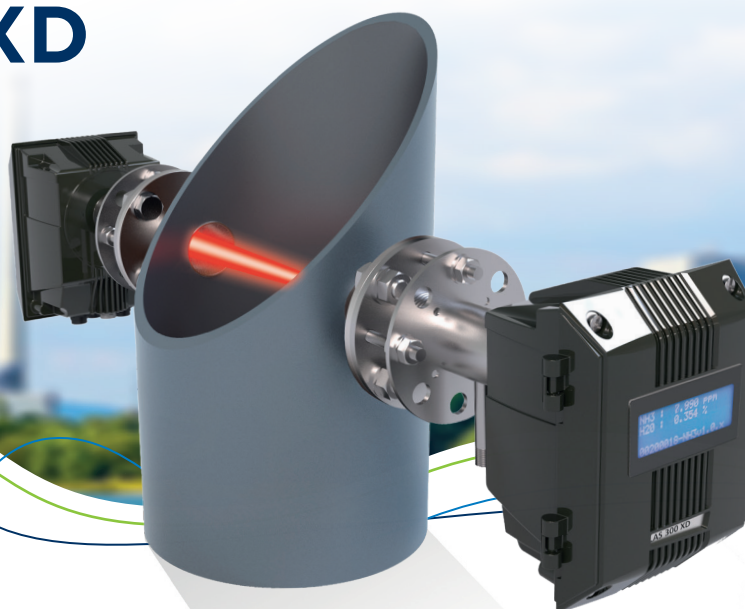


Tunable Diode Laser Spectroscopy

LAS 300 XD



VERSIONS OF THE LAS 300 XD ARE AVAILABLE TO MEET YOUR ANALYTICAL REQUIREMENTS:

- LAS 300 XD **NH₃** for ammonia (NH₃) and water (H₂O) monitoring
- LAS 300 XD **CO** for low and high concentration carbon monoxide (CO) monitoring
- LAS 300 XD **HCl** for hydrochloric acid (HCl) and water (H₂O) monitoring
- LAS 300 XD **HF** for hydrofluoric acid (HF) monitoring
- LAS 300 XD **O₂** for oxygen (O₂) monitoring



including LaserTool®
advanced software for setup and operations

MAIN BENEFITS:

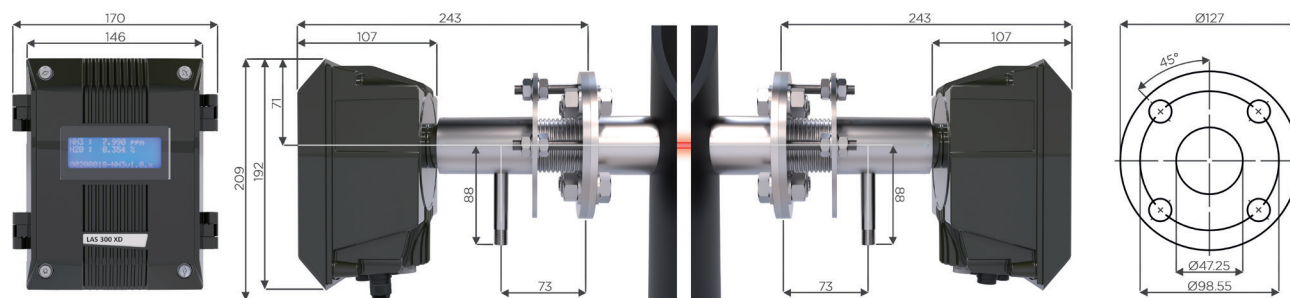
- High sensitivity - ppb, ppm and % concentrations
- Interference-free gas measurements
- Large dynamic range
- Absolute measurements: no drift, no calibration, linear response
- Real-time - 1s response
- In-situ and non-invasive measurement
- Suitable for harsh environments. Unaffected by contaminants - no corrosion
- Small size
- No sample lines required, eliminating errors due to gas sampling
- Low maintenance and low cost of ownership

MAIN APPLICATIONS:

Process & emission monitoring for:

- Scrubber technology
- Combustion control
- Chemical industry
- Fertilizer plants
- Waste incinerators
- Cement industry
- Glass industry
- Pulp and paper
- Biomass boilers
- Petrochemical industry

Tunable Diode Laser Spectroscopy **LAS 300 XD**



Measurement ranges:	
NH ₃ + H ₂ O	0 - 15 ppm / 0 - 500 ppm + 0 - 5% / 0 - 50%
HCl + H ₂ O	0 - 10 ppm / 0 - 3000 ppm + 0 - 5% / 0 - 50%
HF	0 - 100 ppm
CO (low)	0 - 500 ppm
CO (high)	0 - 100%
O ₂	0 - 10% / 0 - 100%
Accuracy:	≤ ±2% of full scale
Response time (0-90%):	1s
Linearity:	≤ ±1% of full scale
Process gas (°C max):	
NH ₃ + H ₂ O / HCl + H ₂ O / HF	+400°C
CO (low) / CO (high) / O ₂	+1200°C
Process gas pressure:	Typical max. 2 bar absolute
Display:	4 x 20 alphanumeric LED backlit LCD
Input signals:	Optional temperature and pressure inputs (4-20 mA)
Communication:	Modbus RTU
Output signals:	x2 analog outputs (4-20 mA), x2 relays
Power supply:	+ 24 V DC, ripple and noise 50 mV
Power:	15 W when starting-up the LAS 300 XD < 15 W in normal operation
Ambient operating (°C):	-10°C to +55°C
Enclosure rating:	IP65
Enclosure material:	Die-cast aluminium (polyester powder coated)
Mounting flange size:	DN40 PN20 or 1.5" 150lb ANSI
Mounting flange material:	SS 316 L
Air purge consumption:	10-50 L/min (depends on application conditions)
Stack temperature:	0-450°C (other temperatures upon request)
Stack diameter:	0.5 to 6 m

MAIN OPTIONS:

- IP67 Junction box (for power and signal)
- Purge air unit (blower, filters, flow meters, pressure regulator)
- Connecting cable (usb) RS485 or RS232
- In-line span check cell ①
- Weather protection covers
- Specific flanges (length / material / C°)
- Remote interface
- Audit cell (with tripod) ②
- Optical alignment tool ③



THE STANDARD LAS 300 XD IS SUPPLIED WITH:

- 1 signal cable, between the Transmitter and Receiver (10 m standard and 25 m optional)
- 2 cables for power supply and signal outputs (each 3 m long)
- 2 alignment bellows (type: ASME B16.6 class 150)
- LaserTool® software

Distributed by: