

NEW

S4 NEBULA

Heated TDLs Ammonia analyser



Heated Tunable Diode Laser Spectroscopy (TDLs) based ammonia analyser for fast and accurate measurement in process & environmental monitoring, automotive and research applications.

Flexible

- Low detection limit 0.2ppm
- Large dynamic range
- Quick warm-up time

Easy to Use

- Contactless measurement
- Fast response
- Low maintenance

Accurate

- High resolution
- Excellent gas selectivity
- Long term stability



Non-tablet Version
available for system
integrators

SIGNAL
GROUP 

S4 NEBULA

SPECIFICATIONS

DETECTOR TYPE:

Tunable Diode Laser Spectroscopy

RANGES:

Range A: 0 - 100ppm
Range B: 0 - 10000ppm
Ranges up to 0-20% available on request

DIMENSIONS:

19"X 133.3mm X 550mm
Weight: 12 Kg

POWER REQUIREMENTS:

110VAC - 250VAC or 24VDC.
150W max..

OUTPUTS:

0-10 volts
RS232
Ethernet (remote software is included)
Optional 4-20 mA.

OPTIONAL:

Ambient pressure compensation

ACCURACY

± 2% FDS

PRECISION:

0.2ppm with 60s averaging time

CROSS SENSITIVITY:

<4% (15% vol. H₂O)

RESOLUTION:

0.1ppm

T90 TIME:

2s @ gas flow rate of 3l/min

Alternative: Ammonia measurement

Depending on the application, Signal Group can also offer a high efficiency converter of NH₃ to NO in conjunction with a heated chemiluminescence detector.

The Signal Group 410 Converter uses stainless steel to convert NH₃ and NO₂ to NO. This can be used with our S4 QUASAR Heated vacuum chemiluminescence NO_x analyser to measure NH₃+NO₂+NO.

If this converter is then bypassed, the analyser can be used to measure NO, or ideally with a NO₂ converter to measure NO_x (NO+NO₂), and from this value for NH₃, NO₂ and NO can all be derived. In this arrangement the selection of converter and bypass is operated via a switch on the front panel and the NH₃ value calculated manually. Signal Group ammonia converters have a very high efficiency.



This compact 3U high 19" rack enclosure houses both the NH₃ to NO converter as well as a self contained heated filter and calibration gas selection valve.

S4 QUASAR

Heated vacuum chemiluminescence NO_x analyser

Flexible

- Very high vacuum with dry vac pump or atmospheric pressure versions
- 'Hot' and 'Cold' version

Easy to use

- Totally automatic operation
- Wireless tablet
- Software suite for use over ethernet or RS232

Accurate

- Dual detector for continuous NO₂, NO and NO_x readings
- Trace PPM measurements standard
- High range % available



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ISO
9001 : 2015
REGISTERED

Cert No. 317012019

Specifications may be changed without notification