# NEW

# **S4 NEBULA**

Heated TDLS Ammonia analyser

mmonia

% Ammon

Amm

NH3 43.6 ppm

NEBULA

Ammonia

SIGNALOO

Ammonia

Ammonia<sup>Ammonia</sup> NH3

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

- $\bigcirc$  High resolution
- Excellent gas selectivity
- Long term stability



Non-tablet Version available for system integrators



# **S4 NEBULA**

## **SPECIFICATIONS**

#### DETECTOR TYPE:

Tunable Diode Laser Spectroscopy

#### **RANGES:**

Range A: 0 - 100ppm Range B: 0 - 10000ppm Ranges up to 0-2% 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% FSD

**PRECISION:** 0.01ppm with <5s response time

## **CROSS SENSITIVITY:** <4% (15% vol. H2O)

### **RESOLUTION:**

0.001ppm **T90 TIME:** 

T90 3s @ 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 NOx 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 NOx (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.

## 54 QUASAR

#### Heated vacuum chemiluminescence NOx analyser

#### Flexible

#### Easy to use

- Totally automatic operation
  Wireless tablet
- Software suite for use over ethernet or RS232
- NO2, NO and NOx readings
   Trace PPM measurements standard

· Dual detector for continous

High range % available

Accurate



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



#### Authorised Representative:

· Very high vacuum with dry

pressure versions

· 'Hot' and 'Cold' version

vac pump or atmospheric



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Specifications may be changed without notification