

NEW

# S4 QUASAR

Heated vacuum chemiluminescence NOx analyser



Chemiluminescent Detector (CLD) for NOx measurement in engine emissions, combustion studies, process plant, CEMS and medical gas production.

## Flexible

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

## Easy to Use

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

## Accurate

- Dual detectors for continuous NO<sub>2</sub>, NO and NO<sub>x</sub> readings
- Trace PPM measurements standard
- High range % available



**Non-tablet Version**  
available for system  
integrators

**SIGNAL**  
**GROUP**



# S4 QUASAR

## SPECIFICATIONS

### MEASUREMENT TECHNIQUE

Chemiluminescence Detector (CLD)

### MEASURING UNITS

PPM or mg/Cu.Mtr. user selectable

### MEASURING RANGES

*Range A: 0-1000ppm.*

User settable to e.g.

0-1ppm, 0-5ppm, 0-10ppm, 0-50ppm,  
0-100ppm, 0-500ppm, 0-1000ppm.

Resolution: 0.01ppm

*Range B: 0-10000ppm.*

User settable to e.g.

0-10ppm, 0-50ppm, 0-100ppm,  
0-500ppm, 0-1000ppm, 0-5000ppm.  
0-10,000ppm. Resolution: 0.1ppm

*Range C: 0-100,000 ppm.*

User settable, with resolution of 1ppm

### RESPONSE TIME

T90 <2.0s

### REPEATABILITY

<1% FSD

### QUENCHING EFFECT

CO<sub>2</sub> and H<sub>2</sub>O Quenching.

2% of reading per 15% CO<sub>2</sub>

and 2% reading per 2% H<sub>2</sub>O

### LINEARITY

+/- 0.5% FSD or 2% of point

EN14181 - dc rel : <2%

R2 : >0.99

### ZERO DRIFT

<0.5% FSD/24hrs

### TEMPERATURE EFFECT ON ZERO

<0.15% per °C

### TEMPERATURE EFFECT ON SPAN

<0.3% per °C

### ZERO NOISE

<0.1ppm

### SPAN NOISE

<+/-0.1%FSD for vacuum version

<+/-0.3%FSD for non-vacuum version

### DETECTION LIMIT

0.05mgC/m<sup>3</sup>

### BYPASS FLOW SENSITIVITY

Less than 0.5% from 1 to 3 L/min

### SAMPLE FILTER

Removable 0.4 micron PTFE

### DISPLAY

Blank or Detachable Screen

### SAMPLE CONDITION

Max temp 190°C

Pressure -0.3bar to +0.5bar

### OPERATING CONDITIONS

5-40°C ambient temperature

### AIR SUPPLY

Air for Ozone (O<sub>3</sub>) flow 140ml/min

Pressure 0-1bar max dewpoint 12°C

Stable O<sub>2</sub> concentration >20%

### CONVERTER EFFICIENCY

NO<sub>x</sub> >95%

NH<sub>3</sub> >85%

### OUTPUTS

0-10 Vdc

RS232

Ethernet

TCP/IP

Optional 4-20 mA

### POWER REQUIREMENTS

220-240 V AC

110-120 V AC

24 V DC

600 W max.

### REMOTE CONTROL

AK protocol via RS232 port,

Ethernet

Comes with S4i remote software  
operating system.

### SIZE AND WEIGHT

19" (w) x 133.5 (h) x 530 mm (d)

Apx. 30Kg



### NOXGEN NO<sub>x</sub> Converter tester

Irrespective of manufacturer, it is extremely important to check the efficiency of the NO<sub>x</sub> converter. It is recommended that this should be undertaken every 6 months of use. The Signal NOXGEN converter tester is the ideal tool for this because it allows operators to simply use the standard NO calibration gas and convert it to NO<sub>2</sub> with the NOXGEN.

The NO<sub>2</sub> is then converted back to NO in the NO<sub>x</sub> converter with an efficiency of at least 98%.

Authorised Representative:



www.signal-group.com

### Signal Group Ltd

Standards House, Doman Road, Camberley, Surrey GU15 3DF  
United Kingdom

Tel: +44 (0)1276 682841 Email: sales@signal-group.com



ISO  
9001 : 2015  
REGISTERED

Cert No. 317012019