

# SOLUTIONS

CUSTOM

## **GAS ANALYSIS CUSTOM SOLUTIONS**

Nucon Provides Custom Solutions for real life analysis and diverse applications of Research and Industry. We have wide experience in Gas Analysis, Application assistance, sampling and custom configuration. Our packaged solutions provide ready to use answers and reliable performance.

The development of a Custom Solution includes studying user sample composition and state, process conditions, environmental requirements, system configuration and Hazardous classification.

#### PARAMETERS MONITORED:

- Oxygen Percent
- Oxygen Trace
- Hydrogen Percent
- ☐ Hydrogen Trace
- Dew Point
- Relative Humidity
- Temperature
- Pressure
- ☐ Flow
- Total Hydrocarbons
- Combustibles
- Carbon Dioxide Percent
- Carbon Dioxide Trace
- ☐ Hydrogen Sulphide
- Sulphur Dioxide
- □ Carbon Monoxide Trace
- Chlorine
- ☐ Ammonia
- □ Nitric oxide
- Nitrogen Dioxide





### **NUCON GAS ANALYSERS**

**SAMPLING** relates to flow or travel of sample to detectors. The simplest are **DIFFUSION** or **PRESSURISED SAMPLE** where sample can flow on its own by self-pressure. Where this does not happen, it is necessary to instal a pump for **EXTRACTIVE SAMPLING.** On-line direct or remote transmitter operation in 4-20mA loop options are available.

**SAMPLE CONDITIONING** is provided as per condition of sample gas. It is necessary to cool if sample is heated, and remove moisture and dust to pass on clean sample to detectors for monitoring. As per requirement suitable cooling coil, filters, pressure regulators, flow controllers, safety valves and By-Pass valves are provided. Special housings are available for incorporating various elements of sample conditioning.

**STREAM SELECTION** is useful when multiple streams have to be analysed using one Gas Analysis system, as we can select one stream at a time under programme control of Nucon Stream Selector. Output of stream selector drives the required solenoid and thus allows the selected stream to flow on for analysis. The address i.e. identification is provided by the 4-20 output available from the stream selector e.g. 4mA is when no stream is selected, 5mA if stream 1 is selected, 6mA if stream 2 is selected and so on. Stream selector works in both Auto and Manual modes. The number of streams is user specified and available upto a maximum of 15, the standard configuration being for 5 streams.

**ANALYSER OUTPUT** is on Digital Display and Terminals for 4-20mA or 0-1V D.C. are provided. Optional self powered optical isolators with 4-20mA input and 4-20mA output are available.

User set **ALARM** over operating range is provided

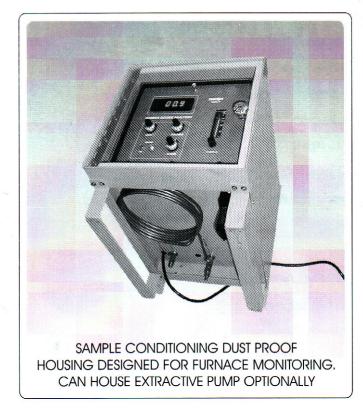
**DATA PROCESSING, LOGGING** and **PC** compatibility options are available.

**PACKAGING**: It is possible to package a Custom Solution in Panel mounting, Wall mounting or Table Top applications.

**GAS CONNECTIONS**: Standard fittings are 1/8" swagelok type. 1/4" fittings are optionally provided.

**POWER:** All instruments are available for 220V A.C. or 110V A.C. operation.

**APPLICATIONS:** Process monitoring, Engine Testing, Pure Gas and Gas Mixture Analyses, Combustion Monitoring, Food Storage and Packing, Furnace Monitoring, Atmospheric Studies, Safety Systems, Pollution Monitoring etc.





Manufactured By:

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