

# THERMAL CONDUCTIVITY GAS ANALYSER BINARY GAS ANALYSER KATHAROMETER



NUCON MODEL 4235P  
In Split form - separate  
Analyser Flow Module  
and Electronics Module  
- or in Single Housing, for  
both Panel Mounting and  
Bench Top applications.

Thermal Conductivity is a basic property of gas related to ability to conduct heat. At one end are gases like Hydrogen and Helium that are good conductors; at other end are Nitrogen, Argon and Carbon Dioxide that do not conduct well. In Reference Channel a pure gas is introduced while the sample channel carries the sample. The signal produced is proportional to the difference in Thermal Conductivity between the two Channels. It is possible to carry out Gas Purity Checks, Mixtures Composition Estimation, and also Safety Monitoring e.g. Oxygen in Hydrogen where it is widely known as Katharometer.



## SPECIAL FEATURES

- High Sensitivity TCD
- Transducers from Gow Mac USA
- Flow Monitoring and Control standard features
- Alarm with indicating light and SPDT relay standard feature
- Insensitive to flow rate in operating region
- Simple to operate
- Can be adapted for many uses
- Sturdy construction

## SPECIFICATIONS

Range : 0-100.0% Standard; other ranges on request

Power supply : 220 V A.C.

Display : Digital

Sample/Reference Gas Pressure: 0.1 to 10.0 kg/cm<sup>2</sup>

Sample connection: 1/8" Tube connection

Dimensions

Panel Mounting - W 198mm H 198mm D 305mm for control module and W 98mm H 198mm D 305mm for flow module

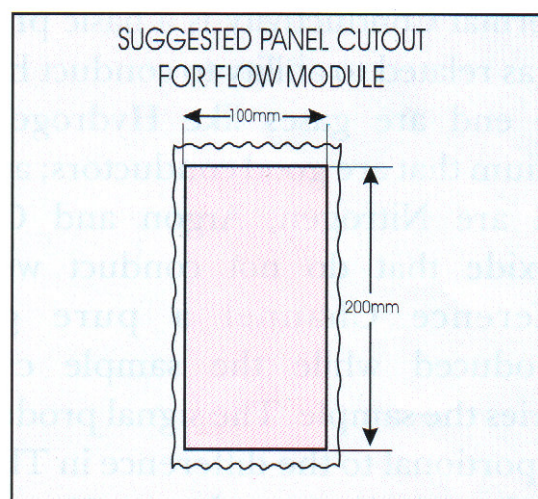
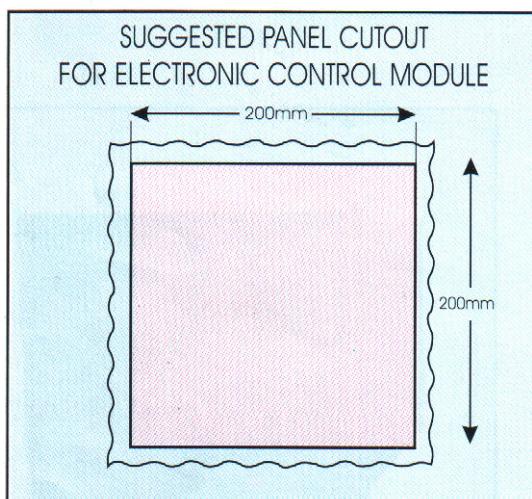
Suggested Panel Cutout W 200mm H 200mm and W 100 mm H 200mm

## APPLICATIONS

- Hydrogen or Helium Monitoring in Nitrogen, Argon etc.
- Gas Mixtures of all types
- Oxygen in Hydrogen
- Argon Inerting Mixture with H<sub>2</sub>
- Argon Shielding Mixture with N<sub>2</sub>
- Helium Breathing Mixtures
- Hydrogen Reducing atm with N<sub>2</sub>
- Nitrogen Inerting Mixture with H<sub>2</sub>
- Freon aerosols blending and mixing
- Flue Gas, Fire Protection Protective atmospheres

## COMBUSTIBLES MONITORING

MODEL 4235 PP is a special panel mounting version for monitoring Combustibles. Instead of standard Thermal Conductivity Detector a Modified Pellistor Thermal Conductivity Detector is used. Both reference and sample transducers are placed in a single Sample Flow path. While the former gives a standard signal, the latter gives an enhanced signal in the presence of combustibles e.g. Hydrogen. Model 4235 PP can be used to monitor Hydrogen in Oxygen on a range 0-10%. Alarm setting provides a relay trip at preset level and this can control the operating of a load through an appropriate contactor



Manufactured By:

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