



IR600 Series infra-red gas analysers

Features

- ◆ Continuous monitoring of carbon dioxide or methane
- ◆ Dual wavelength infra-red sensors for long-term stability and accuracy
- ◆ Digital display with 4 to 20mA analogue output and alarm/control relay outputs
- ◆ Choice of ranges from percentage to trace concentrations
- ◆ Remote sampling as standard



IR600 analysers continuously monitor carbon dioxide or methane in concentrations ranging from 100% down to ppm levels. Features include a dual wavelength sensor, remote sampling, digital readout, adjustable level relay outputs for alarm and control purposes, and minimal maintenance.

High performance is guaranteed by the infra-red sensor which makes use of a reference wavelength as well as a sensing wavelength, thus maintaining accuracy over long periods without the need to recalibrate.

An internal pump draws gas samples into the sensor through a particle filter from an intake which can be located at distances up to 30m from the monitor. The intake can be fitted with a moisture exclusion unit for use in wet environments.

A choice of seven concentration ranges from 0 to 100% down to 0 to 3000ppm (0.3%) is available for carbon dioxide monitoring and a choice of three, 0 to 100%, 0 to 30% and 0 to 10% for methane monitoring.

Readings are displayed by a 4-digit clear and unambiguous liquid crystal display. Two fully adjustable set points with associated volt-free contacts provide signals for separate alarms or appropriate control systems when carbon dioxide or methane concentrations reach set-point levels. The alarm values are displayed by pressing a button, which provides easy interrogation and setting.

The sensor and electronic components are housed in a tough plastic enclosure rated at IP54 (ingress protection against water or dust).

Routine maintenance is limited to occasional filter replacement and gas calibration. Both are simple and quick procedures.

Applications

- ◆ Landfill sites
- ◆ Food processing plant
- ◆ Chemical plant
- ◆ Process control systems
- ◆ Breweries
- ◆ Ventilation control
- ◆ Horticulture
- ◆ Gas storage areas
- ◆ Livestock farming

SPECIFICATION

Display

4-digit LCD display

Ranges

Carbon dioxide: 0 to 100%
 0 to 30%
 0 to 10%
 0 to 5%
 0 to 3%
 0 to 1%
 0 to 3000ppm (0.3%)
 Methane: 0 to 100%
 0 to 30%
 0 to 10%

Response time

30s from sample inlet

Accuracy

±2% of full scale
 Stability ±2% of full scale over 12 months

Indicator LEDs

Fault
 Low flow rate
 Setpoint 1 exceeded
 Setpoint 2 exceeded

Controls

Set-point adjustment and display buttons
 Span and zero adjustments
 Lamp test button

Output (signal)

4 to 20mA linear (500Ω maximum load)

Outputs (alarms)

Set-point relays
 Fault relay

Relay contacts

Volt free, changeover contacts
 3A at 30V dc (resistive load)
 2.5A at 240V ac (resistive load)

Temperature range

0 to 40°C

Power supply

240V, 220V, 110V ac
 50/60 Hz

Power consumption

13W typical

Weight

2.7kg

Enclosure rating

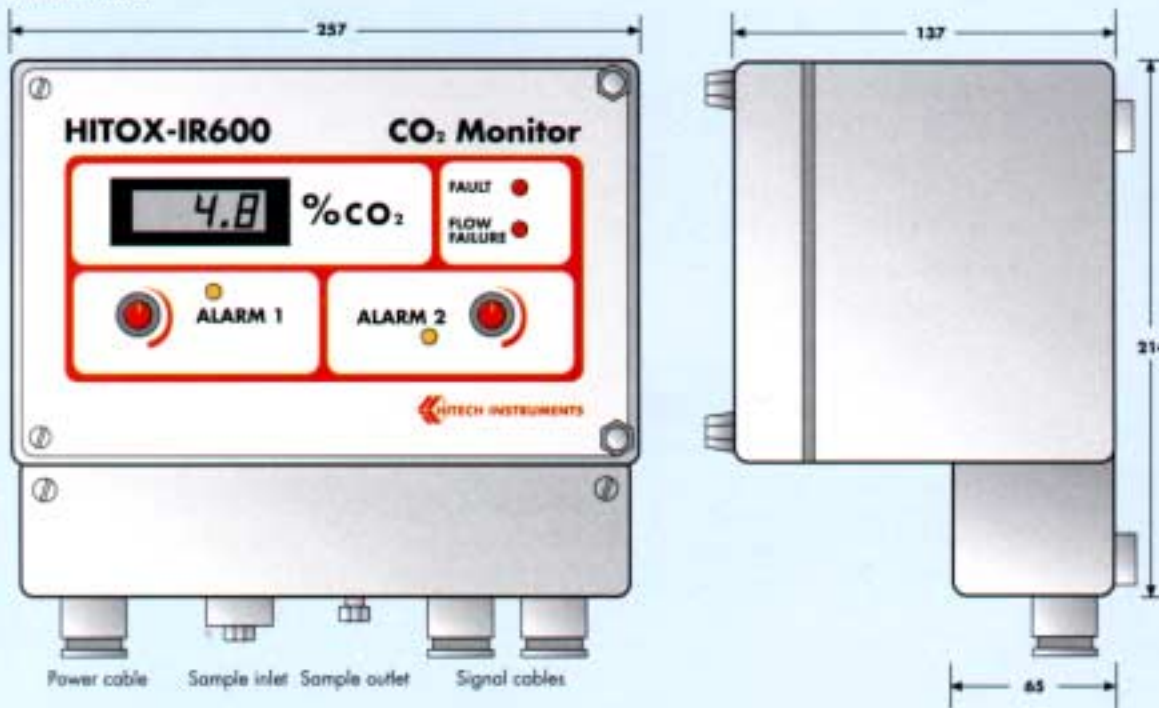
IP54

Optional extras

100dB sounder High intensity warning beacon

Note: if the monitor is used for potentially flammable gas mixtures, it must be housed in a suitably approved enclosure to accord with local standards requirements.

Dimensions (mm)



In keeping with a policy of continuous development, Hitech Instruments Ltd. reserves the right to change any part of this specification without notice

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