

GA45plus (Extra Options)

The GA45plus has the extra capability of measuring temperature and additional gases with plug-in pods.

The additional gases that can be measured by the GA45plus with plug-in pods are:

H₂S, CO, SO₂, NO₂, CL₂, H₂ and HCN.

Important Note

Whilst the gas pod is connected, the GA45plus **MUST NOT** be used in a hazardous area as the gas pod is not certified as intrinsically safe.

For spare parts including inlet filters please contact our office at:

Geotechnical Instruments (UK) Ltd.,
Sovereign House,
Queensway,
Leamington Spa,
CV31 3JR.
U.K.

Tel: +44 (0) 1926 338111
Fax: +44 (0) 1926 338110
Email: sales@geotech.co.uk

www.setpoint-europe.com



GA 45 & GA45plus Infra-red Gas Analyser

Operating Instructions

Geotechnical Instruments (UK) Ltd.,
Sovereign House, Queensway,
Leamington Spa, CV31 3JR. U.K.

Tel: +44 (0) 1926 338111
Fax: +44 (0) 1926 338110
Email: sales@geotech.co.uk

www.setpoint-europe.com

Introduction

The GA45 Infra-red Gas Analyser has been designed to accurately quantify the concentrations of the main constituents of Landfill Gas (Biogas). All readings are automatically compensated for variations in barometric pressure.

Maintenance

In order to keep the unit in perfect working order we recommend that it is returned to Geotechnical Instruments (UK) Ltd at regular service intervals.

Filters –

There are two filters provided with the unit – internal and external. The internal filter can be located inside the inlet port and the external filter is fitted into the water trap. These must be **changed on a very regular basis**, if the filters become wet it will affect performance and may damage the instrument. Only filters supplied by the manufacturer should be used.

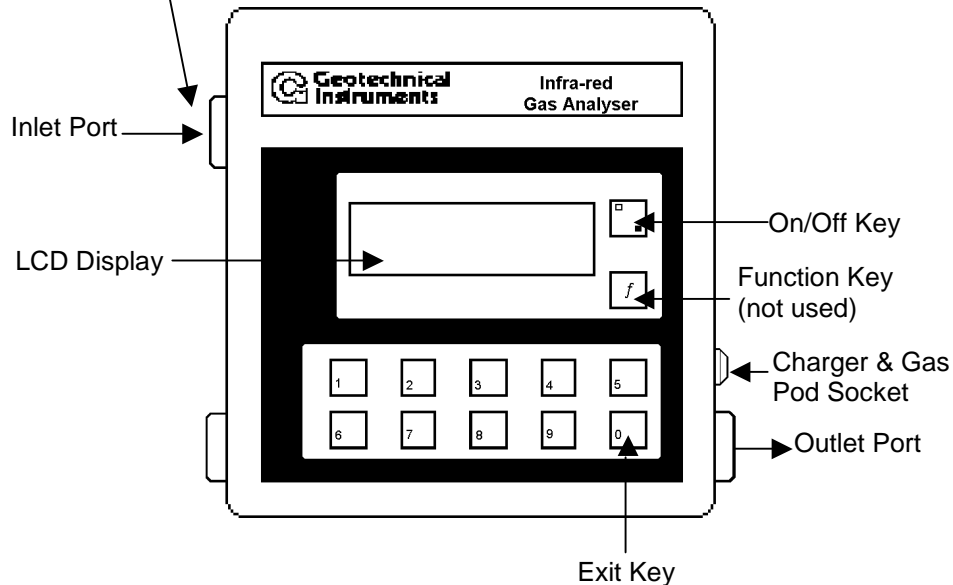
Battery –

The combined battery-charging and Gas Pod socket is located on the right hand side of the unit. The battery must only be charged in a “Safe Area”. The unit will auto-power-off after 15 minutes if no key is pressed to conserve battery life.

Storage –

If the unit is to be stored for a long period, the batteries should be fully charged prior to storage and then fully charged once every month.

The inlet filter can be changed by first removing the sample tube then unscrewing the inlet nozzle using the tool provided.



Safety

The GA45 & GA45plus Gas Analysers are certified by BASEEFA to Hazardous Area Classification EEx ibe IIB T3.

The instrument must only be used in areas to which the above classification is suited – refer British Standards BS5345.

It is the responsibility of the operator to determine the protection concept and classification required for a particular application.

A “Safe Area” is one where there is no requirement for Hazardous Area Certified Equipment.

Gas Pods (for GA45 plus) are not certified as intrinsically safe, and cannot be used in hazardous areas.

Operating Procedure

The GA45 Gas Analyser is very easy to use. The on screen display will show the available options and the instructions to complete the process of taking readings.

Switch on the Gas Analyser

A series of notification screens will appear. After five seconds the title screen will appear. If required press and hold the cursor keys (**key 1 & 6**) to adjust the contrast of the display, then press **key 0** to continue.

The **Read Gas** screen will appear, indicating concentrations of CH₄, CO₂, O₂ and barometric pressure (**.* indicates warming up).

Press **key 5** to switch pump on / off, a counter will display pump run time in seconds. If there is no or low flow “flow fail” will be displayed.

Press **key 1** to display the Methane reading in LEL.

Press **key 2** to access the **MENU** options.

Menu Options

Battery – shows approximate available battery charge (only available after unit has been ON for one minute).

Units – can be selected to be Metric or USA.

Alarms – allows CH₄ HIGH, CO₂ HIGH and O₂ LOW alarms to be set.

Calibration – allows zero and span setting for CH₄ and O₂, and span only for CO₂.

IMPORTANT! – for most accurate readings, zero the CH₄ channel in clean air before every use.

Factory Settings – restores original factory calibration settings.