

Natural Gas Composition Analyzers

Overview

As natural gas is expanding in the world's energy balance, there is an increasing need to measure flows and other gas parameters with the highest accuracy. Heat Value Gas Chromatograph HGC303 offers the world's top class technology to analyze natural gas and calculate derived parameters.

Features

Field mountable

Compact and rugged design for field installation without need for conventional analyzer housing.

Packaged natural gas analysis application

Ready-to-start standard application with gas components concentrations, heat value and other parameters, all in accordance to ISO standards.

Fieldbus communication

HGC 303 is compliant with Foundation Fieldbus for effective data and self-diagnostic transmission as well as configuration/maintenance communications. Modbus communication is also provided.

Environmental friendly design

Designed in accordance to ISO14001, the global standard for environmental protection.

Low cost of ownership

A low priced gas chromatograph with reduced engineering, installation start-up and maintenance costs. Validates the purchaser's decision by assuring effective savings in natural gas consumption management.

A compact analytic system to monitor heat value density, Wobbe index and other compounds for direct installation in pipes without a need of any sampling system, shelters, carrier or calibration gases.



Orbital Compact Gas Properties Transmitter Integrated System



GasPTi™ is a comprehensive, revolutionary and most importantly, fast response instrument. The PTi provides accurate, real-time monitoring of the key physical properties of natural gas including: CV/BTU, Relative Density, Wobbe, Compressibility, Motor Octane Number, Carbon Dioxide and others. GasPTi's unique and proven technology has been implemented in numerous installations across the world with many globally recognized organizations.

Technology recognised in standards as valid for custody transfer in US (AGA 5) and EU (OIML R140)



Benefits

- Easy to install, configure and operate – Installation of full system typically less than 2 hours
- No on-going analyser maintenance or technical support needed - simple annual validation
- No carrier gas - eliminates safety concerns and availability of helium or hydrogen storage
- No continuous calibration gas - eliminates need for cylinder storage and rental
- Reduced uncertainty - near real-time CV data matching, instantaneous flow measurement

Standard options

- GasPTi-P Post-mounted with optional remote sample probe
- GasPTi-F Fixed Probe direct pipeline-mounted version
- GasPTi-R Post-mounted with retractable sample probe
- GasPTi-FF Fixed Probe high speed direct pipeline-mounted version

Description

GasPTi derives a simplified equivalent 5-gas mixture from which it utilizes the standard **ISO6976** gross characterization method to calculate the gas quality parameters. For sampling, the patented *VE Technology™* sample probe eliminates vortex shedding and the need for vortex shedding calculations. This allows you to utilize any length of probe to ensure a representative sample is taken from the centre 1/3 of the pipe. In addition, its aerodynamic tip actively rejects particulates to allow significantly reduced filtration and improved accuracy. The integrated gas conditioning system provides filtering, temperature, pressure reduction with full Joule-Thomson protection and flow- control, which when pipeline mounted provides fast, accurate sampling and measurement.