

www.orthodyne.be

ORTHO^{Smart} ANALYSER

Measurement of trace impurities including hydrocarbons **without FID.**

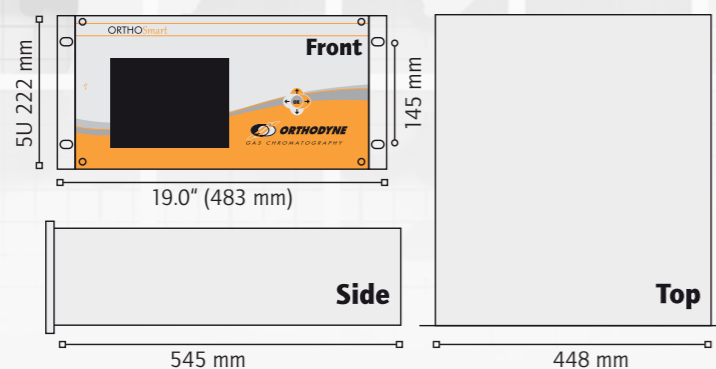
SPECIFICATIONS

Detector type	Argon Discharge Emission Detector (ADED)
Range	Depends on the application
Gas connections	Carrier and sample : 1/8" compression fitting or 1/8 VCR. Vent : 1/8" compression fitting
Carrier pressure requirement	7 Bar
Sample pressure requirement	1 Bar
Operating temperature	Stable temperature
Supply	220 VAC / 50-60Hz
Power consumption	Depends on the application
Calibration gas	70% to 90% of the range selected
Standard features :	Isothermal ovens Back Pressure Regulator on carrier and sample gases High performance Diaphragm valves Windows 7 embedded user friendly interface Ethernet port for remote control PC system with hard disk for storage of the results 8.5" LCD large touch screen 4-20 mA isolated outputs Alarm history High resolution Chromatogram output Two Digital Inputs Six Digital Outputs
Options	Profibus / Modbus communication Serial port : RS232 / RS485 Compact purifier for the carrier gas Stream Selector Unit Analog input for connecting external instruments



Dimensions

Standard rack mount 5U
Height > 222 mm | Depth > 545 mm | Width > 483 mm



Our ORTHO^{Smart} Gas Chromatograph is the new generation of on-line analyser using the Orthodyne Plug & Play philosophy. This GC offers more features than any other type of analysers. **This is a good alternative to the existing FID technology.** This analyser measures a full range of impurities in different gases through Gas Chromatography and "ADED" technology (argon plasma).

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 **ORTHODYNE**
GAS CHROMATOGRAPHY

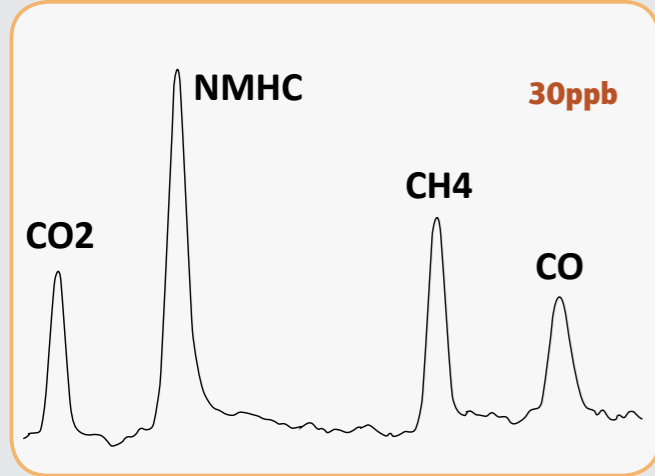
 **ORTHODYNE**
GAS CHROMATOGRAPHY

ORTHO^{Smart}



SENSITIVE

- Lower ppb level
- System with new ADED technology



Chromatogram at 30 ppb performed with our new ORTHOSMART analyser

Features

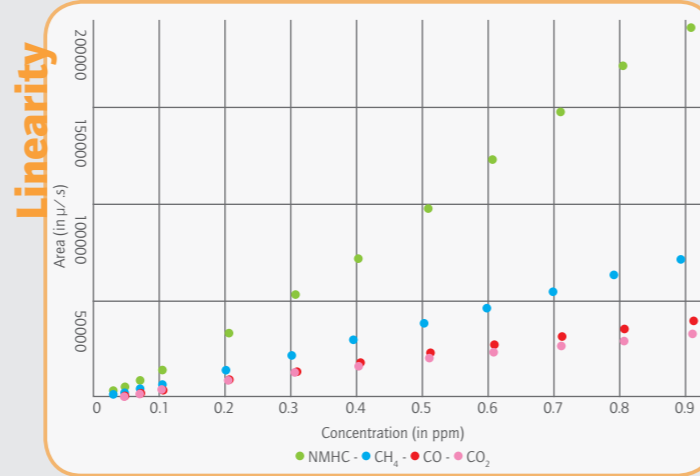
- Plug and play Instrument.
- Argon carrier gas.
- Various configurations available to cover a wide range of measurements.
- Fast response time for all components.
- Additional output relays for the automation of the sample and calibrating lines.

The **ADED Technology** (Argon Discharge Emission Detector) has the advantage of having less interferences with gases than the other detectors.



IMPROVED PERFORMANCE

- Improved linearity for each component H₂, O₂, N₂, CH₄, CO, CO₂ and NMHC



Specific design

- Front access to the isothermal ovens.
- High performance Diaphragm valves.
- Electronic Back Pressure Regulator for the carrier and sample gases.
- Orthodyne Argon Discharge Emission Detector (ADED).
- Easy maintenance with modular system.
- Multiple configurations available in one or two chassis.
- Compact, robust and industrial configuration.

Applications

- Air Separation Units.
- Speciality gas laboratories.
- Process control.
- Beverage Industries.
- Steel Industries.
- Helium liquefaction plants.
- Semiconductor manufacturing.

ORTHODYNE INTRODUCES ITS NEW ORTHO^{Smart} ANALYSER

This new ORTHOSmart Gas Chromatograph is a flexible and customised platform giving the best solutions for any type of gas analysis in ppb and ppm level.

This GC is based on the Orthodyne high performances Argon Discharge Emission Detector (ADED)



HIGH SELECTIVITY

- Less interference with background gases than conventional plasma detector



MORE SAFETY

- No Fuel (Hydrogen) gas required. Enhanced safety.
- No related safety accessories



REMOTE SUPPORT

- Internet based remote access capability
- Orthodyne process software or Chromdyne laboratory software.
- Profibus & Modbus communication protocols.
- Friendly touch screen and user interface.
- Ethernet connection for remote control.



LOW OPERATION COST

- Only Argon as carrier gas
- Intelligent platform, stand alone system with Orthodyne software
- No additional feeding gases required.

ORTHODYNE trace impurities analyser

A safer, easier and more economical and sensitive solution for a wide range of measurements, including Hydrocarbons