GC4310 / TYPE II

Portable total hydrocarbon, methane and non-methane total hydrocarbon analyser (Type II, catalytic method)

Overview

The GC4310 Type II uses a catalytic dual-FID method to monitor non-methane total hydrocarbons in stationary-source waste gas and ambient air. The source lists regulatory monitoring, on-site comparison and company self-monitoring.

Features

- Embedded touchscreen; intelligent control terminal optional.
- Integrated design with imported catalyst, internal gas cylinder and battery.
- AC or lithium-battery power; EPC gas-flow control.
- Solid-state hydrogen cylinder can be filled using a low-pressure steel cylinder.
- PID temperature-control accuracy better than ±0.1 °C; built-in humidity measurement module.
- Built-in printer for on-site results.
- Oil-fume, particulate and flue-gas parameter monitoring units are optional.



Technical specifications

Detection principle	Catalytic-FID method (overview describes catalytic dual-FID)
Parameters	Non-methane total hydrocarbons; temperature, pressure, flow and humidity multifunction probe optional
Heated line	Heating temperature ≥120 °C and more than 20 °C above flue-gas temperature
Sampling system	Stainless-steel gas path; probe filter ≤5 μm, main-unit inlet filters 0.5-1 μm particles
Power and runtime	Battery or mains; normal battery operation ≥7 h
Solid-state hydrogen	Over 10 h from a full charge; more than 2500 refills
Data and printing	Repeated continuous measurements; individual and mean values displayed and stored; built-in printer
Main-unit weight	≤10 kg including battery
Sampling flow	≥0.5 L/min
Range	0.1-200 mg/m³ (optional)
Detection limit	≤0.05 mg/m³
Analysis cycle	≤2 min
Linearity error	Non-methane total hydrocarbons ≤±0.5% F.S.

Referenced standards

- HJ 1012-2018 - Technical requirements and test methods for portable monitors of total hydrocarbons, methane and non-methane hydrocarbons in ambient air and waste gas
- 1331-2023 - Stationary source emissions: determination of total hydrocarbons, methane and non-methane hydrocarbons by portable catalytic oxidation-FID
- HJ 38-2017 - Stationary source emissions: determination of total hydrocarbons, methane and non-methane hydrocarbons
- JJG 700-2016 - Verification regulation for gas chromatographs
- DB11 1488-2018 - Emission standard of air pollutants for the catering industry

Configuration

Standard

- A complete standard configuration list is not provided in the source.

Source notes and verification

- The standards list prints 1331-2023, while the product description prints HJ 1331-2023; identifier and current status require verification.
- The overview describes catalytic dual-FID, whereas the specification says catalytic-FID; both source descriptions are retained.
- The catalogue does not supply a complete standard or optional configuration list. Features and specifications have not been independently tested, and certification has not been independently verified.
- English translation has not been reviewed by a native technical translator.