POLLUTION ANALYTICAL EQUIPMENT



Portable TOC Analyzer for Stack Emissions





ACCESSORIES AND SPARE PARTS







CALIBRATION GAS

Kit of 12 non-refillable cans:

- Span Gas 16/40/120/320 mgC/Nm³
- Zero Air
- Combo: 9 Zero + 3 Span

H2 CARTRIDGE

Hydrogen cartridge with metal hydrides and rare-earths technology. It can be recharged in a few hours thanks to its connection with pure hydrogen source under pressure. Capacity 50L. Dimensions: 200 (L) \times 30 (D) mm.

ACTIVATED CARBON FILTER FOR COMBUSTION AIR

Dimensions: 220 (L) x 28 (D) mm.

BATTERY

The battery is designed to power the instrument, the line and the probe. It can be recharged via power supply without removing it from the instrument.



SAMPLING PROBE

The sampling probe is EN12619:2013 compliant and, it comes equipped with a specially designed heated sampling line self-regulated at 180°C.

These and other accessories are available to get the best performance from the OneFID: external battery charger, carrying case, spare hydrogen accumulator and filters.



ONEFID, THE TOC ANALYZER WITH FID TECHNOLOGY FOR ON-SITE MONITORING

OneFID is an advanced solution for on-site monitoring of the Total Volatile Organic Carbon Concentration (TVOC), **TUV certified according to EN 15267-4:2024, EN 12619:2013 and QAL1 qualitative standards as specified in EN 14181.** Designed for accuracy and reliability, this FID analyzer is an ideal option for conveyed emissions analysis.

VERSATILE SOLUTION FOR ON-SITE MONITORING

OneFID stands out for its remarkable portability which makes it an excellent solution for **on-site monitoring**. Thanks to its **compact and robust design**, this device offers great application versatility to conduct reliable analysis with extreme practicality.

The analyser incorporates all needed elements for analysis:

- integrated battery;
- span gas and zero air cans;
- refillable hydrogen cartridge;
- activated carbon filter for combustion air;

• catalyst for the determination of MHC/NMHC. This integration not only eliminates the need to carry additional external parts, but also simplifies on-site usage, making OneFID extremely convenient for conducting monitoring in different situations.

In addition to its compact and robust design, the instrument delivers **precise and reliable results**. A combination that makes it an essential tool for on-site monitoring needs, both in industrial and environmental contexts.

SIMULTANEOUS ANALYSIS OF TOC, MHC AND NMHC WITH A SINGLE DETECTOR

Thanks to an advanced injection system based on proprietary and patented technology, the OneFID allows the simultaneous analysis of Total Organic Carbon (TOC), methane (MHC) and non-methane (NMHC) hydrocarbons through a single detector.

This innovative technology offers a significant advantage in terms of:

consumption optimization,

1 1

- reduction of operating costs,
- decrease in weight and size of the device.

A SINGLE DETECTOR

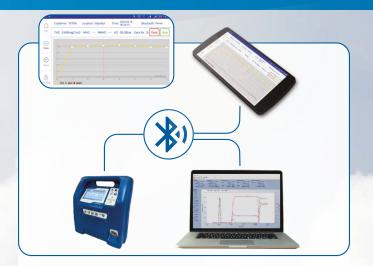
Simultaneous analysis of TOC and MHC/NMHC with a single detector thanks to an advanced injection system based on proprietary and patented technology.

ALL-IN-ONE

In a single device has been integrated all the useful accessories such as: battery, hydrogen cartridge, span gas and zero air cans, active carbon filter and catalyst for MHC/NMHC analysis.

ONE DEVICE, TWO MODES

For maximum comfort and and optimal use, the OneFID is equipped with a large and adjustable touch display with graphical interface both used either vertically or horizontally.



INTUITIVE INTERFACE AND SMART CONNECTION FOR ADVANCED MONITORING

Thanks to the **user-friendly graphical interface** and **SMART connectivity**, OneFID offers a smooth and intuitive monitoring experience, simplifying user interaction and allowing an immediate and clear view of the measured data.

The SMART connectivity of OneFID is a significant step forward: it is possible to **replicate the graphical interface of the instrument on external devices** via Wi-Fi, allowing **real-time data visualization and remote control of the instrument**. This feature allows users to make immediate decisions in real time and take prompt actions if needed, ensuring efficient and precise monitoring in any operating context.

INTEGRATED CONTROL SOFTWARE

The **integrated control software** automatically manages multiple analyzer functions, such as:

- pressure of gas cans,
- detector and catalyst temperature control,
- flame monitoring,
- sample flow control,
- calibration procedures,
- diagnostic checks.

APPLICATIONS

- On-site analysis of TOC concentration in Stack Emissions with FID technology, in compliance with EN12619:2013 standard
- Automatic analysis of MHC/NMHC in accordance with EN25140:2010 standard
- Environmental screenings

KEY FEATURES

- TÜV certified according to EN 12619:2013 and EN 15267-4 standards
- Single range
- Real-time data visualization and remote control of the device
- 7" LCD touch display with adjustable graphic interface both used either vertically or horizontally
- USB port for data download
- Powered by 220Vac power supply or rechargeable battery
- Integrated hydrogen cartridge, Zero Air and Span Gas

STATUS: Running

мнс

0.58

RANGE: -

ppmC3

05/04/2024

• Protection class IP42

19.24_{ppmC3}

18.65_{ppmc3}

METHOD: MT 15 A

MEASURE

THC

NMHC

PAUSE

STOP

- Heating time below 20 minutes
- Extremely low weight: 11 kgs

TECHNICAL FEATURES	
Size & Weight	403 x 213 x 433 mm, 11 Kg with power supply
Power Source	 Outer Power Adapter: 110÷240 Vac – 24 Vdc – 300W 1 Battery
Environmental operating conditions	+0°C < T < +50°C - 0% < RH < 95%
Detector Body Maximum temperature	185°C
Sample Inlet Maximum temperature	185°C
Aspirated Sample Flow	900 ml/min to the inlet fitting
Pressure sampling area	atm ± 100 mbar
Measuring Ranges	Measuring Range: 0-5.000 mgC/Nm ³ Certified range: 0-15 mgC/Nm ³ 0-500 mgC/Nm ³ 0-1.000 mgC/Nm ³ 0-2.000 mgC/Nm ³
Accuracy	The greater between 1% of F.S. or 0.4 mgc/Nm³ (0.25 ppm as Propane)
Limits of Detection	<0,1mgC/Nm ³
Response time	30 sec (with 3 m line)
Method management and data storage	Upload/Download methods via user interfaceInternal flash memory
Interfaces	 USB (data download) Wi-Fi (for connection from an external device for data visualization and remote control of the device) ModBUS TCP/IP
Flame Management	Electronic management with diagnostics and video alarm for flame off and automatic restart system.
Hydrogen Storage Cartridge	 Metal hydride technology (20h continuous range). Rechargeable by external hydrogen source under pressure. No restrictions on transport by car/plane(UN 3479)
Zero Air	 Non-refillable 1L cans: technical air @12bar / 20°C (autonomy 10h continuously) Quick connectors for external Zero Air cylinder Configurable front panel connectors Shipping Info: UN 1956, Hazard class 2 division 2.2 (non-flammable gases, non-toxic)
Span Gas	 Non-refillable 1L cans: propane in air @ 12bar / 20°C (Concentration of total carbon equivalent : 16/40/120/320 mgC/Nm³). Other configurations on request. Quick connectors for external Span Gas cylinder Configurable front panel connectors Shipping Info: UN 1956, Hazard class 2 division 2.2 (non-flammable gases, non-toxic)
Certifications	 EN 15267-4, EN 12619:2013 QAL1 quality standards as specified in EN 14181





THE ANSWER TO YOUR ON-SITE DETECTION CHALLENGES

POLLUTION S.r.l.

Via Guizzardi, 52 40054 Budrio (Bologna) Tel. 051 6931840 Fax 051 6931818 pollution@pollution.it



www.pollution.it



BI-EN0536-3