# EXPEC 3100 Pro Portable Volatile Organic Gas Analyzer

#### Overview

EXPEC 3100 Pro Portable Volatile Organic Gas Analyzer meets the technical requirements of total detection and leak detection, and uses FID detector for total hydrocarbon detection. The product is suitable for VOCs detection and traceability of pollution emergency site, as well as non-organized emission detection of petrochemical equipment and valve parts (LDAR).

The instruments are equipped with FID and PID dual detectors for almost all VOCs as well as some common inorganic factors to make response. The machine is small, light weight, good detection performance, simple operation, to meet customers on the test site quick and accurate analysis.

The instrument is equipped with explosion-proof handheld terminal, cooperating with the host analyzer for VOCs field investigation and analysis, LDAR site documentation, point detection data recording and instrument control, can greatly improve the VOCs field detection traceability work efficiency.



### Advantage

#### **Extreme portability**

• The weight of the instrument is only 3kg, lower than all similar products in the market

 Integrated industrial design, single person can complete the detection task



 Adopts hydrogen storage alloy to supply hydrogen, the hydrogen storage alloy can be safely inflated using a hydrogen generator, the cylinder using time is  $\geq$ 12hours after being fully charged



#### Long time of power supply

• Use large capacity rechargeable battery, battery life  $\geq$  12hours after being fully charged

#### Stable hydrogen supply

• Built-in EPC electronic pressure control system with temperature supplement calculation method to ensure the steady flow of hydrogen during the use of the instrument



Double pump gas circuit

 Adopts double-pump gas circuit to ensure the normal detection of the instrument in a low oxygen environment.

 Added consumable replacement, battery life, leakage exceeding the reminder function

# Double mode communication

• Built-in Wi-Fi and Bluetooth communication modules to realize point-to-point connection between the instrument and the handheld operator



## Application



- Stationary pollution sources organized VOCs screening supervision
- Factory bound unorganized VOCs screening supervision
- Petrochemical enterprises such as pieces of equipment and pipe valve unorganized emission monitoring (LDAR)
- Environmental audit and enforcement of stationary sources and plant boundaries
- VOCs governance facility effectiveness evaluation
- Chemical printing enterprises VOCs emissions selfexamination

## Specification

Item	Indicators
Detector	FID and PID dual detectors
Working environment	Working temperature: -20 $^\circ\!$
Measure range	FID: 0-100000ppm (methane) PID: 0.5-4000ppm (isobutene)
Limit of detection	FID: 0.1ppm (methane); PID: 0.5ppm (isobutene)
Repeatability	FID 500ppm methane, <2% PID 100ppm isobutene, <1%
Response time	FID into 10,000ppm methane, less than 3.5s to reach the final value of 90%; PID into 500ppm isobutene, less than 3.5s to reach the final value of 90%
Battery continuous working time	Continuous working time >12h after fully charged
Hydrogen continuous working time	Hydrogen storage alloy as hydrogen gas source, continuous working time >12h after fully charged
Explosion-proof grade	Ex db ia IIC T4 Gb
Weight	3.0kg

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