

OMNI-2100

Autonomous Volatile Organic Compounds (VOC) Analyzer

DataSheet

Product Features

- **Multiple gases detection**
Up to 20 VOC gas types
Detection as low as 1ppb
- **Real-time Measurements**
Timely actionable insights
Programmable sampling time
- **Autonomous**
Standalone portable analyzer for indoor and outdoor use
Lab quality results
- **Cost Effective**
Eliminates cost associated with labor, carrier gas, processing time, and lab tests
- **Cloud based IoT Platform**
Single screen management console
Remote management capability
Clustering capability
FedRamp Infrastructure
Over-the-air software updates
- **Broad Connectivity**
Wi-Fi, Cellular 4G/LTE
Enables remote and local deployments
- **High Reliability**
No carrier gas
Low-voltage operation (Solar option:Q4'20)



Product Overview:

The OMNI-2100 is a portable, autonomous, cloud-enabled VOC analyzer designed to operate in both indoor and outdoor environments. The analyzer's autonomous and real-time measurement capabilities enable timely actionable insights and eliminate operational and service costs associated with labor, processing time, and laboratory testing.

The OMNI-2100 was developed with ease-of-use and manageability in mind. Cloud-based IoT connectivity allows each analyzer or a cluster of analyzers to be managed remotely through a single screen management console. Connectivity includes Wi-Fi and cellular (4G/LTE). This capability enables the analyzers to be deployed locally or in remote locations and managed from anywhere in the world. All data processing is done within the analyzer; only the processed results are transmitted to the cloud for storage and access. Thus, reducing processing time and transmission cost.

The management application tool tracks VOC data over time, monitors analyzer health, identifies analyzer location, and offers customers the ability to program the measurement frequency.

Analytical Data Earlier Data	
Measurement Start Time: 2018-06-11 10:43:14	
Data Upload Time: 2018-06-11 13:14:44	
Show Retention Times	
Chemical_Name	Concentration (ppb)
benzene	169.09
toluene	101.61
m-xylene	104.19
o-xylene	103.2

All Specifications Are Subject to Change. This Document Is for Reference Only.
Go to www.Omniscient.com For the Latest Documentation and Related Media.

Product Specifications

Characteristics

VOC Detector	Omniscent MEMS-based technology
Other Sensors	Temperature, Relative Humidity, flowmeter, and photoionization detector (PID for Total VOC measurement 50 ppb - 200 ppm)
Pump Flow Rate	0.5 - 15 sccm
Communication / Connectivity	Wi-Fi and LTE
Sensor Cloud	Secure IoT cloud infrastructure
Sampling Time	2 - 40 minutes (User programmable. Refer to product manual for settings)
Embedded Data Storage	16 GB

Output results

Measuring Component	Benzene, Toluene, m-Xylene and o-Xylene (BTX)
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Limit of Detection (LOD) (Refer to User Manual for details)

Benzene	1 ppb
Toluene	1 ppb
m-Xylene	1 ppb
o- Xylene	1 ppb

Power Requirements

Power Supply Input	100-120/200-240 VAC
Power Supply Output	V1: +12V/7A; V2: +24V/4A
Fail Safe	4 A
Power Consumption	50W Max, 4W Idle

Environmental Requirements

Relative Humidity	0 - 80% (Range will be extended soon - Refer to User Manual for details)
Ambient Temperatures	0 – 40°C (32 - 104°F) – Sunshield required for outdoor use

Field Installation

Dimensions	Height: 29.1 cm (11.46 in.), Width and Depth: 19.4 cm (7.64 in.)
Weight	4.8 Kg (10.5 lbs)
Housing material	Stainless Steel

Company Information:

Omniscent Inc.
www.omniscent.com
 +1 (408) 913-6116
info@omniscent.com

