



voice²⁰⁰[™]

- Precision analytical mass spectrometry instrument
- Instantaneous identification and quantitation of Volatile Organic Compounds (VOCs)
- Real-time detection down to low level pptv
- Analysis of whole-air and headspace samples in seconds
- Ease of operation with push-button simplicity and no sample preparation
- Suitable for operation in commercial, industrial and research environments

Instantaneous Quantitation

Analysis of complex gas mixtures in real-time is a challenging task.

The Voice200[™] instrument rises to the challenge by providing instantaneous sample analysis with the specificity and quantitation that only mass spectrometry can provide. This unique combination makes the Voice200[™] instrument a desirable solution for a wide range of applications.

Separation by Selection

Unlike other techniques, the technology platform in the Voice200[™] instrument performs separation in real-time by Selective Ion Flow Tube Mass Spectrometry (SIFT-MS), doing away with complications and delays often associated with column-based GC analysis.

The SIFT-MS technique provides accurate quantitation of most target VOC analytes down to low level pptv.

Simplicity Redefined

Operating and maintaining the Voice200[™] instrument is simplicity itself. With powerful self calibration and validation functions, the self contained system is easy to operate and requires minimal training, making it a perfect fit for commercial and industrial settings.

When more complex analysis is required, the Voice200[™] instrument has the flexibility to be configured to the user's requirements, allowing for thorough and intricate scientific analysis.

Rugged construction with components of proven reliability ensures consistent performance even in the most demanding environments.

Shipping Container Air Analysis

The Voice200[™] instrument provides fast and accurate identification and measurement of hazardous fumigants and toxic compounds present in shipping containers, facilitating worker safety for inspection and devanning personnel. Illegal contraband and goods of interest to customs agencies can also be identified through the detection of their volatile signatures.

Food and Flavour

With its exceptional sensitivity and multiple reagent ion technology platform, the Voice200[™] instrument is an ideal tool for flavour and aroma detection, flavour release analysis and online production process control. As the technology is well suited to a humid environment, real-time samples can be analysed including direct headspace, in-mouth and retro-nasal techniques.

Laboratory Analysis

The Voice200[™] instrument's ability to rapidly analyse whole-air samples makes it the perfect solution for a range of environmental monitoring applications such as stack and vehicle emissions, and ambient air monitoring.

Medical Research

Providing instant analysis of blood headspace, the Voice200[™] instrument is able to decrease diagnosis times for bacterial blood infections.

The Voice200[™] instrument, with its unique ability to analyse moist gas samples in real-time, is a perfect tool for breath research allowing for the development of non-invasive diagnosis of a range of medical conditions.

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Analysis Capability

- VOCs: (BP<200°C, Molar Mass <300Da)
- Simultaneous analysis of polar and non-polar compounds
- Ideally suited to any gaseous sample of volatiles (including, whole-air or headspace above solids and liquids, as well as in-mouth and retro-nasal)
- Real-time quantitative analysis

Performance

- Reagent ion source: air/water
- Selectable reagent ions: H₃O⁺, NO⁺, O₂⁺
- Optional Negative ion source O_n⁻ (n=1-3)
- Mass range: 10-300Da
- Mass resolution: unit mass resolution throughout the mass range
- Response Time: <200 ms
- Detection limit: 50 pptv
- Accuracy: Better than +/- 10% in ppbv range
- Linearity: 100 pptv – 0.1%
- Measuring range: 100 pptv – 0.1%
- Standard inlet flow: 10 sccm

Physical Properties

- Height: 900 mm (35.4 in.)
- Width: 725 mm (28.5 in.)
- Depth: 875 mm (34.5 in.)
- Weight: 212 kg (466 lb)
- Integrated castor wheels

Environmental Conditions

- Ambient operating temperature: 10°C to 30°C
- Ambient operating humidity: 5 to 95%
- Storage extremes: -40°C to 65°C
- Maximum temperature fluctuation 3°C/h
- Exhaust facility should be provided for exhaust gases

Sample Introduction

- Whole air
- Sample bag
- Canister
- Direct breath
- Sorbent tube
- Custom integration

Gas Ports

- Helium supply
- Calibration standard

Interfaces

- TFT colour 8.4" LCD touch screen
- Gas inlets fitted with ¼ inch Swagelock bulkheads
- 10/100 Ethernet (TCP/IP)
- Barcode scanner
- Autosampler

Operating Parameters

- Power: 216-264 VAC, 47-63 Hz, 2.0kVA
- Helium consumption: 0.65 atm Lmin-1

Safety Conformance

- IEC61010-1
- EN61010-1

Electromagnetic Conformance

- EN61326
- CISPR 11/EN 55011: Group 1, Class A

Optional Accessories

- Direct breath inlet
- Sample collection case with integrated sampling wand
- Sample bag flushing system
- Custom integration with automated processing equipment or *in vivo* systems