

Press Release

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Shimadzu Releases New Features for Brevis GC-2050

Brevis “Fully Loaded”

- World’s First Gas Chromatograph (GC) System with CO₂ Reduction Visualization Function
- Expanding Lineup for Green Transformation Industry

Shimadzu, a global leader in analytical instrumentation and testing equipment, announces the release of several new features for the compact Brevis GC-2050 gas chromatograph. With this second release step, the GC-2050 is now “fully loaded”. The enhancements offer flexible configurations, enabling the Brevis GC-2050 to cover a wide range of applications. In response to the growing demand in the Green Transformation (GX) field, special emphasis has been placed on the “Automatic Gas Analysis System”. The newly designed Single Filament Thermal Conductivity Detector (STCD) sets new benchmarks for sensitivity and stability, all within a significantly smaller design compared to previous models.

World’s First CO₂ Reduction Visualization Function

The “ECO Idling Function” is an innovative feature that learns analysis patterns and proposes operation schedules based on workload. This feature seamlessly integrates and automatically activates several analytical intelligence features, significantly reducing gas and electric power consumption during standby periods. Additionally, the software’s CO₂ reduction visualization function offers valuable insights into cost and CO₂ savings achieved through these gas and electricity reductions.

Supporting Gas Analysis in the GX Industry

The Automatic Gas Analysis System integrates the Thermal Conductivity Detector (TCD) and the Auto Gas Injector GI-30, enabling various analysis applications, including new energy development. The newly developed TCD enhances sensitivity.

Flexible Configuration for Versatile Applications

Leveraging nearly 70 years of GC technology, Shimadzu offers a total of seven products with flexible combination options. In addition to the previously mentioned **Automatic Gas Analysis System**, featuring the TCD and the GI-30, users can combine the following products with the Brevis GC-2050:

- **Jetanizer/Polyarc Microreactor System**

Includes a small catalytic reactor “Jetanizer” or “Polyarc” for high-sensitivity and easy quantification of components in gases and liquids using a universal detector (FID).

- **Customized GC System**
Equipped with the "VB-30 Series" valve box for gas analysis in quality and process control in petrochemical, green energy, and gas manufacturing plants
- **Thermal Desorption System**
Features the "TD-30" pretreatment device for high-precision analysis of volatile compounds in the atmosphere
- **Pyrolysis Analysis System**
Includes the "PY-3030D" pyrolysis furnace for analyzing resins and additives
- **Headspace Sampler System**
Features the "HS-20 NX" pre-processing unit for analyzing volatile compounds in liquids and solids
- **Multi-Detector GC System**
Incorporates "Advanced Flow Technology" for simultaneous analysis of various compounds using multiple detectors

Initially launched in 2023, the Brevis GC-2050 further advances the Shimadzu tradition of delivering high-precision gas chromatography analyses – while simultaneously saving valuable laboratory bench space. With the new features, the Brevis GC-2050 can now be configured with all standard injectors, detectors, and accessories provided by Shimadzu and covers a much wider range of gas chromatographic applications.

Web Summary

Shimadzu, a global leader in analytical instrumentation and testing equipment, announces the release of several new features for the compact Brevis GC-2050 gas chromatograph. These enhancements offer flexible configurations, enabling the Brevis GC-2050 to cover a wide range of applications.

It is the world's first gas chromatograph (GC) system with CO₂ reduction visualization function. The "Automatic Gas Analysis System" supports gas analysis in the GX industry. In total, Shimadzu offers seven products with flexible combinations for versatile applications.



Figure 1: The Brevis GC-2050 with Automatic Gas Analysis System

Web link: <https://www.shimadzu.com/an/products/gas-chromatography/gas-chromatograph/brevis-gc-2050/index.html>



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