

Shimadzu releases world's first gas chromatograph systems with CO₂ reduction visualisation function

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The GC system visualises the cumulative CO₂ reduction during operation, enhancing users' energy-saving awareness



Japan headquartered Shimadzu Corporation has released seven new Brevis GC-2050 Systems for the Green Transformation (GX) field. These products integrate the gas chromatograph (GC) Brevis GC-2050 with various pretreatment devices and detectors.

The new releases include the "Automatic Gas Analysis System," "Jetanizer/Polyarc Microreactor System," "Customized GC System," "Multi-Detector GC System," "Thermal Desorption System," "Pyrolysis Analysis System," and "Headspace Sampler System."

Recently, the demand for gas analysis in the GX industry and new energy development for carbon neutrality has been increasing. The Brevis GC-2050 offers the same level of basic performance as the Shimadzu's flagship model Nexis GC-2030 but in a more compact size.

All seven systems feature the new "ECO Idling Function" in the Brevis GC-2050, which automatically learns device usage patterns to reduce gas and power consumption. For the first time in the world, the GC system visualises the cumulative CO₂ reduction during operation, enhancing users' energy-saving awareness. Additionally, the Brevis GC-2050 can be integrated with multiple pretreatment devices and detectors to meet a wider range of customer needs. For example, the "Automatic Gas Analysis System" consists of the new Thermal Conductivity Detector (TCD), which is about one-fourth the size of conventional models, and the Auto Gas Injector GI-30, catering to the demand for high-sensitivity and stable gas analysis in the new energy market.

Shimadzu Corporation has identified GX as a key focus area in its mid-term management plan, aiming to become a "total solution provider" supporting research, development, and quality control in biofuels, next-generation fuels, and environmental regulations.