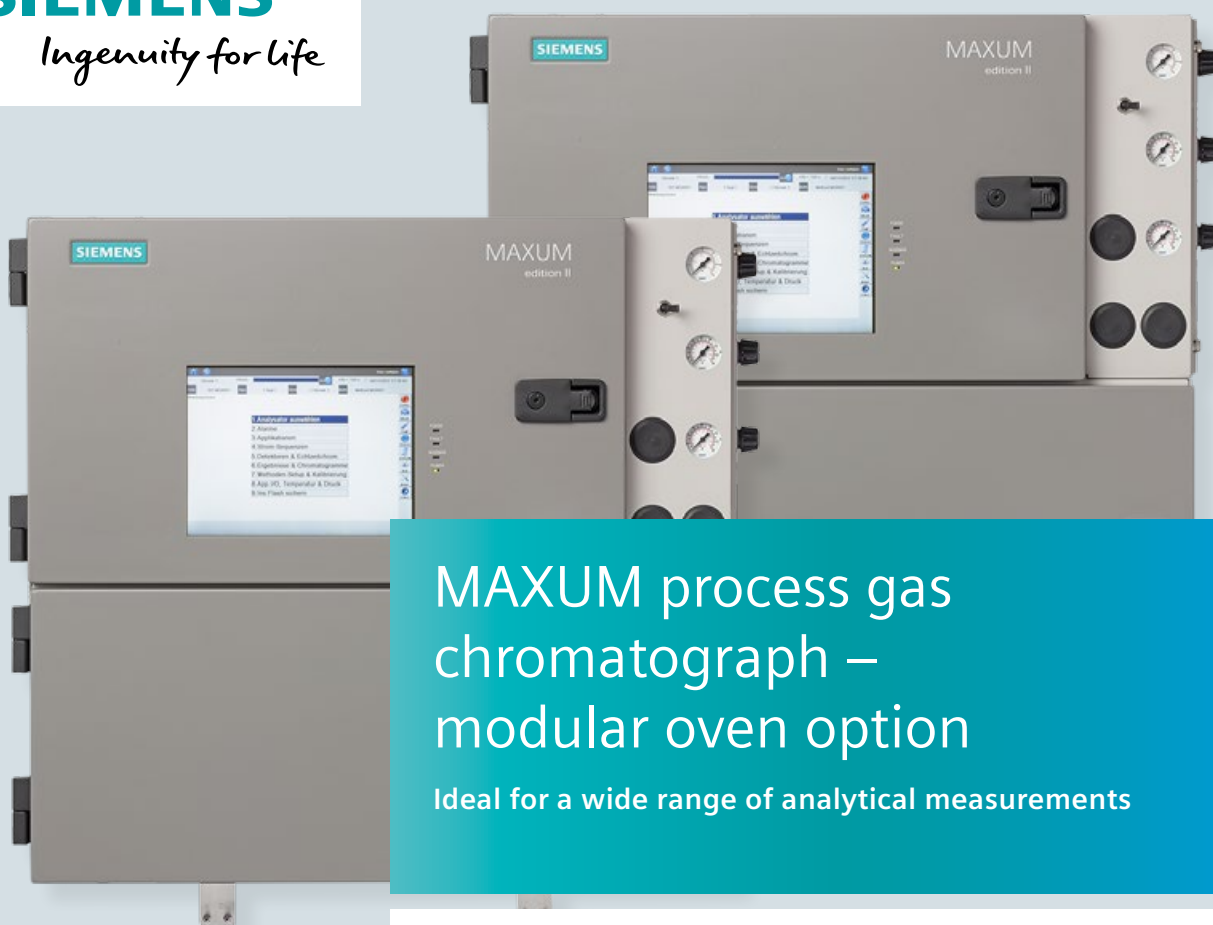


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MAXUM process gas chromatograph – modular oven option

Ideal for a wide range of analytical measurements

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Background

Since its market introduction over 15 years ago, the MAXUM gas chromatograph (GC) has continually led the way in analytical measurement innovation – with expanded capabilities like those of the modular oven option, a popular addition to the MAXUM GC analysis platform.

Ideally suited for a wide range of analytical measurement applications, the modular oven configuration features completely self-contained chromatograph modules that simply need to be snapped into place. Module replacement has never been easier or faster, dramatically lowering operation and maintenance costs as well as greatly minimizing downtime. As yet another excellent example of the

Siemens commitment to the MAXUM GC platform, this oven option is fully compatible with existing MAXUM systems, supporting seamless data communication and reporting.

Key features

The modular oven MAXUM GC is available in a variety of configurations. It can be equipped with up to two modular ovens mounted under the electronics. Each oven can be ordered with either a small or a large sized compartment. Whereas the small compartment is designed for a single GC module, the large one can accommodate either two single modules or one double module.

Benefits

- Modular, highly flexible design
- Minimal installation costs
- High analytical availability
- Low cost of ownership
- Suited for process environments

Fully certified: CSA, ATEX, IECEx

- Single GC module: one model 50 valve, chromatography columns and one thermal conductivity detector block
- Double GC module: up to three model 50 valves, chromatography columns and two thermal conductivity blocks

Let's have a deeper look into the details

The modular oven option offers tremendous value to users interested in a gas chromatograph designed for great utilization flexibility, reduced installation costs, high availability and low long-term cost of ownership.

- **Modular, highly flexible design** – the new configuration features completely self-contained chromatograph modules enabling quick and easy deployment along with highly flexible utilization.

- **Reduced installation costs** – with its small footprint, the analyzer's shelter installation requirements are low, even fitting into simple field mount cabinets. Its power and utility consumption is also very low.
- **High analyzer availability** – the entire analytical module can be removed with a single bolt and replaced in minutes, keeping downtime low for mission critical tasks such as measurements to satisfy environmental mandates.

- **Low cost of ownership** – the modular design of the MAXUM GC helps to reduce the level of training needed for maintenance. The analyzer also has fewer electronics and thus lower spare part requirements. Furthermore, the high sensitivity TCD can perform many of the applications that require more expensive flame ionization and flame photometric detectors.



For easy maintenance, MAXUM modules are equipped with all measurement components, including valves, columns and detectors.

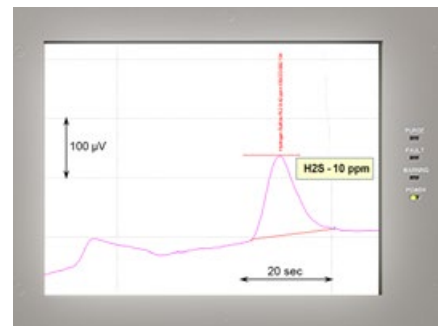
Incorporating all of the system control (SYSCON) functionalities of other MAXUM GC configurations into its CIM electronics, the modular oven option eliminates the need for a separate system controller. Its simplified design reduces maintenance costs and also lowers the overall cost of ownership. The circuitry connecting the modules is certified as intrinsically safe, further simplifying module access and removal.

Forming the centerpiece of the MAXUM modular oven gas chromatograph is the thermal conductivity detector (TCD), which detects the actual components being measured. Combining state-of-the-art, low-noise electronics with a thermally optimized detector design, the MAXUM modular oven GC delivers highly reliable measurement performance for which typically more complex flame ionization detectors (FIDs) or flame photometric detectors (FPDs) are required. For many applications, the thermal conductivity

detector identifies components down to the 1 part-per-million (ppm) levels, even lower in some cases. The result is an oven analyzer solution with simple maintenance requirements and low operating costs. In short: The ideal process analysis solution for years to come.



MAXUM analytical modules are easily accessed and repaired, keeping downtime to a minimum.



The thermal conductivity detector of the MAXUM modular oven GC performs measurements typical of more complex flame ionization and flame photometric detectors.

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