ABB MEASUREMENT & ANALYTICS

GCPro Series

GCP100 Gas Chromatograph



World-class cybersecurity with leading accuracy, flexibility and reliability.

The GCPro series uses ABB's 60+ years of proven gas chromatography technology to set a new standard for analysis and reliable performance with an industry-leading lowest total cost of ownership.

Overcome modern security challenges in the hydrocarbon processing industry

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01 The GCP100 is a single analyzer offering multiple analytical solutions.

Since 1957, ABB's gas chromatography technology has been driving the core of the world's most reliable gas analyzers. Used for applications requiring the highest overall performance, ABB's advanced chromatographic analyzers deliver it all – accuracy, precision, sensitivity and reliability.

Our gas chromatographs can measure the complete composition of natural gas streams, including the heating value, and determine the level of contaminants in the gas fractionation and amine gas treating processes.

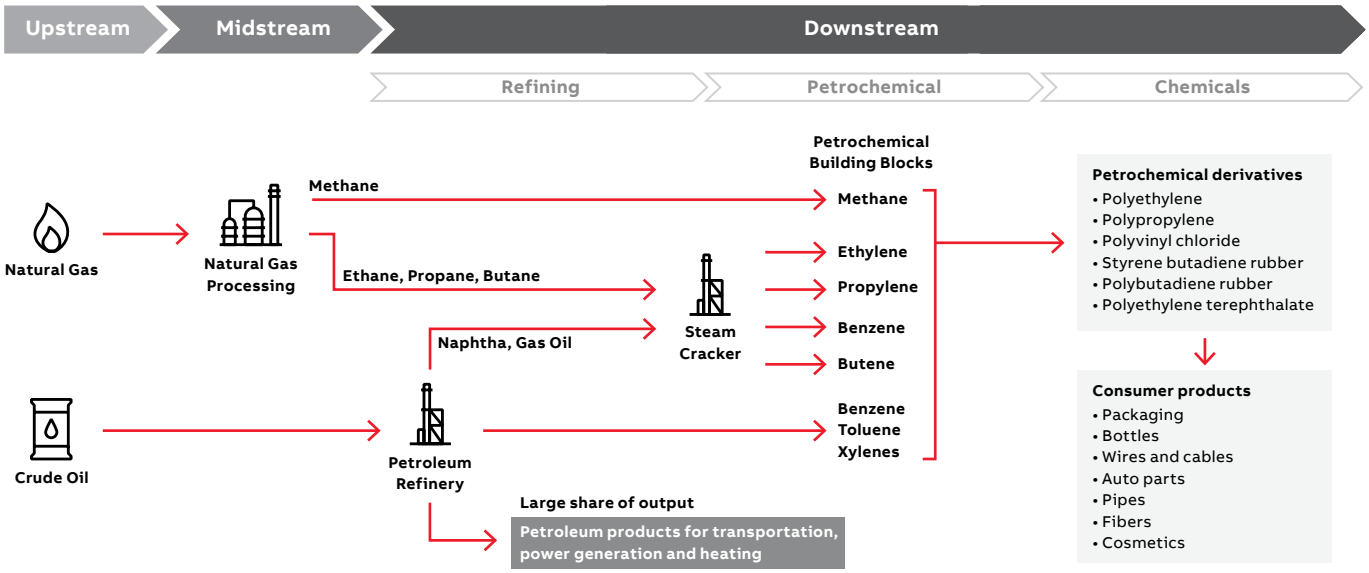
Why transform your process with GCP100?
Gas chromatography is a powerful analytical technique used across all segments in the hydrocarbon processing industry. Incorporating the GCP100 into a hydrocarbon process enhances the efficiency, reliability and accuracy of plant processes, improving productivity and quality control, complete with cost reduction.

Industry challenges
- Limited diagnostics and resources for maintaining the installed base
- Complex analyzers, challenging to train and retain skilled staff
- High utility, maintenance and operational costs with large spare parts inventory

The GCP100 is the industry game changer
- World's first gas chromatograph with built-in certified cybersecurity and integrated Wi-Fi connectivity in a 4-inch gesture-controlled display
- Maintenance downtime reduced by up to 75% via Dynamic QR code and digital connectivity with patented GCM technology
- TCD powered for unmatched 1 ppm detection range and 60°-100°C extended temperatures across countless applications
- Pioneering low power consumption levels of 12 watts

Revolutionize your gas analysis today.

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The GCP100 is the first gas chromatograph with built-in cybersecurity

Hydrocarbon analysis for custody transfer and compliance across upstream, midstream and downstream markets, plus process control and monitoring.

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01 Analytical applications range from custody transfer in the upstream market to process control in midstream and downstream markets.

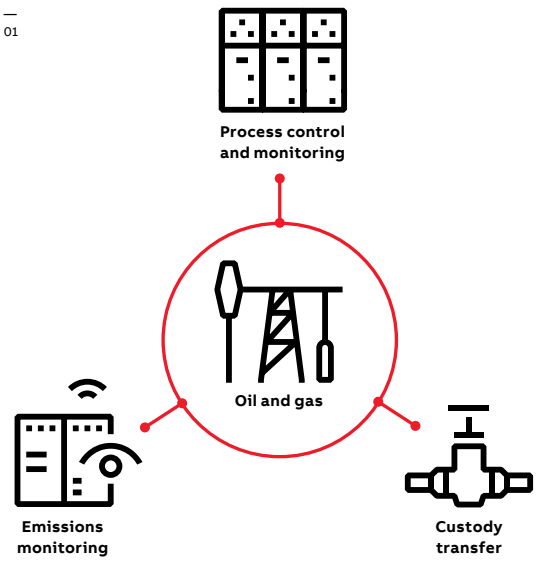
The GCPro gas chromatograph series was developed to analyze and quantify complex gas composition in many different processes of the oil and gas market. It is designed for every segment of the hydrocarbon processing industry, including natural gas and biogas.

The new GCP100 is the world's first gas chromatograph with built-in cybersecurity. ABB strives to maintain the highest level of security for all its products and services. This product is tested to ABB's cybersecurity standards and is compliant with IEC 62443-4-2.

It features enhanced system integrity, data protection and much more. GCP100 was engineered specifically for simplicity and application flexibility in remote and hazardous locations. Plus, the modular, weatherproof design delivers superior performance with the lowest total cost of ownership.

The GCP100's analytical applications range from custody transfer in the upstream market to process control in midstream and downstream markets.

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Modern analyzer designed for peace of mind
The GCP100 combines global-leading cybersecurity with reliability, accuracy and easy maintenance. An intuitive, gesture-controlled user interface provides quick access to in-depth information. Advanced software diagnostics features supply expert insights, self-diagnostics and health monitoring directly from the analyzer.

Accurate and precise analyses
The GCP100 identifies costly process interruptions with accurate and precise process streams analyses, allowing timely responses to process changes when needed.

Rugged, weatherproof, compact design
The GCP100 employs gas chromatographic analytical modules that perform reliably for years of continuous operation inside all environmental settings, even in the most extreme conditions.

Right fit for multiple applications
The GCP100 is much more than a typical natural gas analyzer. Versatile and agile, it seamlessly integrates into all hydrocarbon processing industries:

- Natural gas production and transmission
- Natural gas fractionation
- Oil refineries
- Petrochemical plants

Thoughtfully designed with the user in mind

Easy installation, operation and maintenance.

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01 GCP100 compact and modular analyzer

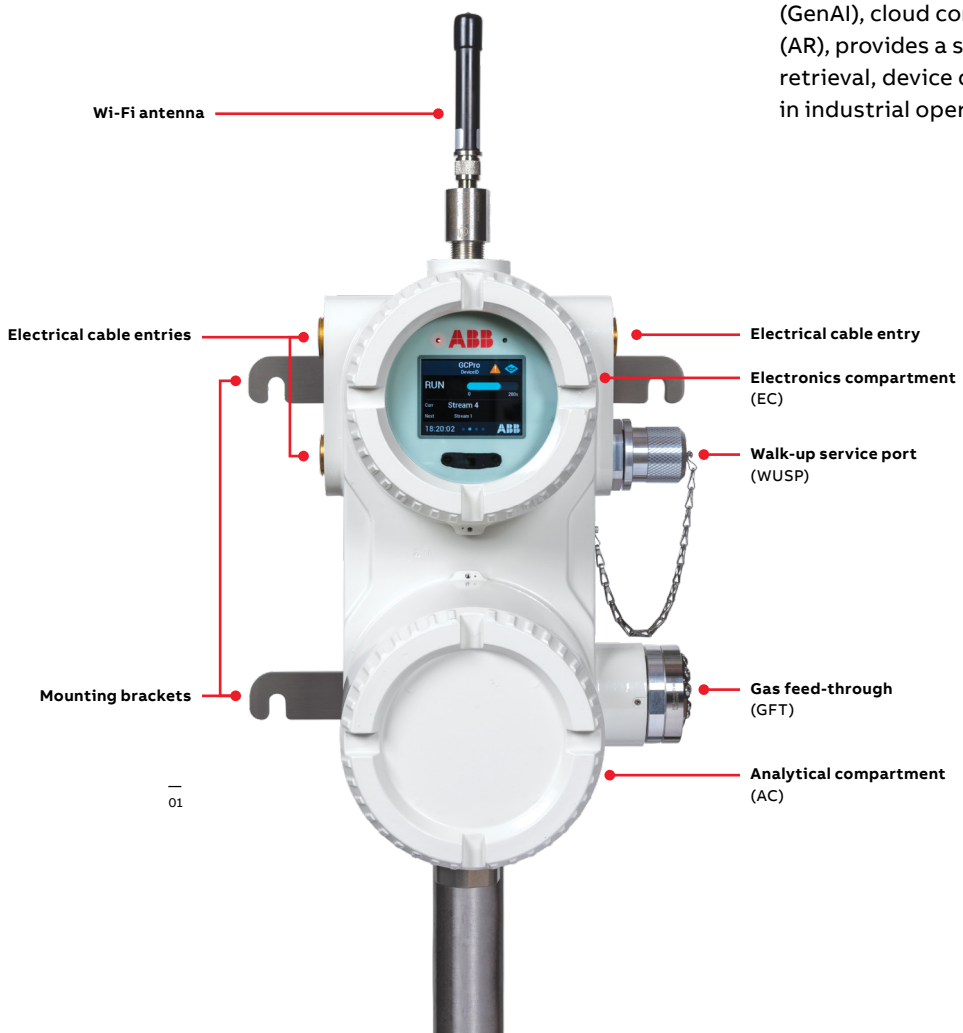
Low maintenance, simple operation
The GCP100 is easily serviced and maintained. Engineered with the end user in mind, the design reduces the level of expertise required to perform simple maintenance through the front of the analyzer. Its modular design ensures that all replaceable parts are quickly accessible in the field to minimize downtime.

Easy installation and commissioning for hazardous areas
The flameproof, explosion-proof design doesn't require a complex purging system. Front access and simple wall mount installation ensure the GCP100 is ready to deliver fast and reliable measurements suited to numerous needs.

Dynamic QR code and autoID assistance
ABB's dynamic QR code for analyzers is a unique feature that enables comprehensive product health checks and effective troubleshooting without physically connecting to the system. In addition to providing static information for analyzer identification from the AutoID feature, the dynamic QR code provides information about analyzer configuration and current health status.

ABB specialists can use this data to troubleshoot and provide a rapid response solution.

My Measurement Assistant+
My Measurement Assistant+ is an AI-powered digital solution for maintenance and trouble-shooting of measurement devices at industrial sites. Leveraging generative artificial intelligence (GenAI), cloud computing and augmented reality (AR), provides a single access point for information retrieval, device diagnostics and remote support in industrial operations.



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Intuitive and insightful user interface on a modern software platform

The GCP100 offers a simple yet comprehensive interface with advanced diagnostic software for key performance indicators and enhanced user experience.

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01 The GCP100's browser-based interface features on-demand analytical insights.

Browser-based interface
In the field or from the office, the browser-based interface is a powerful tool for quick, remote access to operations, diagnostics and data handling information, including:

- Analysis data
- Settings and configuration parameters
- Alarm display, acknowledgement and detailed information
- Process events
- Reports and export of historical data
- System information
- User-defined with role-based access

Human Machine Interface (HMI)
The GCP100 has a 4-inch screen, informational LEDs and a gesture-control system for easy access in any condition.

HMI panels display:

- Analyzer status
- Measurements
- Alarms
- System information
- Dynamic QR code



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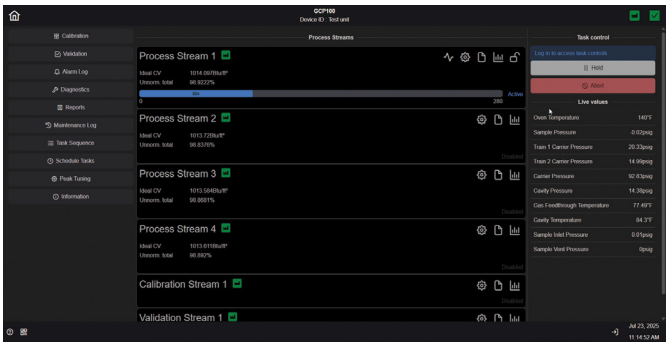


Quick and detailed information access

Inside the GCP100, advanced software diagnostics provide expert actions and analytical insights directly from the analyzer:

- Automatic startup and retention time tuning algorithms
- Analyzer diagnostics
- Health metrics monitoring
- Predictive maintenance

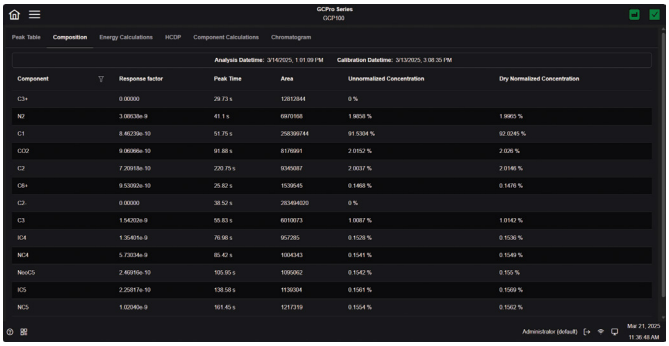
Designed for peace of mind, GCP100 ensures reliable performance that reduces unplanned maintenance.



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Home screen



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Chromatogram



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Report/Results



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01 Fast analysis time, high sample throughput, and a user-friendly interface.

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Additional free publications
are available for download at
solutions.abb/analytical

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