

NEW GENERATION OF FLOW COMPUTERS

RFC 7

The state-of-the-art Flow Computer is designed for precise measurement and control of gas flow in various industrial applications. Featuring advanced algorithms and robust hardware, the RFC 7 ensures accurate data collection and reliable performance even in challenging environments.

One Device for All Your Needs

Introduction

Flow computers are game-changing solutions designed to revolutionize how industries measure, monitor, and control fluid flow. Used in critical sectors like Gas industry, these high-performance devices offer unparalleled accuracy and real-time data by seamlessly integrating inputs from Flow meters, Gas quality, pressure sensors and Temperature sensors.

By transforming raw data into actionable insights, flow computers empower businesses to optimize operations, reduce downtime, ensure regulatory compliance, and enhance overall efficiency. From pipeline management to process control, our cutting-edge flow

computers has also integrated and dedicated archive where the billing informations can be saved with time stamp. With advanced features like remote monitoring and data analysis, they're the key to achieving maximum precision and reliability in Gas flow management.

Compatibility is the Key

The RFC 7 can be incorporated into a complete solution for the gas train. The unit is easily integrated in a cabinet along with gas chromatographs, specialized flow computers, data loggers and controllers.

Our Flow computer can be used for custody transfer and secondary metering applications in conjunction with all types of gas flowmeters, including turbine meters, vortex meters, ultrasonic gas meters and rotary displacement meters.

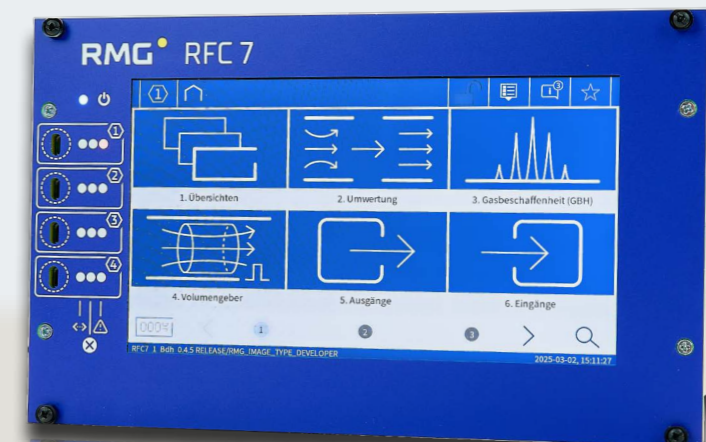
RFC 7

Unlocking New Levels of operational excellence tailored just for your business!

- Enhances Overall Efficiency
- Ensures Regulatory Compliance
- Optimize Efficiency



RMG



Everything You Need

RMG Flow computers play a crucial role in the gas industry, ensuring accurate measurement and management of gas flow in pipelines, processing plants, and distribution systems. To meet the demanding needs of this sector, flow computers must offer a range of advanced features designed for optimal performance, safety, and regulatory compliance. Here are the key characteristics of flow computers tailored just for your need.

Real-Time Monitoring and Control

Continuous, real-time monitoring ensures that operators can respond to changing conditions instantly, optimizing flow control and minimizing risks. This feature helps identify irregularities, such as leaks or flow disruptions, enabling swift corrective actions.

Compliance with Industry Standards

RFC 7 is designed to meet stringent industry regulations and standards. They ensure that all the gas measurements are fully compliant with regulatory standards, protecting your operations from costly penalties and downtime.

High Accuracy and Precision

Flow computers deliver highly accurate measurements of gas flow, ensuring precise billing, inventory management, and compliance with industry standards. With advanced algorithms, they calculate flow rates and total volumes with minimal error, even under varying pressure and temperature conditions.

Advanced Data Integration

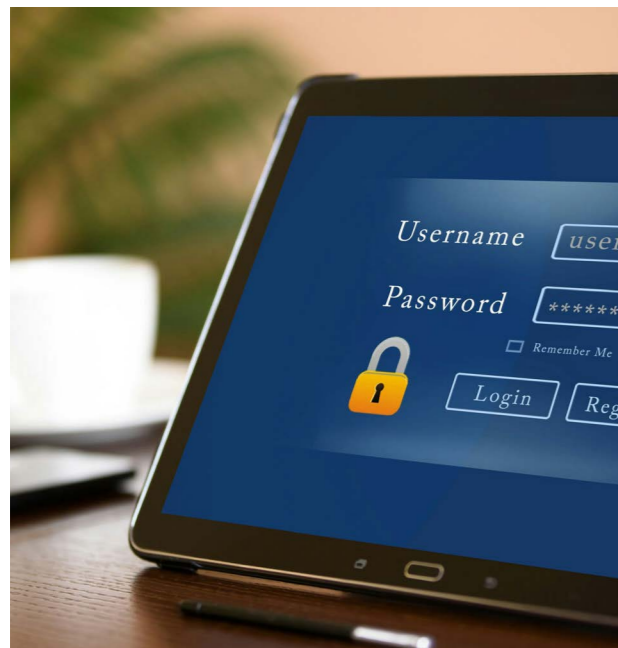
Seamlessly integrate data from multiple sources, such as flow meters, temperature sensors, pressure transducers, and gas composition analyzers. This Integration provides a comprehensive view of system performance and enables real-time monitoring for optimal gas distribution and processing.

Remote Accessibility and Monitoring

Our Modernized flow computer-RFC 7 offer remote access capabilities, allowing operators and engineers to monitor and control gas flow systems from anywhere. This feature improves operational efficiency and facilitates faster decision-making, reducing the need for on-site personnel.

Data Logging and Reporting

Comprehensive data logging and automated reporting capabilities are essential for gas operators to maintain records, analyze trends, and generate reports for audits and compliance. Flow computers store historical data securely, making it easy to retrieve and analyze for performance optimization.



Enhanced Security Features

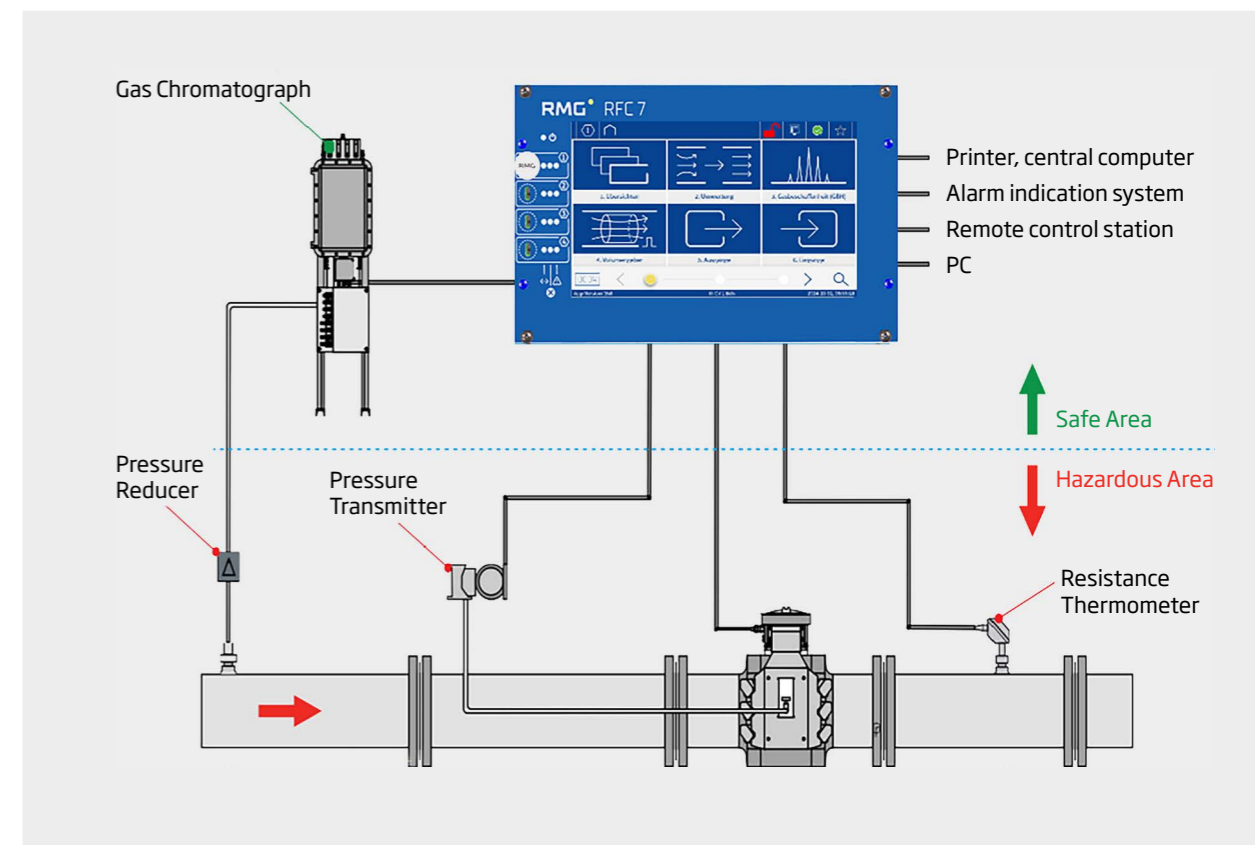
With cybersecurity being a top priority in today's interconnected systems, RFC 7 is equipped with robust security features to protect sensitive data and prevent unauthorized access. This ensures the safety and integrity of both the data and the operations. RFC 7 utilizes a wide range of communication protocols to deliver data securely to SCADA, ERP or data collection systems. It also employs a pair of Ethernet plugs (RJ45) to communicate with separate IP networks, ensuring better overall system security and support for separate networks, and eliminating the influence from remote readings.

Scalability and Flexibility

Our RFC 7 are highly scalable, supporting a wide range of gas flow measurement applications, from small pipelines to large-scale transmission networks. With flexible configuration options, they can be tailored to fit the unique needs of your operation.

- ✓ Multi-Language support
- ✓ Intelligent Search engine
- ✓ Increased processor speed
- ✓ Increased screen resolution
- ✓ New concept for 19" Rack

- ✓ IP based remote viewer
- ✓ Multistream end of 2025
- ✓ Feather touch display
- ✓ Intuitive GUI
- ✓ Advanced Cyber security features



Computing Efficiency

RFC 7 is equipped with even faster ARM-CPU microprocessor systems than ever before.

This enables even faster and more efficient calculation of the measured values, with significantly lower energy consumption.

LMG H₂ Applications

- ✓ Custody transfer
- ✓ Compressor stations
- ✓ Gas pressure reducing grids
- ✓ Remote station monitoring
- ✓ Gas storage
- ✓ City or regional gas suppliers
- ✓ Biogas Applications

Revolutionize Your Gas Applications

With our advanced flow computers, you can optimize your gas operations, reduce downtime, and improve system performance – all while maintaining the highest standards of safety and regulatory compliance. Our flow computers are more than just measurement devices – they are the backbone of efficient, safe, and compliant gas operations. Unlock the full potential of your business today!

Contact us today to discover how our flow computers can transform your gas operations and boost your bottom line!

System Configurations

The RFC 7 Series is designed as a universal instrument, which can be used for all metrological tasks in a gas metering station. The flow computer is available in a choice of system configurations, including:

- **RFC 7 Volume Corrector**
Calculates gas volume at base conditions via pressure, temperature and K co-efficient (PTZ)
- **RFC 7 Calorific Value Corrector (PTZ)**
Calculates gas volume at base conditions via pressure, temperature and K co-efficient and energy content with gas quality

Test Functions

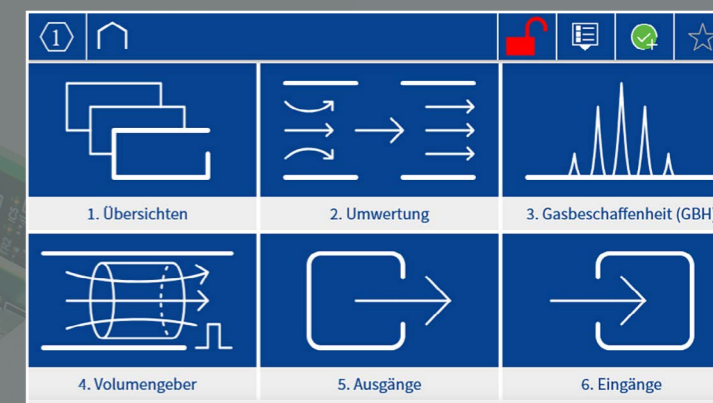
The RFC 7 simplifies testing and calibration with advanced test functions like On-the-fly Calibration, Freeze, and Functional Test. These features enable operators to start or stop test totalizers manually or automatically and freeze measured values for precise analysis during testing, ensuring accuracy at every step.

Error Curve Linearization

To ensure the highest measurement accuracy, the RFC 7 offers error curve linearization. It simulates the gas meter's error curve, which is determined during high-pressure testing, by applying interpolation points or a polynomial over the flow rate or Reynolds Number. This ensures that measurement errors are minimized and the system operates with greater precision.

Rely on RMG

- Local support with global expertise
- Single source provider with a wide portfolio
- Over 150 years of combined Experience in the natural gas industry
- Worldwide solution leader in measurement and analysis technology
- Products for natural gas transportation, storage, distribution and consumption



User-Friendly Touchscreen Interface for Effortless Operation

The intuitive touchscreen user interface is designed to simplify system commissioning, maintenance, and daily operation. It presents critical information in well-organized tabs for easy access. For instance, measurement data and totalizers are instantly visible, as specified by approval authorities, allowing operators to monitor key metrics at a glance.

The interface also provides easy-to-use tools for system commissioning, maintenance, and calibration, empowering operators with everything they need to ensure smooth operations. Additionally, the HMI (Human-Machine Interface) offers comprehensive access to detailed measurement data, parameters, archives, event and alarm logs, as well as trend graphs to visualize performance over time. This streamlined, user-friendly design ensures that operators can efficiently manage and maintain the system while keeping key data easily accessible, improving overall operational efficiency.

Remote Maintenance

The RFC 7 simplifies system management with remote maintenance capabilities. By connecting a PC in the control center, operators can easily maintain the system via a Web browser, enabling quick troubleshooting and updates without the need for on-site presence.

Original Totalizer Readings

For gas meters equipped with encoders, the RFC 7 can digitally transmit totalizer readings, ensuring that original meter readings are captured accurately within the corrector. This feature guarantees precision and eliminates errors associated with manual readings.

Technical Key Attributes and Utility Functions in RFC 7

Data Logging

Equipped with a built-in data logger, the RFC 7 supports conventional data logging via Modbus. This enables it to store important data generated in the corrector and transmitted, allowing for easy retrieval and analysis of performance data.

Language Selection

Designed for global operations, the RFC 7 features multilingual software, allowing users to select from a wide range of languages for easier operation and maintenance across diverse teams and locations.

✓ AGA 8

✓ GERG88S

✓ SGERG-Mod-H₂

✓ Van der Waals

✓ Beattie & Bridgeman

Digital Inputs for Measured Values

Instead of relying on analog transmission, the RFC 7 offers the flexibility to transmit measured values (from pressure transmitters and resistance thermometers) digitally, using the HART protocol. This improves the accuracy and reliability of data while simplifying the integration of various measurement devices.

Bus Interface

The RFC 7 supports multiple standard interfaces for seamless integration into your existing systems. It is compatible with Modbus (RTU/ASCII), RMGbus, and Modbus-IP, allowing for flexible communication and easy connectivity across different platforms.

Compressibility Factor (K) Calculation

The RFC 7 gas volume corrector can automatically calculate the compressibility factor (K) for natural gases based on the most widely used calculation methods. This feature ensures that gas volume measurements are accurate and comply with industry standards, even under varying environmental conditions.

For more information

To learn more about RMG's advanced gas solutions, contact your RMG account manager or visit www.rmg.com



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