X-F.A.C.T.O.R.
Flow computing made easy
ABB's expertise in low power and high-accuracy control devices for the remote production and custody transfer of oil and gas, coupled with decades of proven performance and reliability, yield the ultimate X-F.A.C.T.O.R. in flow computing.
ABB’s family of flow computers, remote controllers, and supporting solutions and ABB’s service, software and training come together to form the X-F.A.C.T.O.R. in upstream and midstream flow computing. What is the X-F.A.C.T.O.R.?

Flexible devices for any measurement and control application
- Upstream and midstream applications
- Fieldmount and panelmount options
- Highly configurable application software

Accurate measurement for correct billing and minimal product loss
- High-accuracy analog inputs
- High-accuracy clock and time measurement
- Factory-controlled application software

Cybersecure infrastructure to keep your data and assets safe.
- Software and data protection
- Secure communication
- Full traceability by secure audit logs
- Roll-based access control

Trusted solutions, rigorously tested over many years and conditions.
- Long, proven history
- Large, global installed base
- International, 3rd-party certifications
- Hazardous Area Classifications
- Rigorously tested for EMC immunity

Optimal, cost-effective operation with a fit-for-purpose solution.
- Low-power for remote operations
- Remote configuration capability
- Highly scalable system architecture

Reliable control and measurement supported by a reliable suppplier.
- ABB global service organization
- ABB education and training
- Tried-and-true software
- Spare parts availability
- ABB life-cycle policy to protect your investment

Over five decades of innovation
Research and development is a vital source of ABB’s technology leadership. It builds on the foundation of many innovations and continues to develop breakthrough technologies needed to meet future challenges.

1982
- Applied Automation Inc., incorporated as part of Phillips Petroleum in Bartlesville, Oklahoma, begins alpha / beta testing its first electronic flow computer

1984
- The first electronic flow computer (Model B 6610) and first version of CCU is released to the market

1986
- The Husky is invented to collect data and set up flow computers in the field.

1992
- The G2 series of flow computers and RTUs

1999
- AAI/Totalflow is acquired by ABB

2002
- SpiritIT is founded.
- The G3 series of flow computers and RTUs

2003
- eXlerate is created

2007 - 2009
- The G4 series of flow computers and RTUs
- Flow-X

2014
- ABB acquires SpiritIT

2018
- Flow-X generation 2
- Flow-X/C (compact panel)

2021
- Flow-X C1D1 / Zone 2
\(\mu\text{Flo}^{G5}\)

Time tested and field proven, \(\mu\text{FLO}\) is known throughout the industry as an extremely accurate and reliable gas flow computer. \(\mu\text{FLO}^{G5}\) features the Linux operating system, has persistent memory, and supports linear liquid measurement.

Backward compatibility is a high priority, and the integrated sensor and electronics are direct replacements for all previous \(\mu\text{FLO}\) generations. Single run gas measurement applications are the primary market for \(\mu\text{FLO}^{G5}\), yet the powerful processor and expansion capabilities allow for multiple run gas and liquid measurement as well.
Flow-X series of flow computers is a powerful and versatile automation platform, especially designed for the custody transfer of liquid and gas. It provides different enclosure options for panel-mount and field-mount installation and possesses measurement certifications from multiple, 3rd-party agencies.

Class 1 Division 2 and ATEX / IECEx Zone 2 certification extends the operating temperature range to withstand harsh field conditions, delivering high accuracy and increased reliability.

- World-class flow computing now with unprecedented, un-compromised accuracy
- Credible accounting data with a certified, purpose-built device
- A single flow computer for the safe and hazardous area
- Investment protection by a modern, future-proof ABB device

XFC\textsuperscript{G5}

XFC\textsuperscript{G5} provides an upgraded path to new digital technologies and protocols such as MQTT and secured wireless connection (WiFi-Access Point or Bluetooth). This generation of flow computers and RTUs also offers a low-power, highly reliable microprocessor-based unit with a Linux operating system, persistent memory, and new connectivity, combined with integral sensor and the same wide range of measurement, monitoring, and alarm applications for remote oil and gas systems.
XFC 6200EX (explosion-proof)

XFC<sup>®</sup> 6200EX offers an explosion-proof product for differential or linear metering and automation systems. XFC<sup>®</sup> 6200EX is an accurate, reliable flow computer with the capability to measure and monitor flow (gas and liquid) in compliance with AGA, API and ISO standards. These units are expandable, they provide exceptional control, and they meet automation requirements.
X-FACTO.R. Remote Controllers

**XRC\(^G5\)**

XRC\(^G5\) provides an upgraded path to new digital technologies and protocols such as MQTT and secured wireless connection (WiFi-Access Point or Bluetooth). This generation of flow computers and RTUs also offers a low-power, highly reliable microprocessor-based unit with a Linux operating system, persistent memory, and new connectivity, combined with the same wide range of measurement, monitoring, and alarm applications for remote oil and gas systems.
X-F.A.C.T.O.R. Remote Controllers
RMC-100

A single RMC-100 controller is capable of managing automation, liquids and gas measurement, and asset data concentration for very large production and transmission facilities. Even so, the controller may still scale to a single-board RTU footprint for smaller systems. There is no other platform in the industry with such a wide, dynamic range. This frees the end user, OEM partner or integrator from the uncertainty of choosing a closed-ended model that could easily be irrelevant in a short period of time.
X-F.A.C.T.O.R. Remote Controllers

XIO sets a new standard for control, automation and measurement solutions, dedicated to upstream Oil & Gas applications. This new solution provides remote expansion for both brownfield and greenfield flow computers and RTUs. It also allows operators to improve their performance by reducing their operational spend, decreasing expansion downtime, and increasing communication expansion across the field.

XIO provides the flexibility to expand not just I/O, but also field connectivity and interoperability in the same device. With the unique ability to easily integrate with ABB controllers without limiting the customer, XIO can also be used with third party devices.

XIO is a solution that can also easily integrate with existing devices via Modbus. By allowing the addition of I/O options to the base at any time, XIO provides optimal flexibility.
Xcore offers a custom option that is assembled to meet field requirements and a broad range of installation needs. The Xcore solution incorporates any ABB controller device and utilizes the complete range of ABB instrumentation and metering options. Xcore provides a centralized solution for all your optimization, reporting and measurement needs.
X-F.A.C.T.O.R. Supporting Solutions
ETO (engineered-to-order)

Engineered-To-Order, pre-engineered systems are custom built to meet all of your site’s individual requirements. Often, standard packages do not offer an adequate solution for your needs. At ABB, we develop systems that are designed by our customers, fully integrated, customizable, HMI capable, scalable, turn-key, with custom fused I/O, and can be supplied on your timeline. It’s not just a box, it’s a solution.
Delivering increased productivity

Whether your operation involves automation and control at the well pad, high-accuracy custody transfer applications, or any of the processes in between, ABB has the solution, and it is the X-F.A.C.T.O.R. in flow computing. With its portfolio of high performance and trusted solutions, ABB’s X-F.A.C.T.O.R. is making its mark for customer operations across the globe.

For Inquiries, email: US-IAMA.inquiry@us.abb.com
For Orders, email: US-IAMA.order@us.abb.com
For Training, email: US-IAMA.training@us.abb.com
For Support, email: Upstream.support@us.abb.com

Over 400,000 field units

Over 22,000 control room units
Measurement made easy