
ABB MEASUREMENT & ANALYTICS

Spirit^{IT} Flow-X

The easy solution for flow computing



Make flow measurement easy

How do you make a great product even better? Expand the installation environments it can be used in. With the new C1D2 / Zone 2 approval and the extended operating temperature range from -40 to 75°C (-40 to 167°F), the Flow-X can now also be used in the hazardous area.

The Flow-X series of flow computers is the most versatile and cost effective automation platform for custody transfer, meeting today's demanding accuracy, security and usability needs for any company across the globe. It is used for measurement and control of gas and liquid pipelines, LACT units and truck & rail loading and offloading systems.

Why pay extra for proprietary software, gas or liquid applications. With Flow-X it is included.

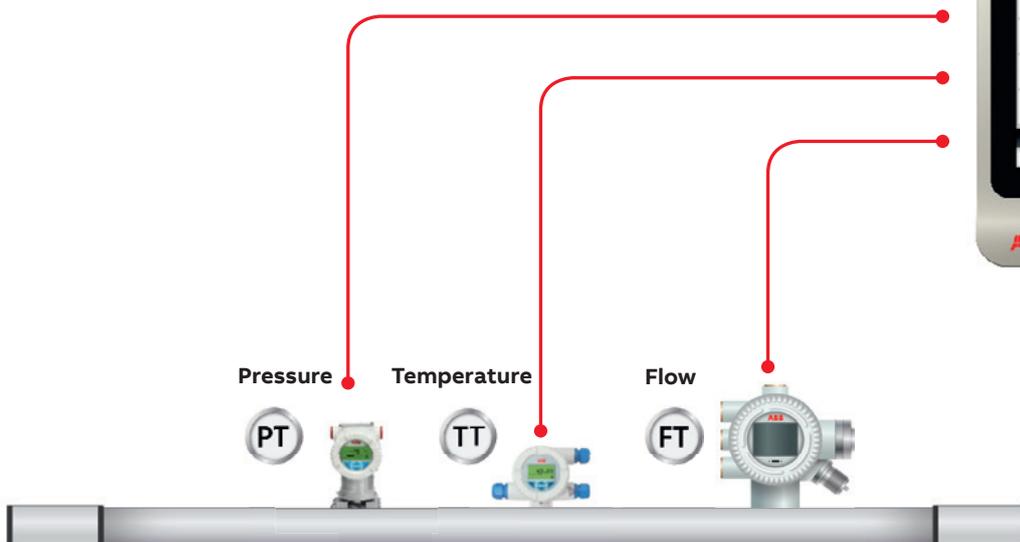
What is a flow computer?

How can it be valuable?

A flow computer is a device specifically made for custody transfer. It connects to flow meters, temperature, pressure and density transmitters and chromatographs to calculate volume at standard conditions, including mass and energy in accordance with API, AGA and ISO standards. It provides an API 21 compliant audit trail to validate the calculations.

Flow- X Main Features:

- Class I Div. 2 and ATEX/IECEX Zone 2 certification
- Wide temperature range: between -40°C and 75°C, -40°F and 167°F
- No need for purging, EX enclosures and junction boxes
- Certified for custody transfer (legal metrology)
- Rigorously tested for electromagnetic compatibility (EMC) immunity
- Cybersecure HTTPS communication
- Highly configurable, no programming required
- Secure web client access



Certified gas and liquid flow computers

Especially made for high accuracy

Any business should prioritize its customers, solving their problems and protecting their interest. The Flow-X is a comprehensive solution held to the highest, international standards. Investing in a certified flow computer, that can be used both indoor and outdoor, helps to be a reliable and cost-effective supplier with a widely used, single solution.



01 Flow X-M



Cyber security



API 21 audit trail



MTBF > 100 years



International certification



Most accurate



Configurable control



Cost effective



Unlimited reports & data



Hazardous area



Harsh conditions



Modular concept



Touch screen & web browser



Reliability

Durable, secure and traceable

Reliability

International Standards

- Hardware and software certified for legal metrology
- Annual update of the flow, liquid and gas calculations

Traceability

- API MPMS 21 compliant audit trail
- ABB controlled software applications
- Logs stored with user and totalizer info for accurate accountability

Security

- Secure HTTPS communication with PKI certificates
- Role based access control
- Mechanical 'Weights & Measures' lock
- Certified, secure data storage

Stability

- Outstanding MTBF > 100 years
- Regular design upgrades based on extensive testing
- Same people, same support, same company
- Rigorous tested for EMC immunity





Performance

Maximum value by a state of the art product

Performance

Accurate

- Highest analog input accuracy (0.008%)
- Advanced dual pulse fidelity algorithm
- 64-bit precision from input to output

User friendly

- Touch screen operation
- Web browser access
- Guided setup and configuration
- Fully configurable software

Cost effective

- No need for purging, EX enclosures or junction boxes
- A single module for all applications (simple spare management)
- Able to install short conduit runs with on-skid mounting

Complete

- Configurable functionality for any application
- Integrated transmitter verification and calibration
- Supports 2 provers, master meters and meter verification
- Extensive configurable sampling control directly from flow computer
- Full support for LACT control



Versatility

Widely used, single solution



Versatility

Installation flexibility

- Enclosures for wall, door, 19" rack and DIN-rail installation

Scalability

- Mass and volume component totals
- Well test control by test separator
- API 18.2 (lease tanks) function
- Meter run switching

Adaptable

- Multi-lingual support
- Any number of custom displays, reports, archives
- Communication with any Modbus and HART device
- Forward and reverse flow counters and station data

Widely Applicable

- Functions in hazardous area acc. Class I, Division 2 (Groups A, B, C & D) and ATEX & IECEx Zone 2
- Sustains harsh conditions -40°C to 75°C (-40°F to 167 °F) including 5% to 95% humidity





