

# Flow-Xplore™

## FLOW-X HUMAN MACHINE INTERFACE

Enhanced diagnostics & troubleshooting of flow measurements



# STANDARD AND CUSTOMIZED SOLUTIONS

Flow-Xplore is an out-of-the-box Human Machine Interface for Flow-X flow computers. In case a custom solution is required, Flow-Xplore offers a high level of flexibility and can be customized according to your specific requirements and project needs.

[Contact us and Xplore new possibilities.](#)

The familiar built-in web-based interface of the Flow-X series of flow computers offers an attractive user interface which is more than adequate for many flow computer applications and systems.

When more advanced functionality is required, such as troubleshooting of electronic flow meters, our Flow-Xplore User Interface can be connected to up to 8 flow computers and offers many additional features besides trouble-shooting. The device can be used for advanced meter diagnostics, performance monitoring and offers additional report storage and printing, combined alarm- and event management and more.

The Flow-Xplore User Interface is standard offered on an all-in-one desktop computer equipped full color touch screen. The softwareonly edition of the Flow-Xplore User Interface can be installed on a separate Windows based computer as well.

## BENEFITS AND KEY FEATURES

- ✓ *Easy to operate, yet advanced Graphical User Interface for Flow-X computers*
- ✓ *Ready-to-run, no programming required, no configuration required*
- ✓ *Advanced Meter Diagnostics and Performance Monitoring for ultrasonic and coriolis meters*
- ✓ *Equipment trouble shooting with real-time and historical trending*
- ✓ *Combines data from up to 8 different flow computers into a single interface*
- ✓ *Graphically oriented P&ID overview with animated meters, provers and transmitters*
- ✓ *Additional flow computer report storage space*
- ✓ *Alarm management and event list for flow computers*
- ✓ *Touch screen operated, with optional keyboard*
- ✓ *Customization is supported by our engineering team*

# VARIOUS DISPLAYS

The Flow-X Advanced User Interface offers various displays in a user-friendly navigation system, that can easily be operated via the touch screen.

Available Displays:

- ✓ System Overview with status of connected devices
- ✓ P&ID Overview of the meters and transmitters
- ✓ Meter run details and configuration displays
- ✓ Diagnostics for coriolis and ultrasonic meters
- ✓ Meter run and station totals
- ✓ Real-time and historical Trending
- ✓ Alarm summary and history
- ✓ Legend

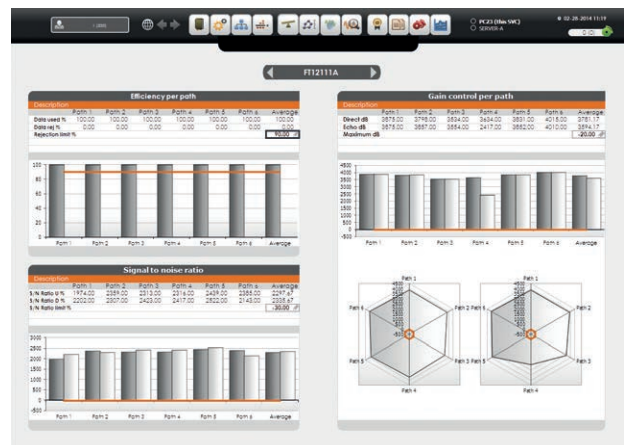
# ADVANCED METER DIAGNOSTICS

## For Coriolis and Ultrasonic Meters

Smart Flow meters have self-diagnostic capabilities. They can detect and indicate failures in their electronics as well as input and output signals. The meters also have more advanced diagnostics to analyze the trend in deviations from a "reference status", which was determined at the factory calibration or the initial meter startup.

Flow-Xplore offers a special advanced feature for coriolis meters. A deviation in the 'tube damping factor' from the reference value indicates mechanical charges like coating or another type of build-up on the tube walls and for corrosion and abrasion of the meter tubes. Fluctuations in 'tube frequency' and 'tube damping' indicate possible gas in the fluid. Asymmetry in sensor signals indicate potential mechanical damage to the meter internals.

Flow-Xplore provides a real-time and centralized overview of these diagnostics for all the meters and clearly indicates warning and failure conditions to the user. Furthermore Flow-Xplore checks if there are conflicts between the configuration of the meters and the Flow-X flow computers with respect to measurement, which simplifies the system startup and troubleshooting process.



# ADVANCED FUNCTIONALITY

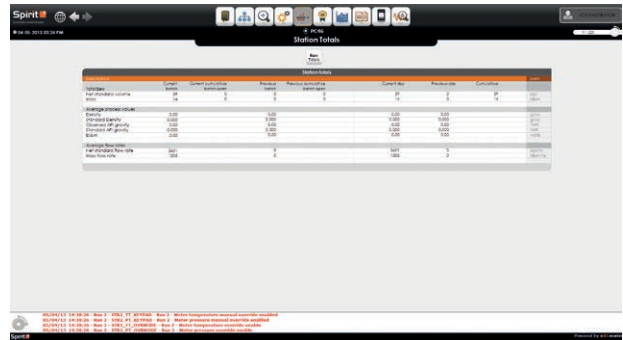
## Real-time and historical Trending

Real-time graphical trending charts of temperature, pressure and density provide you with accurate and detailed information upon which you can react immediately if necessary. This information is logged and is also available in historical trending reports.



## System Overview and Totals

The user interface provides a total system overview of all data of 4 different flow computers. When a flow computer is plugged in, its I/O and tags are automatically detected and implemented in the system.

The screenshot shows the 'Station Totals' window. It contains a table with the following columns: 'Station', 'Flow Computer', 'Flow Rate', 'Pressure', 'Density', 'Temperature', 'Current Flow', 'Pressure', 'Temperature', and 'Unit'. The table lists data for various stations including 'Station 1', 'Station 2', 'Station 3', and 'Station 4'. Below the table, there are several status indicators and a 'Refresh' button. The interface has a clean, professional look with a grey background and clear text.

## Hardware

The Flow-Xplore interface can be installed on most desktop computers and laptops. In the standard version, Flow-Xplore is supplied on an all-in-one touch screen desktop PC.



# DISCOVER OUR COMPLETE PROGRAM

## Whoever choses Spirit IT, chooses quality and reliability

Spirit Innovative Technologies provides automation products and technical services that enable end users and our system integrating partners to create highly reliable state-of-the-art metering solutions for the demanding oil and gas industry.

Numerous custody transfer flow metering control systems utilizing our products have found their successful entrance to the market and operate 24/7 at major terminals, metering stations, depots and central control rooms for major companies worldwide.

100% Reliability is not only guaranteed by the quality of our flow computers, but also by the service we provide. Superior technical support is written in our genes and highly valued by our customers.

## The Synergy between our flow computers and supervisory software

The combination of our Flow-X series of gas and liquid flow computers with our eXLerate 2010 supervisory software platform enable powerful and highly innovative solutions with a more than natural fit to your business.

## Leading in Innovative Technologies

Our technical knowledge centre in the Netherlands forms the beating R&D heart of our global network of business and technology partners. At Spirit IT, R&D has always been the best way to translate customer and market inputs into new or improved products. that is why our ongoing R&D program allows us to offer you both cutting edge technology and reliable solutions, now and in the future.



# ABOUT SPIRIT IT

We make flow measuring systems **better, smarter and more accurate.**



## A MEMBER OF THE ABB GROUP



Power and productivity  
for a better world™

Since November 2014, Spirit IT has become a member of the ABB Group. The acquisition adds a new line of high-performance custody transfer solutions to ABB's measurement business unit.

ABB is a leader in power and automation technologies that improve performance while lowering environmental impact. With thousands of experts around the world and high-performance innovations, ABB's team is dedicated to making measurement easy for its customers.

### WEB

[www.SpiritIT.com](http://www.SpiritIT.com)

### MAIL

[sales@SpiritIT.com](mailto:sales@SpiritIT.com)

### EINDHOVEN

The Netherlands

*Prof Dr Dorgelolaan 20  
5613 AM Eindhoven  
The Netherlands*

*T +31 40 23 69 445*

### BARTLESVILLE

United States of  
America

*ABB Upstream Oil & Gas  
7051 Industrial Blvd  
Bartlesville OK 74006  
United States of  
America*

*T +1 800 442 3097*

### KUALA LUMPUR

Asia Pacific/Malaysia

*Vista Tower, Suite 13D  
Level 13  
348 Jalan Tun Razak  
50400 Kuala Lumpur  
Malaysia*

*T +60 3 2166 5266*