



## Solutions for the Process Industries

# Rosemount Analytical's X-STREAM XE Web-Browser Interface Takes Process Analysis to the Next Level



### The X-Stream XE takes process gas analysis to the level of ease of use and communication capabilities

With a unique new web-browser interface, the X-STREAM XE enables users to securely login to manage the analyzer over an Ethernet connection. The ability to configure, calibrate, and program your X-STREAM XE process gas analyzer remotely from your laptop or PC greatly simplifies diagnostics, speeds the troubleshooting process, and reduces the number of trips into the field by an estimate 50%.

### X-STREAM XE Web-Browser Features and Benefits

- Alarm management
  - Set alarms remotely, and configure the analyzer to send alarm messages to your email
- Built-in programmable logic computer (PLC)
  - Automate your sample conditioning system and program it directly through the web-browser interface
- Calculator
  - Perform pre-defined calculations on various analyzer signals and user-defined constants, including:
    - Calculate NO<sub>x</sub> from NO/NO<sub>2</sub> readings
    - Normalize your CO/SO<sub>2</sub>/NO readings to a specific O<sub>2</sub> reference value
    - Input a flow reading through XE analog input and calculate flow of specific components

- Automatic emailed reports
  - Sends an email notification immediately for predefined situations, such as:
    - Analyzer failure
    - Maintenance required
    - Out of specification readings
    - Critical concentrations
  - Connect immediately to the analyzer through your computer to verify and correct the situation.

### X-STREAM XE Web-Browser Interface

The X-STREAM XE web-browser interface allows users to connect the analyzer via Ethernet and its IP address to a PC laptop via the Internet or corporate intranet. Using a standard browser, such as Windows® Internet Explorer or Mozilla® Firefox, the user can control and setup the X-STREAM XE process gas analyzer right from the desktop.

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Process Management

The secure, password-protected interface offers two levels of administration to the customer – operator and expert. To ensure calibrations and other updates can't be over-written, only one user can be logged into the system at a time.

The easy-to-use interface offers three areas of functionality – the Overview section, where the majority of functions reside, the Configure section, which enables more advanced setup and controls, and the Service Tools section, which enables user diagnostics and service functions.

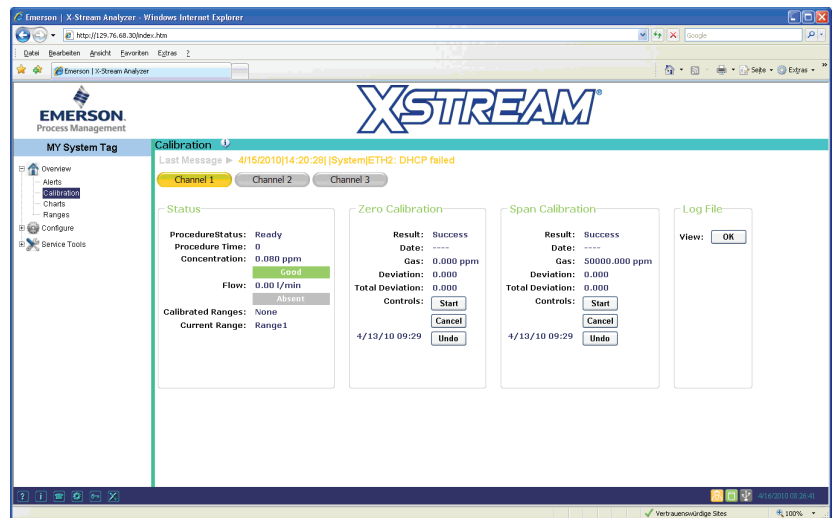
### Overview Section

Users will use the Overview section to accomplish basic analyzer maintenance, including basic functions on zero and span calibration, the status of primary measurement channels, and adjustment of range perimeters.

The X-STREAM XE enables functions on zero and span calibration through the Overview section.

### Configure Section

The X-STREAM XE web-browser interface enables configuration of the analyzer, the system, and the sample handling system.



The X-STREAM XE enables basic functions on zero and span calibration through the Overview section.

With the X-STREAM XE, customer experts can configure a wide range of analyzer functions, including alarms, calibration, concentration, interference compensation, linearization, ranges, secondary variables, and valves.

It also offers configuration of systems functions and parameters that are not assigned to a special measurement channel, including device tag, location, company, log file field separator, and network name. It also includes setup and customization of the LCD front panel and time and date stamp, and even control over pumps and valves in the sample handling system by digital outputs.

The Configure section includes advanced programming capabilities, including:

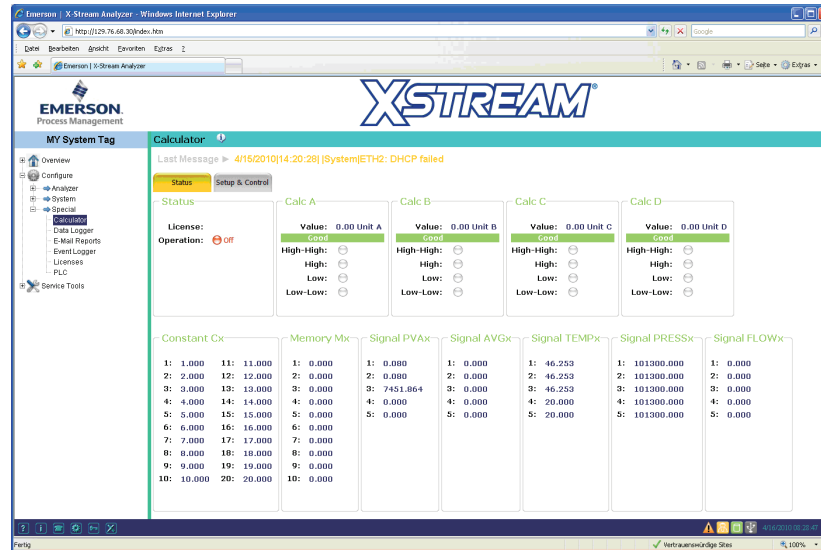
- Programmable calculator
- Data logger
- Status reports via email
- Event and calibration logger
- Programmable logic controller (PLC)

## Programmable Calculator

The programmable calculator allows the user to perform pre-defined calculations on various analyzer signals and user-defined constants. Up to four results can be calculated, and each result can be displayed with its own unit and connected to an analog output with limit alarms.

Calculated results can include:

- NO<sub>x</sub> calculations from NO/NO<sub>2</sub> readings
- Normalization of CO<sub>2</sub>/SO<sub>2</sub>/NO readings to a specific O<sub>2</sub> reference value
- Calculation of flow for specific components



The X-STREAM XE web-browser interface includes a built-in programmable calculator that allows the user to perform pre-defined calculations.

## Data Logger

The X-STREAM XE has a built-in data logger that stores measurements over longer time periods without the need for an external computer or special software. The data logger stores measurement samples at a configurable sample interval time. Data is collected on the internal disk of the analyzer and can be exported as a file. A configurable field separator allows Excel-compatible files to be generated.

Two data logger options are available – standard and advanced.

Data Logger Feature	Standard	Advanced
Start/stop function	X	X
Adjustable sample time	X	X
Storage on internal analyzer disk	X	X
Export data file to USB memory	X	X
View & download file to computer	X	X
Record concentration, temperature, pressure, flow	X	X
Direct data storage on external USB memory		X
Variable file name		X
Daily start/stop interval times		X
Record average, raw signal, calculator results		X
Record PLC result status		X
Record system valve status		X

### Status Reports via E-mail

The X-STREAM XE can email reports to anyone. The reports can be set up in advance — for example, you can configure the analyzer to send reports when a new event occurs, or you can configure a report to be generated daily.

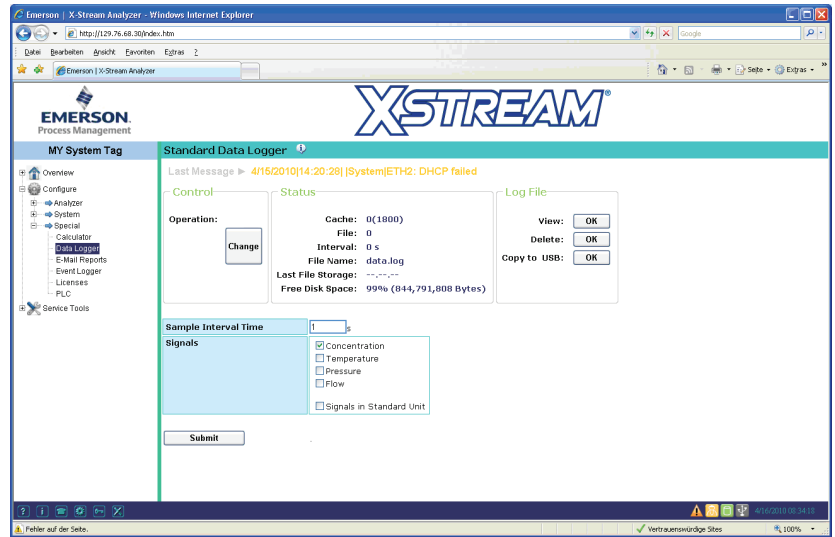
### Event and Calibration Logger

The analyzer's status event manager monitors critical diagnostic functions. It can generate NAMUR signals and user-interface messages and record special event types on files. It enables the user to archive and review performance data and actions that took place. It generates three files:

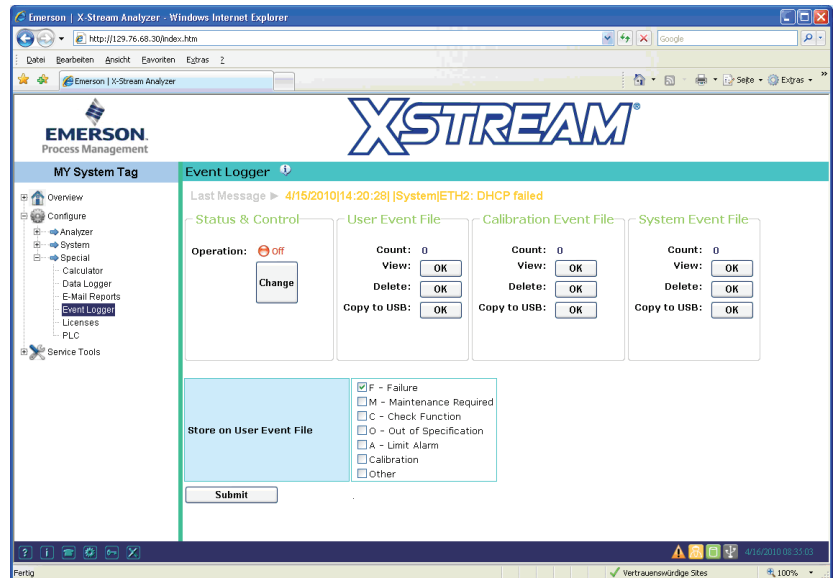
1. System Log – Records system failures and other critical situations
2. User Event Log – Records limit alarms, calibration events and NAMUR status events
3. Calibration Log – Records detailed calibration results

Event data are stored on the internal disk of the analyzer and can be exported. A configurable field separator generates Excel-compatible files.

The event logger monitors critical diagnostic functions.



The standard data logger window allows users to turn logging off and on.

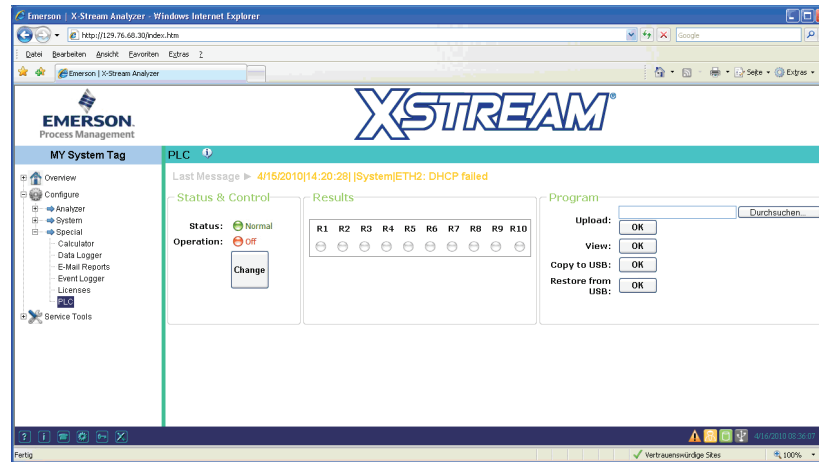


The event logger monitors critical diagnostic functions.

## Programmable Logic Controller (PLC)

The X-STREAM XE offers a programmable logic controller that performs user defined, logical operations on various analyzer functions, supported by eight timers, more than 100 digital output functions, more than 35 actions, nine operators, and more. The PLC can generate up to 10 results, and the results can be displayed in the web browser interface and used to control the analyzer's digital outputs. The PLC executes cyclic with an interval of ~100ms. Programming the PLC is done by uploading a text file with simple code.

The X-STREAM XE web-browser interface offers a programmable logic controller that performs user-defined, logical operations on various analyzer functions.



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## Service Tools Section

In the Service Tools section, users can configure alerts, device information, backup and restore functions, performance and status diagnostics, log files, and USB port access.

## Summary

The X-STREAM XE offers a web-browser interface that allows customers to manage their analyzer over an Ethernet connection. Users now have the ability to remotely configure, calibrate, and program the X-STREAM process gas analyzer. In addition, the new web-browser interface simplifies alarm management by allowing alarms to be set remotely and by sending alarm messages via e-mail.

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