

Integrated QAL3 solution for emission monitoring Quality assurance based on EN 14181 – made easy



With the EasyLine series, ABB offers analyzers with integrated QAL3 functionality as the first manufacturer worldwide.

Following EU guidelines, emission measurements are subject to EN 14181 “Emissions from Stationary Sources – Quality for Automatic Measuring Equipment”.

EN 14181 requires plant operators to regularly apply Shewhart or CUSUM charts in monitoring precision and drift at the zero and reference points of their automatic measuring systems (AMS).

Support for plant operators

The QAL3 option in EasyLine analyzers facilitates the compliance of companies with government standards for certification of their facilities. EN 14181 regulates quality assurance for automatic measuring systems (AMS).

Reliable data capture and monitoring

The QAL3 function in EasyLine:

- Offers automatic capture, checking and documentation of drift and precision at zero and reference points
- Includes data storage for one year minimum
- Compiles Shewhart or CUSUM control charts
- Provides digital archiving in internal databases
- Access using standard Web browser
- Analyzers with integrated Web server and Ethernet interface
- Complies with requirements of EN 14181, QAL3

QAL3 with EasyLine analyzers

Fully automatic monitoring for EasyLine analyzers

ABB's QAL3 solution fully automatically monitors the zero and reference points of EasyLine gas analyzers based on EN 14181. Any further operations for QAL3 monitoring and reporting are obsolete.

Selectable data presentation - Shewhart or CUSUM

Shewhart and CUSUM charts open up the playing field for the presentation of data. Documentation is shown in tables with color highlights for alarm value infringements.

Safe data storage

Required QAL3 parameters, such as recorded dates and times of calibration, instruments data and comments are documented and stored in a safe and integrated database.

Data access and subsequent processing

ABB's QAL3 solution is accessible from any standard Web browser via Intranet, the Internet, ABB's Analyze IT Explorer or directly from PC. It allows further data processing with standard software like Excel.

Unaffected availability of analyzers

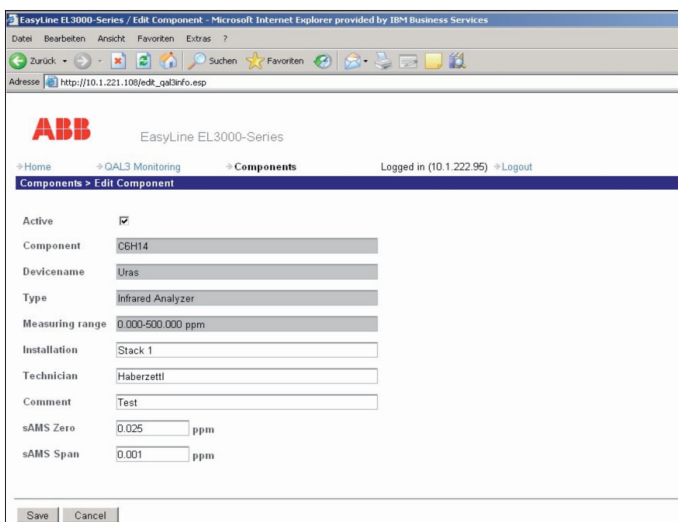
Analyzers remain operational when QAL3 is active, their availability unaffected either way.

Independent of government emission data capture

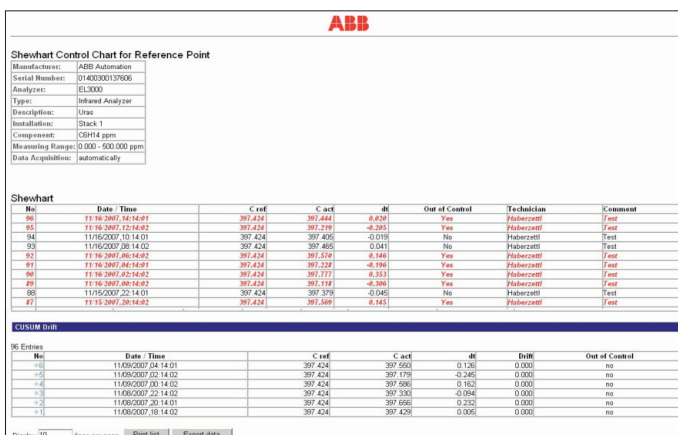
The QAL3 solution operates independently and does not influence government capture of emission data.

Software always up-to-date

Already installed analyzers can be easily upgraded with the QAL3 function with software updates and through the exchange of the memory cards.

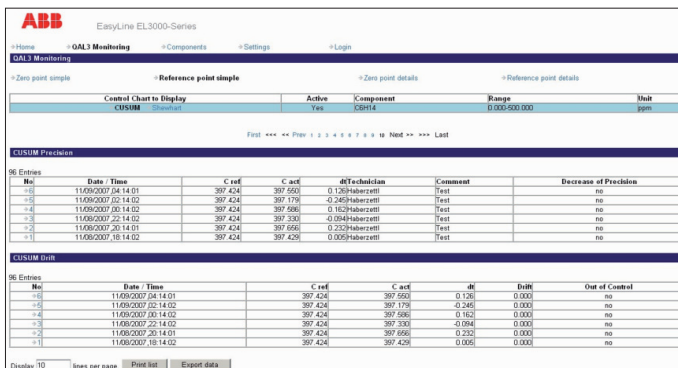


Configuration using standard Web browser



No.	Date / Time	C ref	C act	dl	Out of Control	Technician	Comment
90	11.10.2007 14:14:01	397.424	397.444	0.020	Yes	Haberzettl	Test
91	11.10.2007 15:14:02	397.424	397.179	-0.245	Yes	Haberzettl	Test
92	11.10.2007 16:14:03	397.424	397.405	0.019	No	Haberzettl	Test
93	11.10.2007 17:14:04	397.424	397.405	0.041	No	Haberzettl	Test
94	11.10.2007 18:14:05	397.424	397.219	-0.144	Yes	Haberzettl	Test
95	11.10.2007 19:14:06	397.424	397.219	-0.199	Yes	Haberzettl	Test
96	11.10.2007 20:14:07	397.424	397.171	-0.251	Yes	Haberzettl	Test
97	11.10.2007 21:14:08	397.424	397.113	-0.306	Yes	Haberzettl	Test
98	11.10.2007 22:14:09	397.424	397.113	-0.146	No	Haberzettl	Test
99	11.10.2007 23:14:10	397.424	397.569	0.145	Yes	Haberzettl	Test

Printout of Shewhart chart



No.	Date / Time	C ref	C act	dl	Technician	Comment	Decrease of Precision
90	11.09.2007 04:14:01	397.424	397.560	0.136	Haberzettl	Test	no
91	11.09.2007 05:14:02	397.424	397.179	-0.245	Haberzettl	Test	no
92	11.09.2007 06:14:03	397.424	397.586	0.162	Haberzettl	Test	no
93	11.09.2007 07:14:04	397.424	397.330	-0.094	Haberzettl	Test	no
94	11.09.2007 08:14:05	397.424	397.666	0.242	Haberzettl	Test	no
95	11.09.2007 09:14:06	397.424	397.429	0.005	Haberzettl	Test	no

View of Control chart

For more information, please contact:

ABB Automation GmbH Analytical
Stierstädter Str. 5
60488 Frankfurt, Germany
www.abb.com/analytical

