EasyLine
Continuous gas analyzers
So smart, they're simple

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EasyLine was born out of the market demand for high quality continuous gas analysis at an affordable price.

Suitable for a wide variety of applications, EasyLine combines ABB's proven and reliable analyzer technology with unrivaled ease of use – So smart, they're simple.

Experience confidence and peace of mind when choosing EasyLine, reinforced by independent safety and emission monitoring approvals.

EasyLine
So smart, they're simple

01 Application in industrial gases sector

Easy configuration
Easy to select the right product, tailored to your needs and stress-free set up after delivery

- Delivered tailored for each application
  - Configurable measuring ranges
  - Single dynamic range with two measuring ranges
  - Measure flammable gases without purging
  - Modular I/O based on your needs
- All commonly used functions accessible via HMI
- Every analyzer shipped with PC configuration tool for custom parameter setting
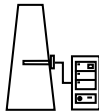
Easy integration
Good fit for each application, options to fit your needs, I/O for every eventuality

- 19" rack (3HU) and wall mount housing (IP65)
- Optional pump, flow sensor and solenoid valve
- Control up to 7 external solenoid valves
- Industry standard I/O
  - 0/4…20 mA for each component
  - Standard 4 x DI, 4 x DO (Max. 12/12)
  - Standard Modbus TCP/IP
  - Optional Modbus RTU or Profibus
- Attractive solutions for hazardous applications!
  - General Purpose for flammable gases
  - Zone 2 for non-flammable gases

Easy operation
No complex menu structure means no training and no manual necessary

- No training/manual necessary for operation
- Intelligent 4-way navigation
- Flat menu structure
- Access to most likely functions using same button
- Password protection for expert levels

Easy maintenance
Innovative calibration concepts, accessible modular design, intelligent and intuitive servicing

- Optional gas-filled calibration cells reduce calibration costs by up to 95%!
- Integrated drift checking with one year data storage (QAL3 reporting according EN14181)
- Automatic or manual calibration
- Modular design allows easy disassembly of hardware for component replacement
- Extensive self-diagnostics, clear text status messages

Now with Dynamic QR Codes for faster fault diagnosis and repair!

01

Analyzer modules – world renowned brand names built on 90 years of rich heritage

Uras26
Infrared photometer

- Components: CO, NO, N_2O, SO_2, CO_2, CH_4, …
- Ranges: 0 - 100 ppm up to 100 vol%
- Measure up to 4 components simultaneously
- Measure up to 2 streams continuously
- Gas-filled detectors for highly selective measurement
- Easy to add and change measuring components in field
- Internal calibration cells minimize cost of ownership

Uras26

Magnos28
Paramagnetic detector

- Components: O_2
- Ranges: 0 - 0.5 vol% up to 100 vol%
- Patented microwing® offers improved repeatability
- Semi-automatic manufacturing for consistent quality
- Inert materials suitable for corrosive applications
- Fast response (1.3s) for improved process control
- Suppressed ranges (99,5 - 100 vol%) for purity applications
- SIL declaration available acc. EN 61508 (2010) part 2

Magnos28

Magnos27
Thermomagnetic detector

- Components: O_2
- Ranges: 0 - 10 vol% up to 100 vol%
- Reliable measurement for flue gas applications
- Robust cell design ideal for corrosive samples
- Easy to clean even after liquid/acid contamination
- Very popular for cement and metals applications

Magnos27

Fidas24
Flame ionization detector

- Components: THC, TOC, VOC, C_nH_m
- Ranges: 0 - 10 ppm up to 10,000 ppm
- Excellent temp. stability through single block design
- Automatic and reliable re-ignition on flame out
- Injector for sample transport with no moving parts
- Optional heated connector block to avoid cold spots
- Optional internal pump for mobile applications

Fidas24

Limas23
Ultra violet photometer

- Components: NO, NO_2, SO_2
- Ranges: 0 - 50 ppm up to 100 vol%
- Measure up to 3 components simultaneously
- Insensitive to H_2O and CO_2 interference
- Simultaneous NO and NO_2 measurement w/o converter
- Internal calibration cells minimize cost of ownership
- Four beam detection simplifies failure diagnosis
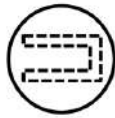
ZO23
Zirconium dioxide detector

- Components: O_2
- Ranges: 0 - 1 ppm up to 250,000 ppm
- Trace level measurement for purity applications
- Catalytically inactive cell minimizes influence from flammable gases
- Wide dynamic range for start-up / shut-down operation
- T_{90} response time < 60 sec for alternation of 2 test gases
- Automatic self-check function without test gases

O_2 Sensor
Electrochemical sensor

- Components: O_2
- Ranges: 0 - 1 vol% up to 25 vol%
- Low initial cost option for O_2 measurement
- Combined as add-on with Uras or Limas modules
- Up to two sensors possible together with Uras
- 6 - 24 months lifetime depending on gas composition
- Certified for continuous emission measurement

Caldos27
Thermal conductivity detector

- Components: H_2, He, Ar, N_2, ...
- Ranges: 0 - 1 vol% up to 100 vol%
- Flexibility to cover wide variety of applications
- Fast response (t^{90} < 2s) for improved process control
- Standard application for H_2-cooled turbogenerator
- Standard application for blast furnace with Uras26

Proven and reliable measurement
Adaptable to your operation

EasyLine offers an excellent price-performance ratio and can be configured to match your specific application requirements. The ability to combine up to two sensors in one housing provides a high degree of flexibility and comprehensive safety and emission monitoring approvals reassure you that you are making the right choice in choosing ABB as your partner in continuous gas analysis.

01 Application in power generation processes

Combinations

Combine up to two sensors in one housing:
Uras26 + Magnos28
Uras26 + Magnos27*
Uras26 + O_2 sensor (up to two)*
Uras26 + Caldos27
Fidas24 (standalone)
ZO23 (standalone)
Limas23 + Magnos28
Limas23 + O_2 sensor
Magnos28 + Magnos28
Magnos28 + Caldos27
Caldos27 + Caldos27

* Combination only available in rack mount housing

Approvals

Applications

Emission monitoring
According EU, US EPA and other local regulations
Industrial Gas
Air separation, HyCO, Carbon Dioxide
Chemicals
Combustion, Reactors
Cement
Kiln, Preheater, Safety
Waste
Incineration, Landfill
Pulp & Paper
Boilers, Lime kilns
Metals
Blast furnace, Converter
Mining
Smelting, Safety
Water
Biogas, Dryers
Marine
Combustion, Safety
Renewable Energy Technologies
Electrolyzers, (green) Hydrogen, Carbon Capture, (green) Methane

01

Unique qualities
Calibration cells and Dynamic QR Codes

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02 Application in cement industry

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03 EasyLine display with Dynamic QR Code

Calibration cells

Calibration is necessary for all gas analyzers but the frequency varies significantly between different devices. The time and costs can increase substantially depending on the approach taken. Regulatory aspects can also have a big impact (e.g. daily validation required according to US EPA emission regulations), especially when you consider the real cost of gas cylinders.
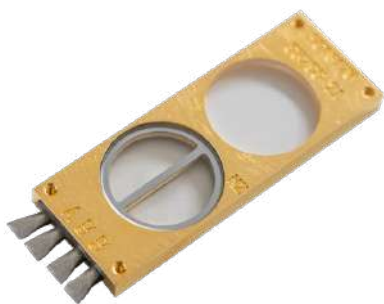
Manufacturing
- Gas-filled calibration cell
- Tightness guaranteed by proprietary manufacturing technique
- 30 years' manufacturing experience

Suitability
- Alternative to flowing test gas
- Available in both Uras and Limas photometers
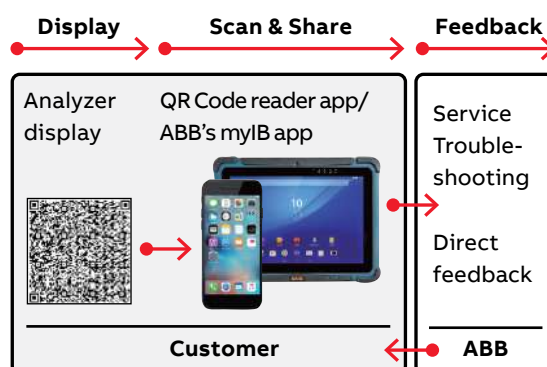- Compliant with EN 14181 and US EPA 40 CFR 60

Proven technology
- Tested by TÜV for over 10 years
- Stability superior to many test gas cylinders
- Drift < 0.5% per year
- Certified according EN 15267

Up to 95% lower calibration costs!
Ask your local contact for more info

Dynamic QR Codes

ABB's Dynamic QR Code is a unique feature to display dynamically generated QR codes on the analyzer display for easy communication. In addition to static information for system identification, it contains also dynamic information on system configuration and analyzer health status. In combination with mobile devices, the Dynamic QR Code represents an innovative way of customer's communication which allows, for instance, improved case-specific support by ABB resulting in an increased availability of analyzer assets. It is compatible with standard QR code reader applications as well as ABB's application 'my Installed Base (myIB)'.

Display	Scan & Share	Feedback
Analyzer display	QR Code reader app/ ABB's myIB app	Service Trouble-shooting Direct feedback
Customer		ABB

Generally applicable for all installations across all industries, especially interesting for
- Measurements with high availability requirements (for example CEMS)
- Remote installations
- Installations with constraint remote access due to information security guidelines

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02

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03

ABB

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ABB Measurement & Analytics

For your local ABB contact, visit:
abb.com/contacts

For your local product information, visit:
abb.com/analytical