ABB MEASUREMENT & ANALYTICS

Open up a new world of water analysis

ABB’s range of digital water transmitters

Accurate water quality measurement made easy

Open your way to a new world of water analysis

Stringent legislation around municipal- and industrial- water quality makes it essential to know how your water measures up against regulatory requirements, while optimizing your process performance calls for efficient water usage and treatment.

Versatile transmitters that work the way you work

Our analytical measurement systems combine the latest advances in intelligent sensor diagnostics/management with ABB's intuitive HMI operation and modular design philosophy. Robust, proven and dependable, our devices offer a choice of industry standard communications protocols, plus a full range of approvals.

Highly flexible, they can be quickly and easily deployed in a range of industries including:

- **Chemical and petrochemical**
- **Metals and mining**
- **Water and wastewater**
- **Pulp and paper**
- **Petroleum refining**
- **Marine**

Modular flexibility, unequalled simplicity

When it comes to helping you find out what's happening in your water treatment processes, we believe in making things easy. That's why you'll find a host of features in our water quality analyzers that have been designed to simplify operation/maintenance and give you access to more data, more quickly, wherever and whenever you need it.

AWT210	Low power, high performance
Intrinsically safe single-channel, two-wire universal transmitter for measuring and controlling pH/ORP or conductivity in hazardous and non-hazardous area applications.	• Plug-and-play modular design • Polycarbonate or coated aluminium enclosures • Intrinsic safety/non-incendive options • One button calibration

ACA592 / APA592	Safe operation, extreme protection
Explosion-proof two-wire field mountable transmitter for measuring and controlling pH/ORP or conductivity in the most demanding applications.	• Explosion-proof design • Through-the-glass (TTG) programming • Field-mountable enclosure • HART communication

AWT420	Versatile design, maximum usability
Universal four-wire modular dual-channel transmitter with integrated PID control for use with both analog and digital EZLink sensors.	• Plug-and-play modular design • Bluetooth connectivity • Dual-channel PID control • SD card data archiving

AWT440	One transmitter, many possibilities
Multi-input four-wire transmitter for use with up to four digital EZLink sensors in safe area applications.	• Up to 4 EZLink sensor inputs • Graphical trending • Full audit trail capability • USB/SD card data archiving

EZLink – accurate measurement is just minutes away

Imagine if you could install your sensor and transmitter in minutes, with none of the time or hassle associated with wiring, set-up and configuration. With our EZLink plug-and-play technology you can. With EZLink, getting up and running is just a matter of connecting your ABB sensor to one of our digital transmitters.

Plug-and-play digital sensor connection
Plug-and-play technology makes it easy to connect and configure the transmitter with any of our digital sensors, offering flexible measurement with minimal set-up time.

Factory calibrated
Factory calibration means your transmitter is accurate and ready to go as soon as it is out of the box.

Automatic sensor recognition and set-up
Automatic sensor recognition enables sensors and transmitters to be matched up quickly, with no wiring or fine-tuning required.

Advanced predictive maintenance diagnostics
Advanced self-diagnostics conforming to NAMUR NE 107 provide clear and simple indication of device status.

Enhanced measurement accuracy
Electrical noise interference is minimized, ensuring maximum signal strength for enhanced accuracy.

AWT420 dual channel transmitter
Versatile design, maximum usability

The AWT420 four-wire, dual channel transmitter offers true flexibility for measuring a wide variety of parameters in a single device.

Offering swappable communications and sensor modules, options for panel-, pipe- and wall-mountings and general purpose and safety enclosures, the AWT420 is the versatile single box solution for measuring a range of parameters including pH/ORP, conductivity and turbidity.

Simple and secure operation

- Multi-level security access prevents unauthorized configuration or calibration changes

The transmitter that gives you more choice

With the AWT420, you get a single device that can be expanded readily to meet changing demands, both now and into the future. Available in both corrosion-resistant polycarbonate or a durable metal version with optional non incendive approvals for hazardous area installation, it offers a versatile solution for use in utility- and industrial process-applications.

Your data, when you need it

The AWT420 incorporates several key features to help you find the data you need quickly and easily. An easily navigable full color TFT display makes it easy to find and access sensor data, while Bluetooth® technology provides up-to-the-minute information and technical support using ABB's EZLink connect app.

Secure access to your data

Easy and secure access to measurement, diagnostic and audit data.

Keep your analysis up-to-date

Access software updates and sensor information through your smartphone.

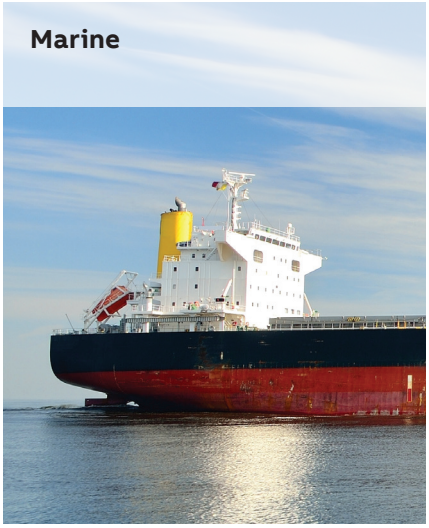
Reduce process downtime

Keep track of current and upcoming maintenance tasks.

Power and energy generation

Industrial process control

Marine



Easy access to your data

- ABB common HMI enables intuitive operation
- One-button sensor calibration saves time and money on routine maintenance
- HART®, PROFIBUS®, Modbus® and Ethernet
- Download archived data to internal SD card

Dual-channel measurement and control

- Mix-and-match analog and EZLink digital sensors
- Integrated dual channel PID control for direct or reverse acting control or dual acid/base control (pH only)

Flexible installation

- Wall-, pipe- or panel-mount options
- Available in polycarbonate or aluminium versions
- Choice of power options

Enhanced safety

- cULus and ATEX IECEx Non Incendive approvals for hazardous area installation

Discover more

Visit **bit.ly/AWT420** or **scan the QR code.**

AWT210 single channel transmitter
Low power, high performance

The AWT210 offers a reliable and durable transmitter for the measurement and control of pH, ORP or conductivity in hazardous and non-hazardous areas.

The advanced transmitter that's easy to use
The AWT210 offers the power of advanced digital communications in a simple, flexible design, enabling you to get up and running quickly.

The true fit-anywhere single channel transmitter
With the AWT210, you get the convenience of a single standard device that can be installed almost anywhere. Its wall-, panel- or pipe-mounting fittings, plus an intrinsically safe, non-incendive design for hazardous areas, enable it to be quickly fitted without the need for extensive modifications.

Intrinsically safe
- Intrinsically-safe, non-incendive design for hazardous areas
- USFMc and ATEX/IECEx approved

Discover more

Visit **bit.ly/AWT210** or **scan the QR code.**

Flexible scalability with the future built-in

With the AWT210 you get a truly adaptable transmitter that can be quickly and easily modified as your needs change. Its modular design allows the same unit to be used with any of the available or future sensor and communication modules, minimising stock holding whilst maximising operational uptime.

Modules can be removed easily, swapped and locked back into place, enabling fast and simple upgrades in the field.

Advanced diagnostics
- Advanced self-diagnostics conforming to NAMUR NE 107

One button calibration
- One-button sensor calibration saves time and money on routine maintenance

Easy to integrate
- Choice of HART, PROFIBUS and FOUNDATION™ Fieldbus communications

Optimum plant availability
- Transmitters can be quickly and easily upgraded in the field
- Choice of sensor and communications module options

Fit anywhere
- Choose from wall-, pipe- or panel-mount options
- Available in polycarbonate or aluminium versions

Reduced cost of ownership
- Common universal design for pH, ORP or conductivity measurement
- ABB common HMI enables easy, intuitive operation
- Easy set-up menus for quick and easy installation and commissioning
- Interchangeable modules for easy upgrading

Explosion-proof transmitters
Safe operation, extreme protection

Our explosion-proof pH/redox (ORP) and conductivity transmitters offer a tried and tested solution for the most arduous industrial applications.

Continuous sensor and self-monitoring
- Electronics self-checking helps safeguard against potential device failure

Discover more

APA592 pH/ORP transmitter

For more about the APA592 pH/ORP transmitter, visit **bit.ly/APA592** or **scan the QR code.**

ACA592 conductivity transmitter

For more about the ACA592 conductivity transmitter, visit **bit.ly/ACA592** or **scan the QR code.**

Proven and reliable

Used in applications worldwide, our range of pH/ORP and conductivity transmitters have established a reputation for tough and reliable performance in the most demanding conditions.

Through-the-glass technology
- TTG avoids the need to open the device to carry out programming or commissioning, reducing downtime in hazardous areas

24 V DC 2-wire transmitter
- Dual compartment design
- Tropicalized circuit boards
- Coated aluminium options
- IP 66/67, NEMA 4X Enclosure

Easy and flexible installation
- Intrinsically safe
- Non-incendive
- Dust-ignition proof
- Flameproof
- Explosion-proof

Pulp and paper

Metals and mining

Petroleum refining

Simple set-up
- Easy-to-configure menus
- FDT/DTM, EDD HART programming

Full approvals
- FM
- ATEX/IECEx
- CSA

Output options
- 4 to 20 mA with HART signal

AWT440 multi-channel transmitter
One transmitter, many possibilities

The AWT440 can be used in a range of water quality monitoring applications.

With the ability to handle signals from up to four EZLink-enabled digital sensors measuring the same or different parameters, the AWT440 four-wire transmitter offers a flexible and cost-effective solution for a variety of water and wastewater treatment applications. Featuring ABB's EZLink plug-and-play technology, it can be quickly and easily connected to a combination of ABB's Aztec 400 range of advanced digital sensors, eliminating the cost and space needed for four individual transmitters.

Full audit trail

- The AWT440 transmitter records all data continuously to its internal memory. This includes both event log data and configuration data in addition to measurement data

The flexible transmitter that gives you more

Flexible, convenient and easy to use, ABB's AWT440 digital transmitter with EZLink lets you get more from your measurements.

Install anyhow, anywhere
- Wall-, pipe- and panel-mount options
- IP66 corrosion resistant

Simple operation
- Intuitive HMI
- Step-by-step menus
- Plug-and-play sensor connection

Reduce cost with multiple sensor connection
- Connect up to four digital sensors
- Mix and match different sensors

Power and energy generation

Industrial process control

Marine

Simple to integrate
- Available with PROFIBUS, Modbus or Ethernet communication
- Embedded web-server provides access to measurement data via standard web browser

Keep your data secure
- Process data and historical logs can be archived securely to a removable SD card or USB stick. Archived data can be transferred easily to a PC and analyzed using ABB's DataManager Pro data review software

Get up and running with EZLink
- EZLink plug-and-play sensor connection

Discover more

Visit **bit.ly/AWT440** or **scan the QR code.**

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ABB Measurement & Analytics
For your local ABB contact, visit:
www.abb.com/contacts

For more product information, visit:
www.abb.com/measurement

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