

TOTALFLOW
REMOTE MEASUREMENT
AND AUTOMATION SYSTEMS



RIGHT IN SO MANY WAYS.

Because precisely is the ABB way, let's get straight to the bottom line: ABB Totalflow's remote measurement and automation systems are proven to dramatically increase the accuracy, efficiency, safety, and productivity of any natural gas operation.

Totalflow software and hardware systems go beyond mere integration. Not only are they designed to be compatible with each other, they are also compatible with your business—now and as your business grows.

And when you trust ABB for your measurement and automation solutions, you can fully expect your business to grow.



> Remote Systems, Hands-on Support.

Our solutions don't end with innovative products. ABB Totalflow support is always part of the package, so you don't have to worry about being left on your own with tricky installations or reconfigurations. Keeping things easy to set up and use is central to our design process and support focus. Familiarizing yourself with our system's intuitive operations is simple, so you'll spend less time training and more time reaping the benefits of streamlined operations.

> Extreme Accuracy in Extreme Conditions.

The nature of remote measurement and automation requires that these systems be able to withstand oppressive heat, driving rain, biting-cold temperatures, and the many changing demands throughout the life cycle of your operations. Our rugged systems are exceptionally capable of taking the brunt of nature and responding exactly the way we engineered them to: with dependable, unwavering accuracy.

> Superior Software Solutions.

To address your ongoing need for connectivity options that help you better manage the flow of information and more easily share it, we have a wide range of software applications. WebCCU, for example, is a Web-based software product that allows secure access from your PC to flow data, alarms, trends, and other critical real-time information, and secure delivery (via WebCCU Intranet and Internet software) to others in your organization. WebCCU even enables you to configure field equipment from a Web browser.

Rugged reliability in unforgiving conditions. Backward compatibility. Complete scalability. And around-the-clock support from some of the most experienced and innovative engineers and technicians in the industry, who can provide everything you need to simplify your growing workload.

ABB is your single source for all of your natural gas measurement and automation needs.

2



MEASUREMENT AND AUTOMATION HARDWARE AND SOFTWARE.



Flow Computers.

Easy installation, minimal calibration, and streamlined, accurate custody transfer systems are just the beginning of the benefits of our microFLO (µFLO) and XSeries devices. Years of experience with real-world applications have helped us build greater efficiency into every function of these products, resulting in exceptional productivity and profitability for our customers.

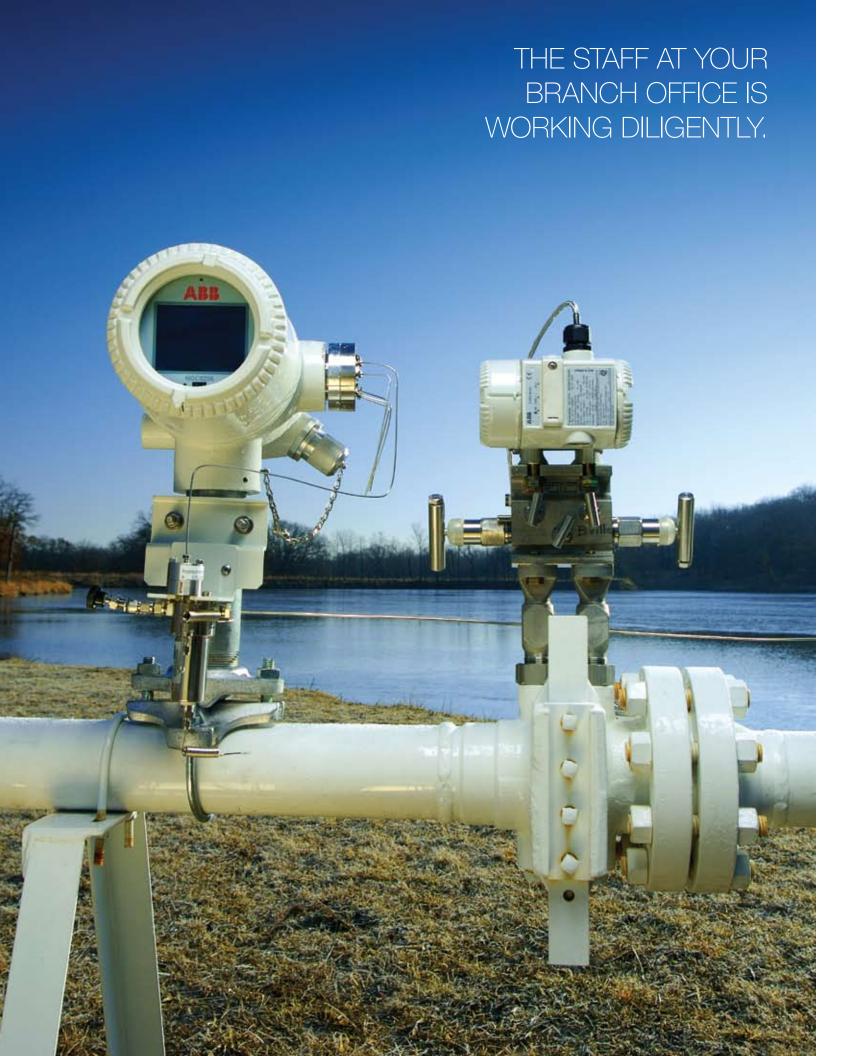
XSeries technology—the X stands for extendable—is a thoroughly integrated, object-oriented, real-time software system on top of dynamic, state-of-the-art, rugged, low-power electronics. Each layer of the system—I/O points, communication channels, protocols or software applications—is designed to grow along with your needs.



Remote Controllers.

Combining unmatched measurement technologies with next-generation remote-control technologies, XSeries Remote Controllers are designed to optimize your facilities and help you better manage your time. Compatible with our innovative PCCU, TF.NET, WinCCU and WebCCU software systems, XSeries Remote Controllers greatly simplify the measurement, monitoring and control of your data.

Like our flow computers, our remote controllers are designed to grow with your business, with upgradeable and expandable hardware and software architecture. These units feature PLC and RTU functionality along with custody-transfer measurement applications, and large enclosures with powerful battery capacity. Plus, we make upgrades seamless and simple, without the need for costly retraining.





Natural Gas Chromatographs.

ABB Totalflow offers the most rugged, economical, versatile, and high-precision on-line and portable gas chromatographs in the industry: the NGC 8200 series. Designed with flow computer and chromatograph capabilities for energy metering, the NGC 8200 provides not only best-in-class, on-site analysis, but also offers a highly versatile platform that integrates many of the functions pipeline operators need to deliver greater productivity.

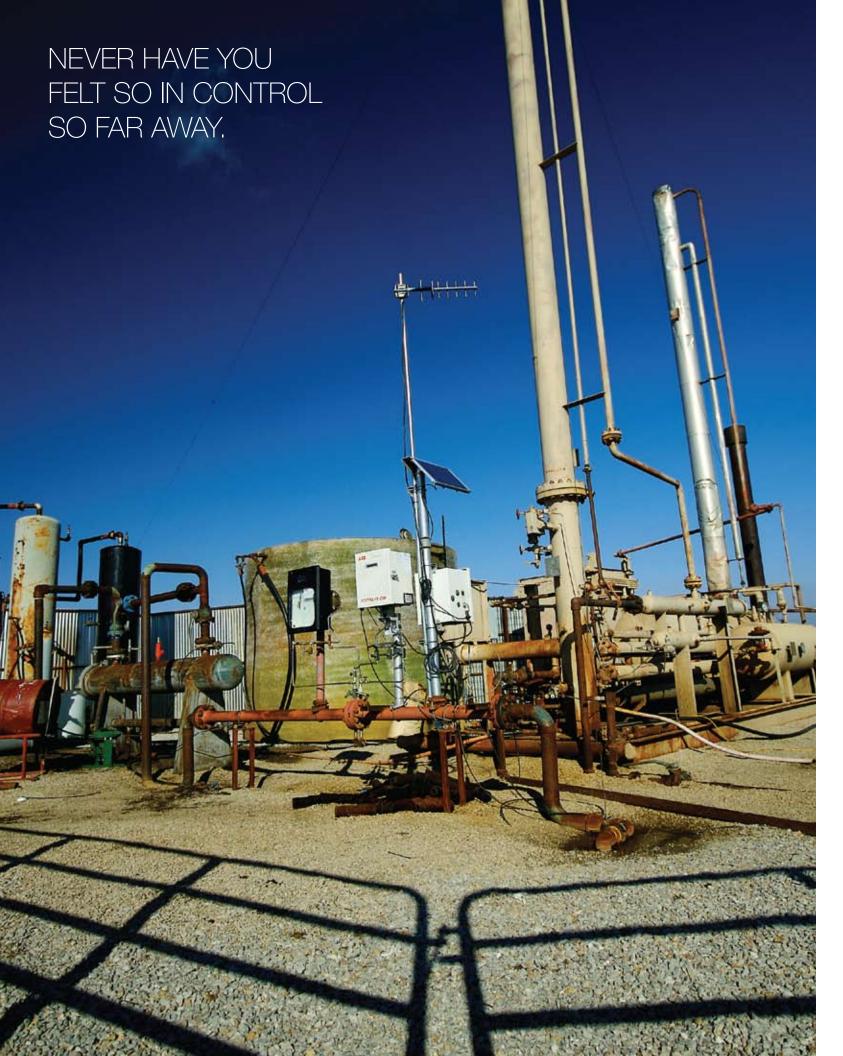
The compact, extremely durable NGC 8200 may be installed directly on the pipe and can operate on solar power. For long-term reliability, it is designed with parts that are easy to troubleshoot in the field and replace, so you can be back up and running in short order.



Tank Level Sensors.

The Model 7100 LevelMaster Digital Level Sensor combines hardware and software to address the unique custody-measurement and operational needs of tank level management. The LevelMaster provides not only an accurate level gauge but also an accurate measurement of the oil and water interface, for trustworthy oil sales.

Unlike other level-sensing technologies, LevelMaster provides precise levels without needing to adjust for densities and other unpredictable properties of storage-tank liquids. LevelMaster comes with a built-in temperature sensor and, when used with powerful XSeries LevelMaster applications, is approved by the Bureau of Land Management for measuring gross volumes of oil in custody-transfer transactions.







Software.

ABB's remarkably easy software systems provide real-time measurement and control right out of the box. Open systems that are compatible with a wide variety of hardware and software, ABB's advanced software makes it easy to securely access and control your facilities from wherever you are.

- •WinCCU EFM Host. A network-based software product that provides connectivity among remote facilities in order to gather and manage all of your gas volume and energy data. WinCCU enables you to remotely configure variance reports and schedule a variety of tasks. It even supports options to import non-Totalflow EFM data and provide graphical SCADA-like screens for XSeries control applications.
- •WebCCU Internet. This software enables the user to access the WinCCU long-term database via the Internet to monitor near-real-time data and reports. It is a shrink-wrapped product that can be installed and configured to provide browser-based presentations—including WinCCU reports and graphs—in an afternoon.
- •ABB SCADAvantage.™ Designed to easily combine, replicate and distribute data to and from disparate sources, ABB SCADAvantage™ features scalability from a single, client-server system to multi-tiered, widely distributed enterprise systems. Its sophisticated templating scheme makes it easy for your organization to add and delete facilities from the system.



- •TF.NET Internet/Intranet Database Navigation and Viewing. This software provides browser presentation capability for virtually any database or OPC server. With its user-friendly Microsoft®.net technology, you can access standard WinCCU reports, post near-real-time data to an Internet site, review historically trended data, and modify configuration data in remote devices.
- •PCCU Local Configuration and Collection. This easy-to use, Windows®-based software provides a local interface to all ABB field products—from NGCs to flow computers and everything in between. It allows you to calibrate and configure all I/O, configure trends and standard historical files, perform diagnostics and troubleshooting, program analog and digital operations, and much more.
- •TDS32 OPC/DDE Driver. A Totalflow protocol link to all OPC/DDE-aware software systems. It is compatible with WinCCU software and can also serve as a stand-alone link to other systems. TDS32 OPC/DDE Driver software supports more than 50,000 tags.
- •Totalflow Protocol Toolkit. For companies that need to integrate Totalflow's native protocol within their own driver package, this toolkit gives you a leg up on implementing our protocol with functions that are fully tested and fully compliant with all Totalflow devices.
- •Voice Alarm System (VAS). Totalflow VAS is a Microsoft® Windows®-based program designed to call specified meter technicians, producers, and other relevant personnel in the event of an alarm condition detected on any Totalflow FCU or RTU.

ABB TOTALFLOW, REASSURINGLY RIGHT.

There is not an engineer, sales representative, customer service professional or technician on the ABB Totalflow team who doesn't believe in doing the job right every time. It's more than a matter of pride—it's a matter of responsibility.

When we tell a customer that our products will deliver the most accurate information in the most efficient manner possible, a lot is at stake. The customer's profitability, for one. And our reputation.

Part of our reputation is making sure the customer is satisfied no matter what. So, if a standard product is not enough, our project engineers will create the right solution for your business.

Discover how much easier life can be when you go with the 'flow—ABB Totalflow.

For more information, please call 800-341-3009 or visit abb.com/totalflow.



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