Products, Solutions, and Services

Industrial Automation Solutions and Services for Process Manufacturing, Chemical, Oil & Gas, Energy and Environmental Industries
The acute angle and sharp straight edges of the top half of the diamond symbol represent Yokogawa’s cutting-edge technology while the gentle curvature of the bottom half represents the warm-hearted nature of Yokogawa’s people. By balancing these two elements, Yokogawa aims to contribute toward the realization of a thriving global society in much the same way as the sun. This property is reflected in the bright yellow of the diamond.

Yokogawa Core Values

Create Value
We create value together with customers providing superior performance and developing customer loyalty.

Collaboration
We collaborate with our stakeholders to achieve mutual objectives.

Respect for Individuals
We respect and trust each individual.

Integrity
Our business practices are fair and open.

Gratitude
We show appreciation and recognize effort.

Corporate Social Responsibility

The Yokogawa Philosophy, which states, “As a company, our goal is to contribute to society through broad-ranging activities in the areas of measurement, control, and information,” provides the underlying basis for our efforts to fulfill our Corporate Social Responsibility (CSR). Yokogawa has established a department at its head office that oversees CSR activities throughout the Yokogawa Group. At the same time, Yokogawa companies around the world are promoting CSR initiatives that take into consideration the unique attributes of each country and region. Through these means, we are making every effort to contribute to the sustainable development of local communities. Yokogawa has also established the compliance guidelines, which provide employees with a roadmap for conduct in such areas as human rights, legal compliance, and occupational safety and health.
About Us

Since our establishment in the United States in 1957, Yokogawa Corporation of America has been a leading manufacturer and supplier of analyzers, flow meters, transmitters, controllers, recorders, data acquisition units, meters, handheld instruments, distributed control systems and more.

Headquartered in Sugar Land, Texas, Yokogawa Corporation of America has a sales network across the United States, with a manufacturing center south of the Atlanta area. Our commitment to our customers is our number one priority, and we back it up with a network of representatives and distributors that reflect this commitment.

Our parent company, Yokogawa Electric Corporation, established in 1915, is dedicated to developing the most advanced control and instrumentation products and systems in the world. Today, Yokogawa has a firm hold on its position as a leading manufacturer in the fields of measurement, control, and information. As a major global player, Yokogawa anticipates the needs of the times, continually tackling new challenges and exploring new markets in order to provide the best solutions in the world.

Yokogawa’s commitment to innovation is reflected in our extraordinary investments in research and development, which ensure development of the most advanced products and services. Yokogawa has consistently made above-average investments in research and development. In fact, over the past decade we have set an industry standard by committing a full nine percent of sales revenue each year to research and development.

The Yokogawa Philosophy
As a company, our goal is to contribute to society through broad-ranging activities in the areas of measurement control, and information. Individually, we aim to combine good citizenship with the courage to innovate.

Locations

Yokogawa Corporation of America
Headquarters
12530 W. Airport Blvd., Sugar Land, TX 77478
(800) 888-6400

Yokogawa Canada
Bay 4, T1133 46th Street SE, Calgary, AB T2C 2Z4
(403) 258-2681

Yokogawa de Mexico
Urbina No. 18
Parque Industrial Naucalpan
Naucalpan de Juarez, Estado de Mexico
C.P. 53370
(52)-55-5955-7400
EJA & EJX Pressure Transmitters
- Digital sensor technology provides simultaneous measurement of DP and static pressure
- Class leading total accuracy and long-term stability up to 15 years
- Fast response time of 90ms
- Built-in compliance to IEC61508 as standard
- Multi-Variable transmitter available with compensated mass flow output

AXF Magnetic Flowmeters
- Exclusive enhanced dual frequency excitation method with selectable 165 Hz component ensures quicker response and greater stability in high concentration slurries
- Advanced flow transmitter permits the measurement of fluids with conductivity as low as 1μS/cm
- Diagnostics to detect the build-up of insulating coatings on the electrodes

RotaMASS Total Insight Coriolis Flowmeters
- Unique “box-in-box” design decouples the measuring tubes from pipeline stresses and vibration guaranteeing reliability and easy installation
- Uninterrupted and reliable measurement under extreme aeration conditions by utilizing Smart Power Management
- Tube Health Check function for in-line meter verification without disturbing process measurement

digitalYEWFLO Vortex Flowmeters
- Easy installation, with flange or wafer process connections
- No zero adjustment is needed
- No moving parts make Vortex Flowmeters highly durable and reliable
- Uniting noise reduction and Spectral Signal Processing (SSP) to provide an accurate and stable measurement
- Robust construction of the shedder bar makes measurement at high temperatures (max. 450°C) and high pressure possible

AXR 2-wire Magnetic Flowmeters
- Premium performance from field proven dual frequency excitation comparable to 4-wire meters
- Reduced installation costs by avoiding the extra AC power supply and wiring. Lifetime power savings due to 1-4% of power usage compared to typical 4-wire magnetic meters

YTA Temperature Transmitters
- Single or dual input temperature transmitter
- Dual compartment, Itra-low copper housing
- Display with local parameter setting
- Global approvals, including SIL2
- High accuracy with advanced diagnostics (NE107)
- User selectable inputs: T/C, RTD, ohm, or DC mV

MLX Field Mount Loop Indicator
- 4-20 mA DC input
- Explosion proof housing
- 6 digit numerical or alphanumerical display
- 20 segment bar graph indicating 0 to 100% of full scale
- Square root extraction from a pressure transmitter signal for flow measurement

Field Wireless
- ISA100.11a (IEC62734) open standard supported by many vendors
- Object oriented, IPv6 communications supports IIoT and future applications
- Stable, deterministic networks with TDMA, duocast and up to 0.5 sec update
- Multiple levels of industry leading wireless security
- Flexible, highly scalable, fully redundant network designs from Sky Mesh to star
- Up to 10 year battery life with easy, low cost replacement
- ISA100 infrastructure plus pressure, temperature, protocol, and I/O transmitters
- Modbus/TCP connectivity to DCS, SCADA, or DAQ including extensive diagnostics

Rotameters
- Direct measurement and indication
- Easy installation with low maintenance
- Various process connection and wetted materials
- Available in either glass or metal
- Countless options such as Exi-version, adjustable limit switches, pulse output, etc.
SMARTDAC+
• Modular construction, scalable up to 100 input channels
• Modules that can support measuring TC, DCV, RTD, DI, and DO
• Fast selectable scan intervals from 100/200/500ms, 1/2/5 sec.
• Secure and Reliable data storage to both internal (500MB) and external (up to 32GB) storage media
• Unique multi-point touchscreen operator interface.

DXAdvanced Data Acquisition and Display Station
• Built-in standard Ethernet interface
• Web server, E-mail messaging, MODBUS TCP client/server, SNTP, DHCP, Ethernet/IP, PROFINET and more
• On-board data storage and trending for up to 348 channels. FDA regulation 21 CFR Part 11 compliant
• High-resolution, customizable display
• Universal inputs accept any input combination

UTAdvanced and YS1000 Series Industrial Controllers
• Advanced PID control, ladder sequence control and fuzzy logic
• Function block programming
• Bright and easy to read color LCD displays with scrolling text
• Multiple communications protocols, Ethernet, Modbus, PROFIBUS, CC-Link, DeviceNet. 3 Year warranty and NEMA 4 face

MW100 Data Acquisition Data Logging System
• Universal analog inputs; 10mS at 10 channels; 100mS at 60 channels
• Measure and save data at 3 independent intervals with secure, redundant data archiving
• Web enabled settings and real-time monitoring
• Standard Ethernet/IP, MODBUS TCP, FTP, E-mail messaging and more
• Optional PID control, Class I, Div II, Steam and AGA gas calculations

μR10000 & μR20000 Chart Recorders
• Industrial 100 and 180mm intelligent strip chart recorders
• Ethernet and serial communications interface options
• Large, bright, multi-function data display and user interface

Y-Flow®- YFFC Orifice Flow Computer
• Field Flow Computer with embedded EJX910 Pressure Transmitter
• Static and Differential Pressure Measurement all in one transmitter
• API Chapter 21 compliancy
• AGA 3, 5, 7, 9, 11 capability
• AGA 8 (Detailed & Gross Methods I & II) & NX-19
• Multiple run capability
• Wide array of wireless connectivity options (Cellular, wireless radio and satellite)
• Wellpad Monitoring & Control, Gas Measurement, Gas Control & Distribution

Y-Flow®- Remote Terminal Unit (YRTU)
Yokogawa’s low power RTU offers flexible I/O points and superior data collection with a wide range of connectivity options. Whether measuring gas flow for custody transfer or need wellhead control and monitoring, Yokogawa offers both the performance and stability required in the most rigorous environment.
**DL850E ScopeCorder**
- 19 unique plug-in modules offer sensor connectivity, high accuracy, and low noise
- 2 Gpts memory plus real-time streaming to computer, internal, or external hard-drives
- Simultaneous high and low speed recording
- Web server, FTP, and e-mail functions via Ethernet
- Extensive math and waveform analysis functions
- USB, GPIB, Ethernet, IRIG, and GPS interface options

**DLM4000 Oscilloscope**
- 350MHz and 500MHz
- Up to 125 GS/s (repetitive), 2.5 GS/s sampling rate
- 125 Mpoints memory (option) and 20,000 “history memory” segments
- 7 or 8 input channels, plus 8, 16 or 24 bits logic
- Up to 125GS/s (repetitive), 2.5GS/s (single)
- High resolution 12.1-inch LCD display
- Serial bus analysis, power analysis, and advanced analysis

**DD Direct Handheld Hart® Communicator**
- Reads manufacturers’ DDs in their native format without the need for translations
- HART®-compliant modem communicates with any registered or unregistered HART® Device
- Enhanced 4.3” diagonal anti-glare touchscreen with color graphic display (no stylus required)
- Full QWERTY keyboard for commissioning new transmitters

**AQ7280 Modular OTDR**
- Capacitive touchscreen with ICON based menu
- 15-hour battery life (Telcordia conditions)
- Modular platform with 9 plug-in modules
- Wireless connectivity
- Multi-tasking: tests up to 4 fibers simultaneously
- Fast boot-up: <10 sec.
- Up to 50dB dynamic range
- FTTH, METRO, CORE
- PON capability up to 1x128 splitters
- USB fiber scope support
- Macro bend detection

**CA700**
- Achieves the highest accuracy in the portable class
- Achieves the highest resolution and widest range in the portable class
- Strong support for field calibration and maintenance work
- IP54 robust case enables use in harsh environments
- Three high-performance hand pump models for different pressure ranges are available

**AQ6370 Series OSA**
- Wavelength range: 350-1200nm (AQ6373B), 600-1700nm (AQ6370D), 1200-2400nm (AQ6375B), 1500-3400nm (AQ6376), 350-1750nm (AQ6374)
- High Wavelength Resolution: 0.02nm (AQ6370D)
- High Wavelength Accuracy: ±0.01nm (AQ6370D)
- Wide Level Range: +20 to -90dBm (AQ6370D)
- Fast Measurement: 0.2 sec. (100nm span) (AQ6370D)
- LAN and GPIB Remote Interface
- USB Ports for Memory Stick, Mouse/Keyboard Interface

**FieldMate**
- Mobile field device management
- Reads manufacturers’ DDs in their native format without the need for translations
- HART®-compliant modem communicates with any registered or unregistered HART® Device
- Enhanced 4.3” diagonal anti-glare touchscreen with color graphic display (no stylus required)
Liquid Analyzers & Sensors
• pH and ORP, conductivity, inductive conductivity and dissolved oxygen measurements
• HART®, FOUNDATION fieldbus™, PROFIBUS™
• On-line sensor diagnostics

Model TDLS8000 Tunable Diode Laser Spectrometer
• Process and combustion gas measurements
• In-situ analysis

Model GD402 Gas Density Analyzer and Detector
• Highly responsive
• Outstanding, stability and resistance to vibration
• Simple, user-friendly interface
• General purpose and explosion-proof

Zirconia Oxygen Analyzers and Detectors
• Single point and multi-point analyzers
• HART®, FOUNDATION fieldbus™
• Long-life, highly reliable Zirconia sensor
• Field replaceable probe heater assembly
• Remote and integral converters

Model GC8000 Process Gas Chromatograph
• TCD, FID and/or FPD detectors
• Custom column design to fit a wide variety of applications
• User friendly interface
• Enhanced maintenance via PC interface
• High Sensitivity Thermal Conductivity detector (HTCD) capable of measuring down into the low parts-per-million ranges often replacing Flame Ionization Detectors (FID) and/or Flame Photometric Detectors (FPD)
• High Speed Ethernet based Analyzer Communications
• Intuitive 12" touch screen interface
• Single or Multiple ovens available with multiple system clocks
• GC module (GCM) concept for intuitive, modular parallel chromatography
• User defined functions using Y-Basic
• Flexibility with one to three ovens; isothermal and programmable temperature designs available
**Process Analyzer Integration**

- Analyzer & CEMS Shelters
- CEMS Integration
- Process Analytics
- 3rd Party Equipment Integration
- Engineering, Consulting, and Fabrication Services

Recognized globally for execution excellence in process analytics and CEMS, Yokogawa has successfully delivered thousands of systems, including Sadara, the world’s largest petrochemical project.

With an average of 20 years industry experience, our employees are Yokogawa and 3rd party proficient, and remain technologically advanced through continuous training.
Custom Integrated Solutions

- Heat treating thermal solutions
- Loading, metering, and blending automation
- Plant annunciator and SOE recording system
- Diesel generator monitoring system
- Compressor control system
- Solar tracking control systems
- High operating temperature controller
- Well Producer™
- SENSTATION
CENTUM VP

- Integrated production control system; CENTUM VP is an extremely reliable, highly available process automation system that utilizes rugged Class 1 Division 2 controllers and I/O subsystems combined with Windows 7 based operation
- Highly Coupled with Yokogawa Solution Based packages to improve a single integrated real-time database
- Designed for mission-critical applications, this scalable and expandable architecture combines with open system connectivity to ensure seamless technology migration
- Software Configurable Universal I/O

ProSafe-RS

- SIL 3 TÜV Approved Safety Integrated System (SIS)
- Integrated operation with CENTUM VP for one process, one network, one window with separate engineering environment
- Risk reduction: a single safety system, from a single vendor
- Highly scalable architecturer
- SIL 3 capability on a single module

Fast/Tools

- Fully Integrated
- SCADA Environment
- Integration of third party systems
- Wide area (media independent) communication

Enterprise Pipeline Management Solutions (EPMS)

Yokogawa’s Enterprise Pipeline Management Solution (EPMS) provides a comprehensive series of standard software applications which are integrated within the FAST/TOOLS real-time system platform to facilitate pipeline management and operations.
STARDOM

- Network-based control system ideally used in SCADA environments with FAST/TOOLS SCADA HMI
- JAVA/Web enabled
- Smart SCADA RTU/Autonomous Controller
- Fieldbus enabled with integration to Yokogawa’s Device Asset Maintenance and Management system - Plant Resource Manager (PRM)

FA-M3

- Multi-CPU distributed processing
- Industry leading instruction execution times (100,000 in 1 ms)
- Programming environment featuring ladder, instruction list, and structured text languages
- 8192 I/O

For Safety, Financial, Environmental and Security Improvement

Distributed Control Systems

- High performance 99.99999% (seven 9s) availability
- 41 years of progressive compatibility
- Intuitive and integrated operator interface

DCS Hardware

- For continuous, batch and sequential controls
- Local and Remote I/O

Batch Processing

- Ensures batch-to-batch predictability
- ISA88-based design for modularity and flexibility
- Runs unit recipes securely in the controller

Batch Historian

- Process control systems interface
- Data processing and storage
- Role-based view
Incident/Near Miss Management
Incident Management is an essential business process to help avoid major incidents and near misses that lead to major accidents in complex chemical operations facilities. Our solution focuses on People-Plant-Process and is one part (module) of Yokogawa’s fully integrated Operations Management solution: RPO - Production Instructor.

Plant Information Management System
Based on open standards, Yokogawa’s data historian and PIMS solution captures data easily and creates a valuable bedrock. Our solution is especially unique in that engineering costs in implementation are significantly reduced when compared to the alternatives.

Production Dashboard
(RPO - Production Supervisor VP)
RPO Production Supervisor VP is a core component of Yokogawa’s real time production management suite, a unified platform which enables you to unlock the true potential of your valuable production assets.

Operations Management
(RPO – Production Instructor VP)
Production Instructor VP helps to ensure Safe and Reliable Operations by digitizing necessary information for Operation Management Practices.

Operator Training Simulator
- Training on a virtual plant which has the identical look and feel, reproducing realistic plant behaviors with identical DCS and SIS operational environments
- Gaining plant start-up, shut-down and normal plant operations
- Acquiring how to respond against equipment malfunctions and other emergency situations (early recognition, avoidance, and corrective action)
- Capturing and transferring plant operation knowledge among plant operators
- Increasing process knowledge and confidence in operators (experienced and inexperienced) for better plant operations
- Ability to leverage OTS assets over the plant lifecycle, from the design phase to the operation phase. The OTS assets can contribute to reduce design time and cost, evaluate and improve control strategy, and improve productivity and efficiency
Asset Management Solutions

Field Device Management
- Manage and maintain your field devices
- Reduce maintenance costs with predictive alerts and condition-based maintenance

Asset Performance Diagnostics
- Real-time monitoring of asset health
- Optimized maintenance schedule and prediction of future performance

Partial Stroke Testing
- Compatible with most HART® safety valves
- Increase duration of compliance testing

Safety Excellence Solutions for ISA84 Lifecycle Compliance

TÜV SIL 3 Certified Safety Instrumented System
- Small footprint
- True DCS and SIS integration
- Modular design

Independent Safety System
- Standalone
- Interfaced to non-Yokogawa DCS
- Remote I/O

Quadlog Migration to ProSafe-RS
- History of Quadlog OEM for ProSafe-PLC makes migration easy
- iDefine Engineering Tools are the same as ProSafe-PLC

High Integrity Pressure Portection
- Safety Integrity Level 4
- Solid state elements
- Inherently fail safe
- Very fast applications

- End-to-End TÜV Certified Functional Safety System (Phase 4)
- Flexible Architecture
- Cyber Security
- Lifecycle Management Services and Software
- Easy Migration from 3rd Party SIS

Ensure Sustainability

www.yokogawa.com
Lifecycle Excellence Solutions
Emergency • Preventive • Predictive • Consulting
Support services sustain and enhance existing automation assets to ensure reliability, increase availability, and provide the path to the next generation of platforms and solutions.

- Lifecycle Maintenance Agreements
- Remote Support Solutions
- Upgrades, Additions, and Expansions
- Cyber Security and Endpoint Security
- Plant Security Management
- Advanced Solutions and Cons
- Parts Management Programs
- Technical Assistance and Global Support

ONE CALL - 800.524.SERV (7378)
Service and Support 24/7
support@us.yokogawa.com

Training Solutions
We provide options for your personnel to review fundamental principles, sharpen existing skills and learn how to integrate new advanced strategies.

- Classes available at our training centers for a hands-on experience and in-depth instruction
- Classes also offered online, on-demand and on-site
World-class technology and consulting services for designing, operating and managing hydrocarbon production and processing facilities—everything you need to take your business to the next level.

Our foundation of collaboration, clear communication and impartial advice is supported by deep industry knowledge and operational experience. We combine this with flow assurance and integrated production modelling and technical process engineering skills, best in-class models and our proprietary simulation tools to develop and deliver practical solutions with measurable results. KBC helps clients sustain these benefits by preparing the organization for change and providing training and tools to support ongoing success.
Worldwide Business Operations

North American Network
- 800+ Employees
- 250 Independent Manufacturers Representatives

United States
Newnan, GA
Field Instruments
Test & Measurement
Analytical Instruments
Control & Data Acquisition Instruments
Sugar Land, TX
Analyzer Systems
Coldspring, TX
Freeport, TX
Analyzer Services
Dallas, TX
Software Development

Yokogawa Canada
(Calgary)

Yokogawa Corporation of America
Headquarters
(Sugar Land, TX USA)

Yokogawa Corporation of America
(Newnan, GA USA)

Yokogawa Europe
(Netherlands)

Yokogawa Russia
(Moscow)

Yokogawa de Mexico
(Mexico City)

Brazil
Measuring Instruments

Netherlands
Analytical Instruments

Germany
Field Instruments

North American Network

www.yokogawa.com
Global Network Supporting Business Growth

- 16 subsidiaries and 2 affiliates in Japan
- 70 subsidiaries and 1 affiliate outside Japan

Main Factories in Japan

- Kanazawa: Life Science-related Equipment
- Kofu: Field Instruments, Measuring Instruments, Analytical Instruments, Controllers
- Ome: PCB
- Sagamihara: Optical Communications Equipment
- Komine: Semiconductor Testers, Analytical Instruments, Control Systems

Manufacturing Organizations

Our 25 manufacturing facilities span 10 countries

www.yokogawa.com
Visit our Technical Library on www.yokogawa.com/us/library for more information on these applications and related products, watch how-to videos and webinars, or contact us!
Through “Process Co-Innovation,” Yokogawa creates new value with our clients for a brighter future.