

Product Overview



Yokogawa Capabilities & Solutions

Engineering

- Systems Configuration
- Instrumentation
- Project Management
- Commissioning
- Information Technology
- Advanced Control
- Industry Applications
- Consulting Services
- Plant Audits
- SIL Assessment & Audit
- Energy Efficiency
- Assessment & Audit



Solutions

- Measuring Instruments
- Analytical Systems
- Distributed Control Systems
- SCADA Systems
- Safety Systems
- Network Control Systems
- Programmable Logic Controllers
- Advanced Operations Applications
- Advanced Control
- MES and IT Applications



Field Solutions

- RotaMASS Coriolis Flowmeters
- digitalYEWFLO Vortex Flowmeters
- AXF Magnetic Flowmeters
- EJA and EJX Pressure Transmitters
- YTA Temperature Transmitters
- FieldMate Device Configuration Software



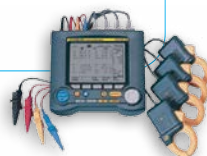
VigilantPlant® Solutions

- CENTUM VP Distributed Control Systems
- ProSafe-RS Safety Instrumented Systems
- PRM - Asset Management System



Meters & Instruments

- Analog Panel Meters
- Digital Panel Meters
- Portable Power Monitors
- Portable Test Instruments



Test & Measurement

- Digital Oscilloscopes
- ScopeCorders
- Data Acquisition
- Power Analyzers
- Optical Instruments



Services

- Preventative Maintenance
- Maintenance Agreements
- Bench Repair Service
- Spares Management
- Remote Maintenance Service
- Complete Maintenance Outsourcing
- Software/Hardware Update Service
- Engineering Software Support
- Emergency Breakdown 24 Hour Service
- Instrument Calibration



Training

- Engineering Systems
- Maintenance Methods
- Plant and Equipment Operations
- Advanced Process Applications
- Plant Simulation Training
- Operator Training
- Analyzer Training



Analytical

- Gas Density Analyzer and Detector
- Zirconia Oxygen Analyzers and Detectors
- Process Gas Chromatograph
- Tunable Diode Laser Spectroscopy Analyzer
- Liquid Analyzers and Sensors



Control Instruments

- DXAdvanced Data Acquisition and Display Station
- UTAdvanced Controllers
- DAWN Wireless
- STARDOM Process Automation Controller and RTU Processor
- DTSX200 Distributed Temperature Sensor
- FA-M3
- Y-View



vigilantplantservices.™

MAC Services

- Project Management
- Cost & Schedule Control
- FEED & Detail Engineering
- Procurement Support
- Vendor Package Interfaces
- System Integration & Programming
- Construction Support
- Commissioning Support
- Training
- Operations Support

Lifecycle Services

- Opportunity Identification Services
- Solution Implementation Services
- Lifecycle Effectiveness Services



Training Center

- Over 45 different classes
- Training conducted in our factory or on your site
- CEUs issued with Yokogawa Corporation of America classes
- Web Based Training for CENTUM VP
- Operator benchmarking

Product Overview

Field Instruments

RotaMASS Coriolis Flowmeters

- Unique “box-in-box” design decouples the measuring tubes from pipeline stresses and vibration guaranteeing reliability and easy installation
- New high accuracy density calibrations for your most demanding density applications

For more information request bulletin:
[BU01R4B4-E-A](#)



AXF Magnetic Flowmeters

- Enhanced dual frequency excitation method with selectable 165 Hz component ensures quicker response and greater stability in high concentration slurries
- Newly designed flow converter permits the measurement of fluids with conductivity as low as 1 $\mu\text{S}/\text{cm}$
- Diagnostics to detect the build-up of insulating coatings on the electrodes

For more information request bulletin:
[BU01E20A02-01E-A](#)



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 10 years
- Fast response time of 90ms
- Built-in compliance to IEC61508 as standard

For more information request bulletin:
[BU01C25A02-01E](#)



AXR 2-wire Magnetic Flowmeters

- Premium performance from field proven dual frequency excitation with electric noise immunity 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 compound to typical 4-wire Magnetic meters

For more information request bulletin:
[BU01E30A12-01EN](#)



digitalYEWFLO Vortex Flowmeters

- DSP technology automatically selects the optimum settings and eliminates the need for start-up tuning
- Multi variable option provides mass flow calculations for saturated steam and mass flow of liquids
- Dual elements, high temperature and high pressure options available

For more information request bulletin:
[BU01F06A01-02E-A](#)



YTA Temperature Transmitters

- Microprocessor-based sensing technology ensures high accuracy and reliability
- Sensor input is user-selectable: thermocouple (T/C), RTD, ohm or DC millivolt
- Continuous self-diagnostics

For more information request bulletin:
[Bulletin 01C50A01-01EN](#)



Analytical

Liquid Analyzers & Sensors

- pH, conductivity, inductive conductivity, dissolved oxygen, and ORP measurements
- HART®, FOUNDATION fieldbus™, PROFIBUS™
- On-line sensor diagnostics

For more information request bulletin:
[BU12A01B05E-A](#)



Model GD402 Gas Density Analyzer and Detector

- Highly responsive
- Outstanding, stability and resistance to vibration
- Simple, user-friendly interface
- General purpose and explosion-proof

For more information request bulletin:
[Bulletin 11T3E1-E-A](#)



Model TDLS200 Tunable Diode Laser Spectroscopy Analyzer

- Process gas measurement
- In situ analysis
- Interference free

For more information request bulletin:
[BU11Y01B01-E-A](#)



Systems and VigilantPlant Solutions

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

For more information request bulletins:
[BU11M12A01-01E](#)



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

For more information request bulletin:
[BU11B08A01-01E-A](#)



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 Vista/XP 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

For more information request bulletin:
[BU 33K01A01-50E](#)

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 architecture
- SIL 3 capability on a single module

For more information request bulletin:
[BU32S01B10-01E](#)



DXAdvanced Data Acquisition and Display Station



- Built-in standard Ethernet interface
- Web server, E-mail messaging, MODBUS TCP client/server, SNTP, DHCP, Ethernet/IP, PROFIBUS-DP 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

For more information request bulletin:
[BU04L41B01-01-E](#)

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



For more information request bulletin:
[UTA - 05P01A01-01EN](#) and
[YS1700 - BU01B08A01-01E](#)

Control, Data Acquisition, and Wireless Instruments

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

For more information request bulletin:
[BU 04M10A01-01E](#)



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

For more information request bulletin:
[BU 04L51B01-01EN](#) or [BU 04L52B01-01EN](#)



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)

For more information request bulletins:
[Bulletin 34P02A00-51E](#)

FAST/TOOLS

- Multiple Process Site environments
- Integration of third party systems
- Wide area (media independent) communication

For more information request bulletins:
[BU 50A01A00-01EN](#)



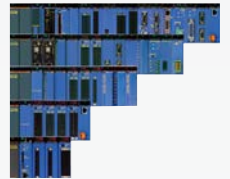
DAWN Wireless

- I/O and data radios
- Self organizing, self healing mesh network
- 2.4 GHz and 900MHz frequencies
- Run MODBUS and I/O in one radio



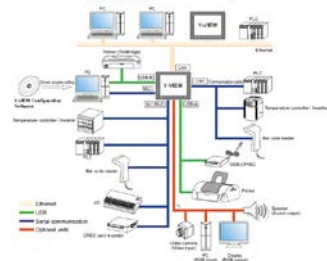
FA-M3

- 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
- 1152 PID Loops



Y-View

- 5.7", 8", 10.4", 12", and 15" screen sizes
- Large library of device drivers
- Robust graphics development environment
- Gateway function allows for communications between non-native devices
- Dual IP addressing
- Electronic signature
- Full featured alarming including e-mail notification
- SQL read/write functions
- Pre-configured applications for Yokogawa products



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

For more information request bulletin:
[BU04P02B01-01E](#)



Field Wireless

- Battery Powered ISA100.11a Mesh Technology
- 500 transmitters per system
- Easy, web based setup
- Redundancy from transmitter to gateway
- Fast update, (0.5 sec)

For more information request bulletin:
[BU 01W01A01-01EN](#)



Product Overview

Test & Measurement

DL850 ScopeCorder

- 17 unique plug-in modules offer sensor connectivity, high accuracy, and low noise
- 2 Gpts memory with up to 30 days recording, plus streaming to disk
- Simultaneous high and low speed recording
- Web server, FTP, and e-mail functions via Ethernet
- Extensive math and waveform analysis functions
- USB, GPIB, Ethernet, and IRIG interface options

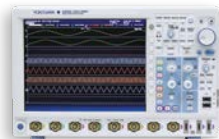
For more information request bulletin:
[Bulletin DL850-00EN](#)



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), 125Mpoints memory, and 20,000 "history memory" segments
- High resolution 12.1-inch LCD display
- Serial bus analysis, power analysis, and advanced analysis

For more information request bulletin:
[Bulletin DLM4000-00EN](#)



AQ7275 Optical Time Domain Reflectometer

- High speed measurement, easy to operate, full feature set for installation & maintenance
- Short dead-zone: <0.8m
- Fast boot-up: <10sec
- Fiber Type: SMF, MMF, both, multi-wavelength
- PON option tests 1x32 splitters with no undershoot

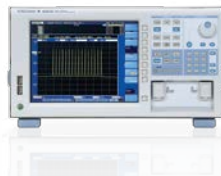
For more information request bulletin:
[Bulletin AQ7275-03EN](#)



AQ6370 Series OSA

- Wavelength range: 350-1200nm (AQ6373), 600-1700nm (AQ6370C), 1200-2400nm (AQ6375)
- High Wavelength Accuracy: $\pm 0.01\text{nm}$ (AQ6370C)
- High Wavelength Accuracy: $\pm 0.01\text{nm}$ (AQ6370C)
- Wide Level Range: ± 20 to -90dBm (AQ6370C)
- Fast Measurement: 0.2 sec. (100nm span) (AQ6370C)
- LAN and GPIB Remote Interface
- USB Ports for Memory Stick, Mouse/Keyboard Interface

For more information request bulletin:
[Bulletin AQ6370SR-10EN](#)



Meters & Instruments

CW240-D Portable Clamp-On Power Meter

- Simultaneous measurement of power, harmonics, voltage fluctuations and waveforms
- Supports a wide range of current and voltage inputs from 1p2w to 3p4w
- Accurate measurements and customized reports for power quality management in your plant or facility

For more information request bulletin:
[Bulletin CW-E](#)



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
- Features an ergonomic, handheld design
- Enhanced 4.3" diagonal anti-glare touchscreen with color graphic display (no stylus required)
- Full QWERTY keyboard for commissioning new transmitters

For more information request bulletin:
[Bulletin FL YHC5150X-E](#)



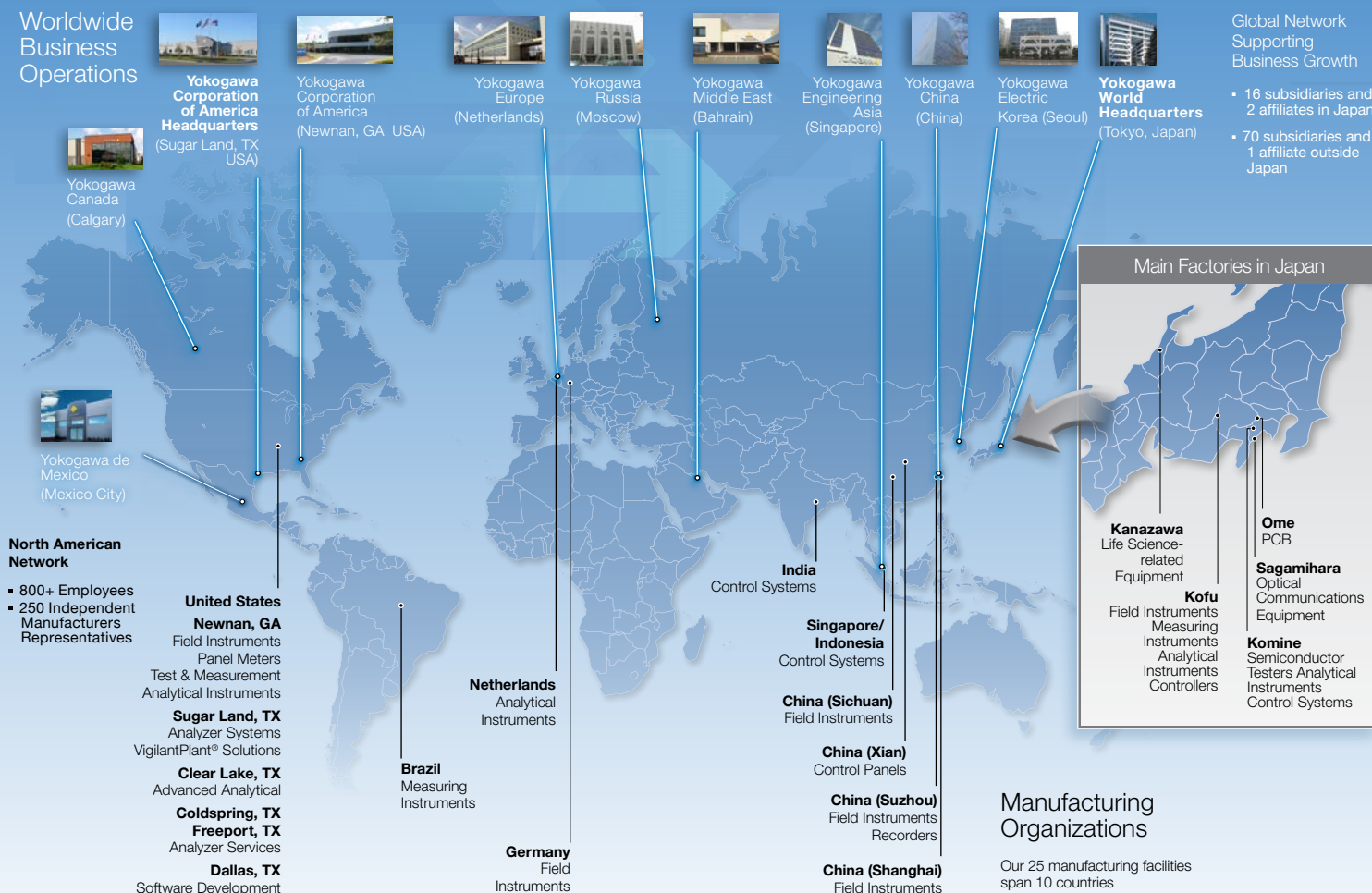
CA700

- 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

For more information request:
[BU CA700-EN-E](#)



Worldwide Business Operations



vigilantplant.®

The clear path to operational excellence

SEE
CLEARLY

KNOW
IN ADVANCE

ACT
WITH AGILITY

VigilantPlant is Yokogawa's automation concept for safe, reliable, and profitable plant operations. VigilantPlant aims to enable an ongoing state of Operational Excellence where plant personnel are watchful and attentive, well-informed, and ready to take actions that optimize plant and business performance.

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