CONTROL ENGINEERING

2026 PRODUCT OF THE YEAR

WINNERS

Innovative. Sustainable. High-Performing.

These are the products bringing us to the future.



Breakthrough Technologies: Shaping the Future of Automation

For nearly four decades, the *Control Engineering* Product of the Year program has recognized the technologies advancing automation, control, instrumentation and industrial operations. The 2026 program continues this long-standing tradition by spotlighting new products that help engineers, system integrators, plant teams and technology leaders improve performance, reliability, connectivity, safety and efficiency across industrial environments. Eligible entries were newly available to the North American market in 2025 and were nominated by manufacturers or their marketing agencies.

A defining strength of the Product of the Year program is the direct involvement of *Control Engineering*'s subscriber audience. Readers reviewed nominated products and evaluated them based on technological advancement, service to the industry and overall market impact. Their votes determined this year's 27 winners across nine categories, including one product earning the Most Valuable Product honor — the program's highest distinction.

The annual Product of the Year Winners eBook celebrates the solutions shaping the future of industrial engineering, from next-generation control platforms and edge connectivity to asset reliability, cybersecurity, industrial software, motion control and advanced measurement technologies. Congratulations to all the 2026 winners for their contributions to innovation, progress and excellence in automation and control.



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MOST VALUABLE PRODUCT (MVP)



Remote I/O System for Distributed Control

Allen-Bradley PointMax I/O is a remote I/O solution designed for discrete, hybrid and process applications. It supports faster engineering and commissioning through intelligent diagnostics, high-speed connectivity and integration with Logix 5000 controllers. Using producer/consumer technology, it enables efficient data sharing and supports distributed control architectures. Flexible module selection and simplified configuration help improve network efficiency and support scalable system expansion. Designed for modern automation requirements, PointMax I/O helps optimize performance and productivity in a wide range of control applications.

www.rockwellautomation.com

Email Rockwell Automation



www.emerson.com

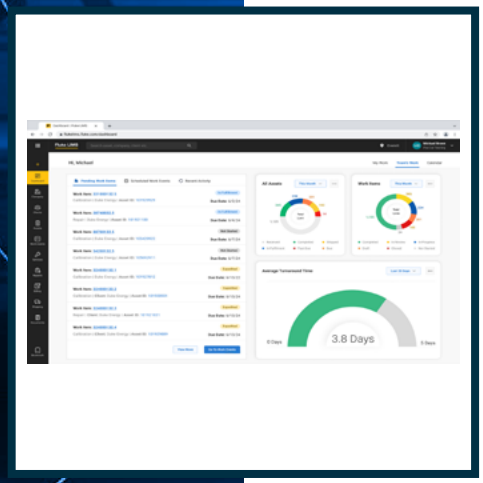
Field Device Configuration and Diagnostics Handheld

Emerson's next-generation AMS Trex Device Communicator combines HART, FOUNDATION Fieldbus and Bluetooth connectivity in a rugged, intrinsically safe handheld. Its updated platform delivers faster response times, greater capacity and mA current measurements traceable to NIST standards. Building on decades of field device management expertise, the communicator is designed for long life and "go-anywhere" safety. Enhanced accuracy and performance, along with embedded Bluetooth, support wireless diagnostics, configuration and troubleshooting across more than 2,500 devices, helping technicians work more efficiently in demanding environments.

Emerson

View all of the product & company details **here!**

Asset Reliability & Maintenance Intelligence



www.fluke.com

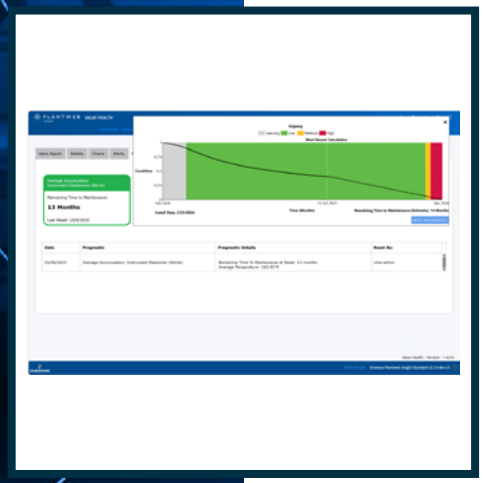
Cloud-Based Calibration Management Platform

CalStudio is a SaaS-based platform designed to centralize calibration procedures, methods and technical knowledge within a single cloud-based environment. Powered by Cubyt, a comprehensive measurement-device database, it provides browser-based access to up-to-date calibration data without requiring local software installation. The platform allows multiple calibration labs to work within a shared, continuously updated system, supporting consistent workflows and improved collaboration. By reducing administrative effort and streamlining access to calibration information, CalStudio supports faster calibration processes, improved accuracy and increased technician productivity across distributed lab operations.

Fluke Corporation

View all of the product & company details **here!**

Asset Reliability & Maintenance Intelligence



www.emerson.com

Control Valve Health Monitoring Software

Plantweb Insight Valve Health Application provides fleet-wide analysis of the condition of control valves from Fisher and other manufacturers. It continuously monitors valve parameters to assess repair urgency, helping users prioritize maintenance activities based on operational need. Version 1.5 introduces an algorithm designed to predict hardening of instrument elastomers. The application collects temperature data, applies a model using coefficients specific to the elastomer material and generates a recommended maintenance date. The algorithm continually adjusts damage accumulation based on real operating data, supporting proactive maintenance planning for connected control valves.

Emerson

View all of the product & company details **here!**



www.yokogawa.com

Next-Generation Distributed Control System

CENTUM VP R7 is Yokogawa's 10th-generation distributed control system (DCS) designed for complex process industries. It expands plant-wide control and monitoring while integrating secure, high-speed data across the facility and strengthening cybersecurity for critical infrastructure. New AI-driven capabilities help detect anomalies early, predict process deviations and provide scenario-based operator guidance to reduce workload and support safer, more efficient operations. Enhanced engineering tools, streamlined project workflows and support for Windows 11 and OPC UA help position R7 as a future-ready control platform for long-term modernization and autonomous operations.

Yokogawa

View all of the product & company details **here!**



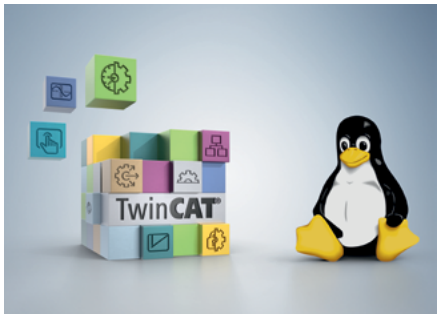
www.vtscada.com

SCADA Connectivity and Configuration Platform

VTScada 12.2 expands connectivity, streamlines configuration and strengthens security to support the increasingly complex needs of modern industrial environments. New features include a Sparkplug B publisher that enables VTScada to function as a powerful edge node, two-factor authentication with TOTP for secure system-wide access and the VTScada Data Diode for safely sharing data outside secure networks. Additional enhancements include expanded batch management for out-of-the-box manufacturing workflows and SVG file support for scalable, high-quality graphics.

VTScada By Trihedral

View all of the product & company details **here!**



www.beckhoff.com

Containerized Automation Platform for Linux Systems

TwinCAT for Linux expands automation and operating system options by enabling resource-efficient, virtualized deployment of TwinCAT software applications. Both the TwinCAT PLC runtime and TwinCAT functions packaged as containers can operate locally on a controller or within a data center environment. Using the EK1000 EtherCAT Coupler, decentralized I/O remains fully connected to support seamless system communication. In addition to bringing TwinCAT automation software to the Linux operating system, the platform enables TwinCAT applications to be distributed and operated in containerized environments, supporting flexible deployment and scalable automation architectures.

Beckhoff

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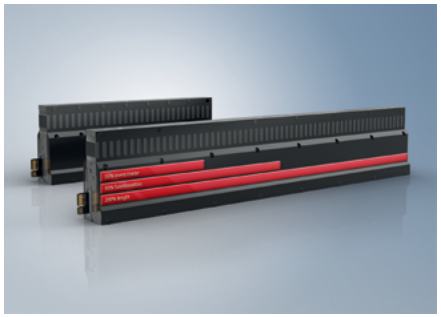
us.mitsubishi electric.com/fa/en

Compact Variable Frequency Drive for Industrial Automation

The FR-D800 Series is a compact variable frequency drive designed for fast setup and reliable performance across a wide range of applications. It supports both induction and permanent magnet motors to deliver precise control, improved energy efficiency and reduced operating costs. Features such as simplified wiring, built-in networking options and USB parameterization without main power help streamline commissioning. An eco-conscious design supports reduced power consumption and lower CO_2 emissions while enabling use of high-efficiency motors. Advanced diagnostics and predictive maintenance features help minimize downtime in applications including fans, pumps, conveyors and general industrial automation systems.

Mitsubishi Electric Automation

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Cost-Optimized Linear Transport Motor Module

The XTS EcoLine motor module is designed to enable more cost-effective integration of intelligent product transport systems. It delivers approximately 95% of the performance of standard XTS motor modules at about 55% of the cost for the same motor length. The module is fully compatible with existing XTS motor modules, allowing seamless integration within current systems. By lowering cost barriers, XTS EcoLine expands access to XTS technology for more cost-sensitive applications across industries such as assembly, battery manufacturing, packaging, pharmaceuticals and laboratory automation.

Beckhoff

www.beckhoff.com

View all of the product & company details **here!**



www.eaton.com

Ductless Arc-Resistant Medium-Voltage VFD

The SC9000 EP is a ductless, arc-resistant medium-voltage variable frequency drive designed to enhance electrical safety in motor control applications. Its ductless design reduces installation complexity and space requirements by eliminating the external exhaust ducts typically required in arc-resistant enclosures. Certified to IEEE C37.20.7, it is rated to withstand arc faults up to 50 kA in a Type 2B enclosure, helping protect personnel even with open low-voltage doors. The drive is suited for applications in oil and gas, HVAC, water treatment and other critical infrastructure where safety, energy efficiency and uptime are priorities.

Eaton

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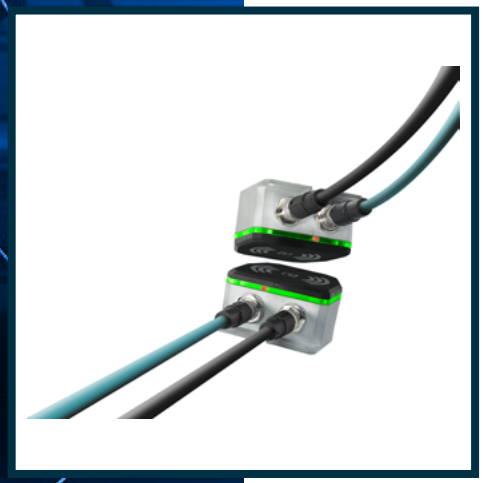
www.hms-networks.com

Unmanaged Industrial Ethernet Switches

The NT100 Series unmanaged industrial Ethernet switches provide reliable, mission-critical connectivity for demanding applications. Their compact design includes eight copper ports and up to four fiber ports to support efficient network expansion. Built for harsh conditions, the switches offer resistance to shock and vibration and operate across temperatures from -40 to 85°C for stable performance in extreme environments. Designed to support collection of critical performance data, their hardened construction is suited for long-term use in factory floor control networks and applications across oil and gas, utilities, water and wastewater treatment, alternative energy, rail, intelligent traffic control and transportation.

HMS Networks

View all of the product & company details **here!**



www.phoenixcontact.com

Contactless Ethernet and Power Transmission System

NearFi is a contactless, real-time transmission technology designed to transfer Ethernet communication and power without physical contact. NearFi couplers support protocol-independent Ethernet communication up to 100 Mbps and power transmission up to 50 W. In factory automation applications with moving components—such as robot tool changes, rotary tables, and AGVs—NearFi couplers can replace plug-in connectors and slip rings to help reduce wear, repair needs and downtime costs. When transmitting data only, NearFi supports communication across an air gap of up to 40 mm. Power and data together, or power only, can be transmitted across an air gap of up to 12 mm.

Phoenix Contact

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www.rockwellautomation.com

Advanced Edge Gateway with Secure MQTT Connectivity

OptixEdge is an advanced edge gateway designed to enable FactoryTalk Optix and FactoryTalk Remote Access capabilities without requiring changes to an existing automation architecture. It includes a preconfigured setup wizard to simplify secure MQTT-based connectivity between control systems and the cloud. The device also supports development of custom edge applications to collect, process and visualize data locally. Built in a compact, book-mount form factor, OptixEdge integrates into control systems and enables secure connectivity across a wide range of automation networks using purpose-built protocol drivers.

Rockwell Automation

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Integrated PLC-HMI Control for Data Center Cooling

The UniStream Data Center Cooling Control Solution is a dedicated control platform designed for data center cooling and CDU applications. It combines PLC and HMI functionality in a single device to support control, communication, visualization and monitoring without requiring additional gateways or add-ons. The system comes pre-licensed and pre-configured with protocols commonly used in data center infrastructure, including BACnet, Modbus, REST API and OPC UA, with native support for Redfish and IPv6 aligned with OCP requirements. Designed as an out-of-the-box solution, it supports modern cooling control needs in data center environments.

Unitronics

www.unitronics.com

View all of the product & company details **here!**



www.rockwellautomation.com

Compact EtherNet/IP Micro Controller

The Micro820 L20E controllers are designed for small control applications, offering a cost-effective platform with expandability over an EtherNet/IP network. Built in a compact form factor, they provide expanded capabilities that support simplified program execution, faster I/O refresh and improved communication. Intended for OEMs seeking flexibility and performance, the controllers are compatible with Connected Components Workbench software version 23 and FactoryTalk Design Workbench software version 1 or later. This enables users to access advanced functionality within an intuitive programming environment for streamlined machine development.

Rockwell Automation

View all of the product & company details **here!**

Industrial Computing



www.emerson.com

Rugged AI-Ready Industrial Computer

Emerson's next-generation PACSystems IPC 6010, 7010 and 8010 deliver rugged, AI-ready industrial computing powered by 13th Gen Intel Core processors. These systems support up to 64 GB ECC memory, fanless cooling and operating temperatures from -40 to 70°C for continuous use in demanding environments. Designed for on-premise AI, edge analytics and IIoT applications, they offer PCIe expansion, Wi-Fi 6E and 2.5G Ethernet connectivity. Preloaded PACEdge, Movicon Connext and WebHMI software streamline integration and visualization. This redesigned generation provides significant performance gains, improved thermal management and modular, field-upgradeable architecture for long-term flexibility.

Emerson

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www.rockwellautomation.com

Unified Microcontroller Programming Software

FactoryTalk Design Workbench software is a free, unified design environment for programming, configuration and troubleshooting to support micro control system development. Version 1 supports Micro800 controllers, providing machine builders with a consistent workflow for creating automation solutions for compact, standalone systems. Designed for applications in packaging, water and wastewater, agriculture and material handling, the software helps reduce reliance on fragmented tools and long development cycles. It streamlines modern automation projects from programming through deployment while supporting efficient management of multiple devices.

Rockwell Automation

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www.rockwellautomation.com

Integrated Automation Programming and HMI Software

Connected Components Workbench software combines programming, simulation, device configuration and HMI development in a single integrated design environment. Version 23 expands controller communication capabilities with programmable controller communication commands (PCCC) functionality and Class 1 implicit messaging support, enabling a familiar user experience using remote LCD display connectivity. It also enhances controller and program organization unit (POU) security by supporting passwords up to 64 characters. Included in the same download are trending tools for PowerFlex drive parameters and Micro800 controller tag variables to help reduce setup time and simplify maintenance workflows.

Rockwell Automation

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www.yokogawa.com

Cloud-Based Electronic Quality Management System

OpreX Quality Management System is a cloud-based electronic quality management system (eQMS) designed to support digital transformation of QA in pharmaceutical and food and beverage manufacturing. It centralizes key quality processes including deviations, CAPA, change control and document management. Built on the scalable ServiceNow platform, it offers no-code workflow design, advanced search, dashboards and standard connectors to MES and LIMS to reduce integration effort and human error. Advanced audit trails, role-based access and support for global GMP/GQP and data integrity requirements help provide regulator-ready quality governance and continuous improvement.

Yokogawa

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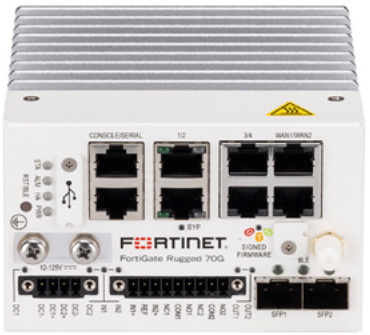
www.data-talk.eu

Intelligent Alarm and Notification Module

DataTalk AI Alarm & Notify delivers intelligent, real-time monitoring by ingesting data from PLCs, IIoT sensors, MQTT, databases and other sources. A no-code graphical compute module allows users to define alarm logic, hierarchies, thresholds and hysteresis to reduce false alerts. Notifications can be sent via email, SMS, WhatsApp, Discord and other channels, customized by role or priority. Built-in AI provides expert-level guidance using uploaded machine manuals. The module integrates with existing SCADA or MES systems and can be deployed on-premises or at the edge for low-latency, secure operation.

DataTalk

View all of the product & company details **here!**



www.fortinet.com

Rugged Industrial Next-Generation Firewall

The Rugged 70G is a compact, industrial next-generation firewall (NGFW) designed for harsh and remote environments. Powered by Fortinet's fifth-generation security processor (FortiSP5), it supports high-performance networking, AI-enabled threat protection and integrated zero trust capabilities. The latest version introduces a more compact design, improved digital I/O and additional software features for operational technology (OT) applications. Its fanless, ruggedized construction is built to withstand extreme conditions while consolidating security, secure SD-WAN and advanced threat protection into a single industrial appliance.

Fortinet

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www.phoenixcontact.com

EMC Noise and Surge Protection Filters

EMC filters from Phoenix Contact are designed to help reduce premature failures, shortened service life and unplanned downtime in high-interference environments. The portfolio limits interference voltages and currents that sensitive equipment can generate during normal operation and fault conditions. The FIL-1S family is a conventional in-line filter for protecting 120 to 240 V AC and DC power circuits. Filters in the SFP2 family provide double protection against overvoltage pulses and high-frequency interference. TTC-6-SFP filters also offer both noise and surge protection in a slim 6.2 mm-wide package.

Phoenix Contact

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www.eao.com

Functional Safety Keypad with CANopen Safety

The Series 09 Rugged Keypads – PREMIUM Functional Safety Version expands the Series 09 platform with integrated functional safety architecture certified to DIN EN ISO 13849 Performance Level D (PLd). The redesigned keypad incorporates the CANopen Safety protocol to support redundant communication, advanced error detection and real-time safety monitoring for critical control functions. Designed for demanding vehicle, machinery and mobile equipment applications, it features a durable, low-maintenance construction intended for long service life. The PREMIUM version helps manufacturers streamline development and certification processes while improving operator protection and system reliability in safety-critical environments.

EAO

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www.exair.com

Hazardous-Area Electrical Enclosure Cooler

ATEX Cabinet Cooler Systems provide enclosure cooling for electrical equipment installed in hazardous ATEX-classified areas and are now available in durable aluminum construction. Designed for use in Zones 2 and 22, the systems are UL-tested, CE-compliant and meet ATEX requirements for purged and pressurized enclosures. With cooling capacities up to 5,600 Btu/hr, they help prevent overheating in electrical cabinets exposed to explosive atmospheres. These coolers are intended for industrial control panels, application-specific electrical enclosures and other sensitive electronics operating in hazardous locations.

EXAIR

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www.emerson.com

Pressure Transmitter with Integrated Diagnostics

The Rosemount 4051S Pressure Transmitter is designed to support reliable measurement in tough processes and harsh environments, with a 20-yr warranty and 20-yr stability. Bluetooth connectivity helps simplify configuration and maintenance while improving personnel safety by reducing the need to access hazardous locations. Built-in advanced diagnostics provide additional insight to help identify issues before operations are impacted. Two integral relay pressure switches enhance asset protection and help prevent overpressure conditions. The transmitter can be configured for pressure, flow or level measurement to support a range of applications.

Emerson

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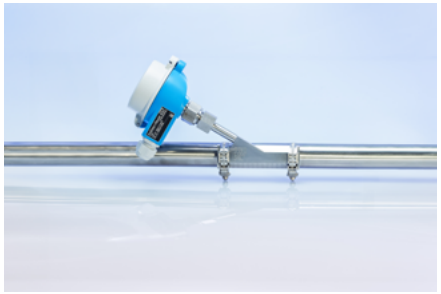
tmi.yokogawa.com

High-Speed Modular DAQ and Oscilloscope System

The SL2000 is a high-speed modular data acquisition unit that combines an isolated oscilloscope and a DAQ in a single platform. This integrated architecture improves flexibility by reducing reliance on high-voltage probes and simplifying measurement setups. It is designed to capture high-speed transient events while offering enough memory for days of continuous data logging, supporting applications from power electronics to full system-level evaluation. With inputs for voltage, current, strain, temperature, acceleration and communication buses, the SL2000 pairs automated analysis with an open API to enable fully programmable, automated test systems.

Yokogawa

View all of the product & company details **here!**



us.endress.com

Non-Invasive Industrial Surface Thermometer

The iTHERM SurfaceLine TM611 is a non-invasive surface thermometer designed for universal use across industries. It delivers accuracy and response times comparable to invasive temperature measurement without requiring process openings or introducing leakage risk. A specialized thermal coupling element supports efficient heat transfer while minimizing ambient influence, enabling reliable performance in demanding conditions such as high pressures, high flow rates, corrosive or abrasive media and small pipe diameters. Suitable for retrofit installations, the TM611 enhances safety, simplifies installation and helps reduce project costs. It supports standard communication protocols, optional Bluetooth® connectivity and global certifications including ATEX, IECEx, CSA, NEPSI and SIL.

Endress+Hauser

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High-Speed Mid-Range Oscilloscope

The R&S MXO 3 oscilloscope delivers professional-grade performance in a compact, mid-range test platform. It features an acquisition rate of 4.5 million waveforms per second and 99% real-time capture to help reveal intermittent signal behavior. Available in 4- or 8-channel models with bandwidths from 100 MHz to 1 GHz, it offers 12-bit ADC resolution (18-bit in HD mode) and up to 500 Mpts of memory depth. A space-saving design with an 11.6-inch touchscreen supports flexible bench use while maintaining the speed and precision of the MXO family. It supports applications including automotive, power electronics and embedded systems development.

Rohde & Schwarz

www.rohde-schwarz.com

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