

MINNERS Innovative. Sustainable. High-Performing.

These are the products bringing us to the future.



Honoring Innovation in Automation, Control and Instrumentation

For nearly four decades, the *Control Engineering* Product of the Year program has set the standard for recognizing breakthrough technologies in the automation, control and instrumentation markets. Now in its 38th year, the 2025 Product of the Year program continues this legacy by spotlighting products that are shaping the future of industrial engineering. Eligible entries were newly available to the North American market between January 1 and December 31, 2024, and were nominated by manufacturers or their marketing agencies.

What sets the Product of the Year awards apart is the involvement of *Control Engineering*'s highly engaged subscriber audience. Readers evaluated nominated products based on technological advancement, service to the industry and overall market impact. Their votes determined this year's 26 winners across nine categories, culminating in the selection of one Most Valuable Product (MVP), the program's highest honor.

The annual Product of the Year Winners eBook not only celebrates innovation but also serves as a trusted guide for professionals seeking the most impactful new solutions in automation and control. Congratulations to all the 2025 winners for their outstanding contributions to the industry's progress and excellence.



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MOST VALUABLE PRODUCT (MVP)



Fluke 1670 Series Multifunction Installation Tester

The Fluke 1670 Series Multifunction Installation Testers are essential tools for electricians and maintenance technicians, offering fast and reliable installation testing. Designed to boost productivity by reducing testing and reporting time up to 50%, these testers ensure accuracy in commercial and industrial settings. The 1673 FC and 1674 FC models feature wireless connectivity and a high-resolution color touchscreen for easy test setup and data management. Auto Test function, automatic measurement validation and integration with Fluke Connect and TruTest software streamline workflows. The series ensures compliance with international standards like IEC/HD 60364-6, making it indispensable for comprehensive electrical installation testing.

Key Features:

- · Simple bidirectional user interface eliminates complex multi-level menus
- \cdot Easy setup with the full-color touch screen, smart device or a PC
- Fast, accurate testing with Auto Test and Automatic Measurement Validation
- \cdot Fluke Connect compatibility eliminates tedious data entry
- Preview results and generate certificates on site with Fluke TruTest software

PRODUCT CATEGORIES:

Automatic test equipment; meters (test and measurement)

PRODUCT INDUSTRIES:

Electrical equipment; chemicals, petrochemicals; food, beverage; utilities (electrical, gas)





Actuators, Motors, Drives, Motion Control



www.emerson.com

Fisher FIELDVUE DPC2K Digital Valve Controller

The DPC2K serves as a direct retrofit replacement for pneumatic controllers on most valves, regardless of manufacturer. It significantly enhances closed loop control with configurable loop types, over 150 units of measure support and rapid scan rates. Features like configurable dead band and dynamic reset limiting keep process variables close to setpoint and improve recovery from saturated conditions. The DPC2K maintains high performance for years without maintenance and offers easy upkeep using modular replacement components when needed.

Emerson

Actuators, Motors, Drives, Motion Control



usa.siemens.com/ lv-drives

SINAMICS G220 Clean Power Drive

The SINAMICS G220 Clean Power is the smallest low harmonics drive on the market, with integrated clean power technology ensuring total harmonic distortion of current below 2% to meet strict harmonic standards. It delivers near unity power factor under almost any load conditions and includes SIL3 and Ple/Cat.4-rated safety functions, network connectivity to multiple protocols with integrated cybersecurity and S2 system redundancy to reduce downtime. A built-in web server allows easy access without requiring additional software. This energy- and space-efficient design is available in IP20 and UL Type 12/IP55 variants.

Siemens

BRONZE WINNER



Actuators, Motors, Drives, Motion Control



CTL Linear Unit

The CTL linear unit, featuring an integrated linear motor, offers high precision and dynamic performance in a compact, backlash-free design. ISO 3 and ISO 5 cleanroom certified, it meets stringent cleanliness standards for semiconductor, pharmaceutical and medical industries. With strokes up to 5,970 mm, continuous forces up to 1,125 N and ±0.001 mm repeatability precision, the unit ensures unmatched accuracy and reliability. Low maintenance requirements and an optional silent high-speed cable chain make it ideal for demanding applications.

Unimotion

unimotionusa.com

Control Components



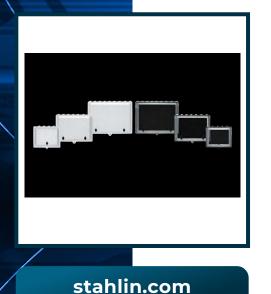
us.endress.com

Micropilot FMR43 — Radar Sensor for Hygienic Processes

The Micropilot FMR43 is a free space radar sensor for hygienic applications, offering reliable non-contact level measurement even in turbulent conditions. It features both 80 and 180 GHz options for use in small vessels and large tanks. Key benefits include easy setup with guided wizards, enhanced safety through configuration integrity and increased productivity with Heartbeat Technology for on-demand verification. The compact design allows installation in tight spaces, ensuring flexibility and compliance with industry standards for hygienic design and material traceability.

Endress+Hauser

Control Components



SolarShield HMI Cover Expansion

Stahlin's patented SolarShield HMI Covers redefine HMI screen protection with unmatched durability and innovation. Designed for demanding industrial and commercial environments, these non-metallic covers shield screens from UV rays, harsh weather and contaminants. Now available in expanded sizes — 10 by 8 inch, 16 by 11 inch and 20 by 14 inch — they offer flexibility for various applications. Available in opaque and clear options, they enhance visibility and protection in industries such as oil and gas, water/wastewater and food processing. With impact-resistant polycarbonate construction, NEMA 4/4X compliance and secure sealing, SolarShield HMI Covers deliver long-lasting performance and reliability in tough conditions.

Stahlin Enclosures by Robroy Industries

▼ View all of the product & company details here!

Control Components



Food Grade Stainless Liquid Tight Transition Fitting

The patent-pending Robroy Stainless Food Grade Liquid Tight Transition Fittings set a new benchmark in hygienic electrical raceway design for hazardous and sanitary environments. Engineered to connect foodgrade liquid-tight fittings to conduit bodies, these fittings ensure smooth transitions between liquid-tight flexible metal conduit and rigid conduit while maintaining environmental system ratings and hygienic compliance. Made from 316 stainless steel, they resist corrosion, rust and contaminants, making them ideal for washdown environments. Extended male NPT threads provide a secure, flush connection, eliminating harborage points and ensuring long-lasting, sanitary protection for critical electrical systems.

Robroy Stainless by Robroy Industries

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



www.unitronics plc.com

UniStream Built-In 15.6-inch

UniStream 15.6-inch by Unitronics features a built-in fast-response 15.6-inch human-machine interface (HMI) touch screen designed to simplify data center management. This programmable logic controller (PLC) is the first on the market with native, embedded Redfish protocol support, eliminating the need for a gateway while managing critical systems like Cooling Loop management. It includes extensive fieldbus and advanced communication capabilities such as BACnet IP, OPC UA, MODBUS, REST API and MQTT. With built-in proportional integral derivative functionality and unmatched I/O scalability, this controller is an automation game-changer for complex control projects requiring powerful control and communication features.

Unitronics



www.cincoze.com

Embedded MXM GPU Computer — GM-1100

The GM-1100 is a rugged, compact embedded MXM GPU computer for space-limited edge AI applications. It combines a 14th Gen Intel Core CPU with a unique MXM carrier board, offering flexible GPU module options. Advanced cooling features, including independent heat dissipation for CPU and GPU, an aluminum case and external fans, ensure reliable operation in temperatures from -40 to 70 C. Its modular design allows for performance upgrades without replacing the entire computer, supporting efficiency, extended lifespan and ESG sustainability goals.

Cincoze Co.

View all of the product & company details here!





www.yaskawa.com

iC9200 Machine Controller

The iC9200 is an EtherCAT-based machine controller providing control for motion, logic, safety and security. Designed by Yaskawa specifically for demanding applications including multi-axis synchronized motion, it's powered by the Triton processor. The controller supports multiple modern field buses and offers tailored features like human-machine interface integration and directly mountable slice I/O. With an integrated EtherCAT (FSoE) safety master, it eliminates the need for an external safety programmable logic controller, allowing all EtherCAT devices to be integrated on a single network. This versatile controller can be customized to meet specific requirements for various machine control applications.

Yaskawa America

Human-Machine Interface



www.se.com/ ww/en

SpaceLogic Touchscreen Room Controller

The SpaceLogic Touchscreen Room Controller is an all-in-one, wall-mounted device designed to enhance control and efficiency. It supports rooftop units, heat pumps and fan coil units, offering flexible BACnet or Modbus wired communications, ZigBee 3.0 and WiFi for seamless integration. The controller features a powerful processor and built-in sensors for temperature, humidity and occupancy, with the option to add a CO2 sensor. Equipped with 17 universal I/Os, it utilizes AI on the edge for dynamic HVAC optimization to balance comfort and efficiency. Its programmable capabilities allow users to customize control sequences for any application.

Schneider Electric



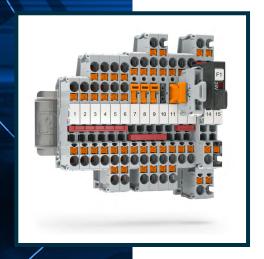
www.automation direct.com

C-more CM5 Headless HMI

The C-more CM5 is an HDMI-enabled device that works with televisions, monitors and most HDMI displays to show real-time operational data or messages. It also offers remote access via Windows PC browsers or iOS and Android mobile apps. The CM5-RHMI supports various screen resolutions and includes an SD card slot for log files, project memory or graphic media. It features four USB ports, two serial ports and two 10/100 Base-T Ethernet ports. The device's software boasts C-more's renowned user-friendly design, making it versatile for both local and remote monitoring needs.

AutomationDirect

I/O & Networking



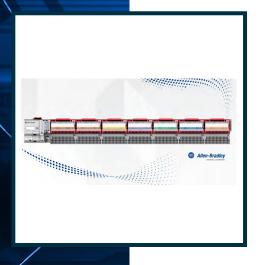
www.phoenix contact.com/en-us

XT 2.5 Terminal Blocks

Phoenix Contact's new XT 2.5 terminal blocks feature a front Push-X connection for fast, easy wiring. The portfolio includes feed-through and multi-conductor terminal blocks, plus function versions for disconnect knives, plug-in fuses and components. Push-X technology enables quick connection of solid, stranded or ferruled conductors and cross-sections, either manually or automatically. As one of the market's fastest connection technologies, Push-X increases control cabinet wiring efficiency. The factory-opened clamping space further reduces installation time.

Phoenix Contact

I/O & Networking



www.rockwell automation.com

FLEX 5000 I/O Modules

The enhanced Allen-Bradley FLEX 5000 EtherNet/IP adapter, supporting Rockwell Automation's new Logix SIS, delivers up to SIL 3 for high availability in process and hybrid safety applications. This solution enables continuous operation and maximizes output in demanding industrial environments. The adapters provide concurrent communications support, allowing different safety controllers to maintain separate network paths to the same safety I/O module. This capability facilitates seamless failover, protecting against downtime and minimizing operational disruptions.

Allen-Bradley



I/O & Networking



www.antaira.com

LMP-0702G-SFP-24-T-V2 Managed Gigabit PoE Industrial Switch

The Antaira LMP-0702G-SFP-24-T-V2 is a durable industrial switch with significant upgrades. It features a DC to DC power boost for efficient operation from lower voltage inputs and offers a PoE power budget of 90 W at 12 VDC and 120 W at 24 to 55 VDC. Advanced Layer 2 functionalities and redundancy protocols enhance network performance, while the wide operating temperature range (-40 to 75 C) supports deployment in harsh environments. With improved security, expanded VLAN support and an intuitive interface, this switch is ideal for demanding applications like factory automation, renewable energy and internet of things systems.

Antaira Technologies

▼ View all of the product & company details here!



www.phoenix contact.com/en-us

PLC Relay with Circuit Breaker

Phoenix Contact's PLC-INTERFACE family now includes relays with an integrated circuit breaker. The PLC-CB combines a relay interface and electronic fuse protection in a slim 6.2 mm width. Compatible with the PLC-INTERFACE series, it's suitable for new and retrofit installations. Multicolored LEDs indicate status: green for OK, yellow for current at or above 80% of the set nominal current and red for errors. An active diagnostic output (FB terminal) provides reliable status messages to the higher-level control system.

Phoenix Contact

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



www.antaira.com

DTD-480-0953-T DC-to-DC DIN-Rail Power Converter

The Antaira DTD-480-0953-T is an advanced DC-to-DC DIN-rail power booster and converter for industrial automation. It supports a 9- to 36-VDC input range, accommodating various panel power conditions. The device offers rated power outputs of 150 W at 9 V, 180 W at 12 V, 360 W at 24 V and 480 W at 36 to 55 V. It efficiently converts low voltage input to power higher voltage devices requiring 48 to 55 VDC with up to 480 W. With a wide operating temperature range (-40 to 75 C), overcurrent and overvoltage protection and a compact DIN-rail mountable design, it ensures stable and efficient power delivery in industrial settings.

Antaira Technologies

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Power



www.wago.com/us

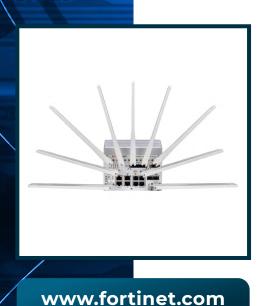
Distributed Energy Resource Controller

WAGO's Distributed Energy Resources (DER) Controller is a library function block with a control algorithm for voltage, frequency and reactive power control. It ensures reliable power systems by enabling communication between energy sources and operators. Programmed with CODESYS 3.5 software and validated by a Nationally Recognized Testing Laboratory, the controller complies with IEEE 1547-2018 standards. It specifically supports clause 5 (reactive power and voltage/power control) and clause 10 (interoperability for information exchange) of the 11 clauses.

WAGO Corporation

View all of the product & company details here!

Safety & Cybersecurity



FortiGate Rugged 70G-5G-Dual

The FortiGate Rugged 70G-5G-DUAL is an industrial next-generation firewall designed for mission-critical networks. Equipped with dual 5G modems, it offers seamless connectivity and ensures continuous operations. Powered by FortiOS and Fortinet's SPU technology, it delivers exceptional network and security performance. Its fanless, compact design operates reliably in extreme environments, supporting various OT use cases. With Al-driven intrusion prevention, secure SD-WAN and support for more than 150 OT protocols, it protects critical infrastructures from cyber threats. The FortiGate Rugged 70G-5G-DUAL also received the 2024 Red Dot Design Award, highlighting its excellence in innovation, security and design.

Fortinet

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Safety & Cybersecurity



www.kuebler.com/en

Safe Industrial Ethernet Encoder Platform — SIL2, SIL3 Certified FSoE Encoder (S58x8FSX)

Kuebler's new Safe Industrial Ethernet Encoder Platform enhances functional safety across various industrial applications. The SIL2- and SIL3-certified FSoE encoder (S58x8FSX) provides high-resolution position values, gear factors and variable integration times for speed and acceleration monitoring. Designed for future-proof safety and cybersecurity compliance, the encoder meets Cyber Security SL1 requirements and protects against cyber threats under IEC 62443 standards. It is the first and only encoder equipped with Cyber Security SL1.

Kuebler

Safety & Cybersecurity



us.mitsubishi electric.com/fa/en

Dispel Zero Trust Remote Access

Mitsubishi Electric has partnered with Dispel to offer secure, zero-trust network access solutions for remote locations. Facilities can connect through Dispel-enabled Mitsubishi Electric iQ-R Series WinCPU R102WCPU-W or RD55UP12-V C Intelligent Function Module, complying with NIST/IEC 62443 standards. The system uses a centralized dashboard designed for cybersecurity controls including NIST 800-53, NERC CIP and IEC 6244. Features include password vaulting, session recording, vendor self-management and endpoint isolation. This solution is widely used in industries such as food and beverage, packaging, automotive, medical, electronics, logistics/e-commerce and water/wastewater.

Mitsubishi Electric



www.teledyne visionsolutions.com

Linea HS2

The Linea HS2 camera series, the industry's first 1 MHz multiarray time delay integration (TDI) camera, is designed for ultra-high-speed imaging in low-light conditions. It offers exceptional image quality with 16k/5 µm resolution and a maximum line rate of 1 MHz, or 16 gigapixels per second. The multi-array TDI sensor architecture allows configuration for superior image quality with maximized line rate, dynamic range or full well. Equipped with dual Camera Link HS CX4 connectors to Active Optical Cables, it delivers reliable 16 gigapixels per second data transmission over long distances with complete electromagnetic interference immunity.

Teledyne Vision Solutions

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Sensors



/us

Wireless Steam Trap Sensor

The Wireless Steam Trap Sensor, part of the Sushi Sensor line, is a battery-powered industrial internet of things device that monitors pressure and temperature. Installed directly on process piping, it enables live steam trap monitoring, allowing prompt maintenance to reduce steam system failure risks and improve energy efficiency while cutting greenhouse gas emissions. This low-maintenance, intrinsically safe sensor is suitable for hazardous areas. Its LoRaWAN network offers excellent sensitivity, high radio-frequency interference resistance and an industry-leading range up to 10 km. By providing continuous monitoring, it significantly improves upon infrequent manual inspections, enhancing overall system reliability and performance.

Yokogawa

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Sensors



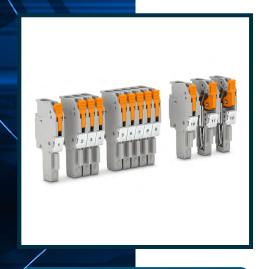
TB820D Turbidity Meter

The EPA-approved TB820D turbidity meter uses right-angle light scattering to provide highly reliable measurements with excellent linearity and repeatability for drinking water applications. It measures turbidity in tap water, sewage, river water and general process water, interfacing seamlessly with Yokogawa's liquid analyzer. Front panel access simplifies maintenance, while internal diagnostics inform users of maintenance timing. The LED light source offers extended operational life. The meter features ultrasonic cleaning and remote wash and calibration functions.

Yokogawa

www.yokogawa.com /us

Test & Measurement



www.phoenix contact.com/en-us

LP COMBI 2.5

Phoenix Contact's new LP COMBI plug connectors provide a versatile, compact solution for various applications. Featuring a lever-actuated design, they enable easy, tool-free connections for ferruled or stranded wires with minimal effort. Available pre-assembled or as individual connectors, they can be clipped together to meet specific application needs. Assembly is simple — just plug pre-configured conductors into the connectors. Optional latching accessories and a sturdy connection to the plug-in zones ensure the connectors remain secure while minimizing stress on the wires.

Phoenix Contact

Test & Measurement



TwinCAT 3 Weighing Library

The TwinCAT 3 Weighing Library from Beckhoff integrates fast, precise weight measurement into standard machine control environments. This programmable logic controller package, supporting manual and automatic triggering, works effectively with Beckhoff's measurement I/O modules, especially ELM35xx and EL3356 EtherCAT Terminals. Its high-performance signal filtering accelerates process sequences across various applications. The library eliminates the need for standalone measurement and sensing solutions, reducing engineering time and integration effort.

Beckhoff

www.beckhoff.com

Test & Measurement



Portable Variable Frequency Drive Demonstrator

Southwire's CableTechSupport Services engineers have developed a portable variable frequency drive (VFD) cable demonstrator that simulates an AC drive and motor system. This tool showcases the performance difference between installing building wire and properly terminated shielded VFD cable. The demonstrator illustrates that better VFD cable termination reduces the likelihood of control malfunctions, drive problems and safety concerns. It also demonstrates the 80% reduction in ground current achieved by using VFD cables.

Southwire

www.southwire.com

