



Automation Solutions Selection Guide

Ravison | **Industrial
Controls**

a relevant.company

About Rawson/Industrial Controls

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Created by joining two industry-leading companies in 2019, Rawson/Industrial Controls offers more than 100 years of combined experience serving customers in the oil and gas, chemical, refining, pharmaceutical, pulp and paper, food and beverage, water and wastewater, and power generation industries. With a team of in-house engineers, along with instrumentation and valve customization services, Rawson/Industrial Controls designs and customizes product solutions to help customers solve complex problems. The company currently has partnerships in 31 states across the Gulf Coast, Mid-Atlantic, Midwest, Northeast, Southeast, and Southwest regions of the U.S.

Markets Served



MACHINE/EQUIPMENT CONTROL



OIL & GAS/CHEMICAL



POWER GENERATION/DISTRIBUTION



PROCESS/MANUFACTURING



TRANSPORTATION & INFRASTRUCTURE



WATER/WASTEWATER

Services We Offer

- On-Site and Factory Classroom Training
- Applications Engineering
- Software Asset Management
- Control System Modernization & Audits
- Extended Warranty
- Extensive Evaluation Unit Demo Inventory
- Proof of Concept Systems
- Software Maintenance Contract Management
- Integrator & OEM Software Toolkits

Engineering Services Include

- Control Network Support
- DCS and PLC Programming
- Engineering CAD Drawings
- Prototype Development
- HMI/SCADA Programming
- System Tuning and Updates
- VFD Start-Up
- Customized Training

Our Automation Vendor Partners

 Industrial Automation & Control Premier Distributor			
Automation Solutions Built For Industry 4.0 And Beyond. From creating the first remote I/O with Genius, to our modern-day outcome-optimizing controllers that revolutionized the PLC, Emerson continues to surpass conventional standards to help customers maximize the power of the Industrial Internet. Emerson's next generation industrial automation and control solutions optimize industrial processes safely, securely and reliably to give you peace of mind while helping realize higher performance of operations in any environment.			
	Total power quality solutions keep production lines moving while keeping people, equipment and information safe.		Multi-radio edge compute platform with gateways, edge data analytics, and applications.
	Industrial networking, secure remote access, cellular RTUs, IIOT gateways and routers, protocol and media conversion, HMI and edge controls.		Industrial networking, secure remote access, cellular RTUs, IIOT gateways and routers, protocol and media conversion, HMI and edge controls.
	All-in-one controllers, consisting of programmable HMI, I/O, software, and peripherals for the industrial, process control, and building automation markets.		Rugged laptops and tablets for harsh industrial and hazardous locations. Wide range of computing technology from low power edge devices to high performance plantwide servers.
	The first reporting software developed for industry to fully embrace the latest Microsoft Office technology. More than just reports. It provides a scheduler, data logger, manual data entry and powerful analytics.		Secure remote access and operations doesn't have to be complicated, expensive, or time-consuming.
	Provides connectivity solutions that link dissimilar automation products. Products include PLC Remote Access, Communication Gateways and Industrial Wireless connectivity.		Honeywell Process Solutions (HPS) - Distributed Control Systems (DCS), Modular Process Controller, Remote Terminal Units (RTU), Wireless I/O and Sensor Transmitters.
	The recognized industry standard for alarm notification and management.		Industrial connectivity solutions to help businesses connect diverse automation devices and software applications.
	Industrial automation products rich in features and designed for easy operation and reduced engineering time. Market-leading control algorithms, recording and data management		For over half a century, ABB has developed, manufactured, supplied and installed analytical instruments for the laboratory, process, environmental, steam and power industries.

Industry Solutions

Machine/Equipment Control

- Assembly
- Inspection Machinery
- Packaging Equipment Control
- Labelling
- Plant Floor Dashboarding
- Inspection
- Predictive Maintenance



Oil & Gas/Chemical

- Wireless Tank Monitoring
- Distributed Control Systems (DCS)
- Harsh/Hazardous Area Systems
- SIL Safety Systems
- Vibration Monitoring
- Emissions Compliance & Reporting



Power Generation/Distribution

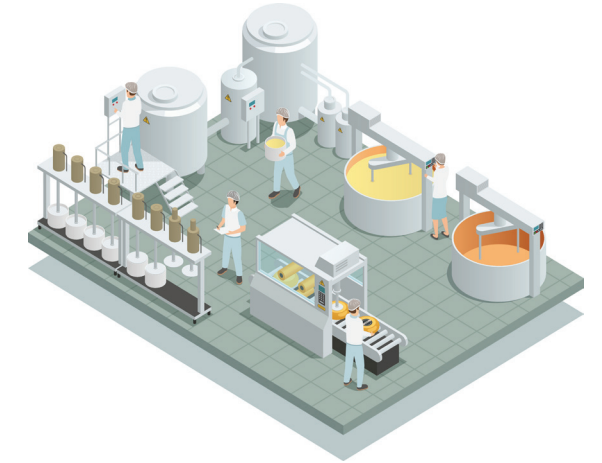
- Advanced Alarm Annunciation
- DNP3/IEC 61850 Integration
- Pothead Pressure Monitoring
- Balance of Plant Controls
- Safety Shutdown



Industry Solutions

Process/Manufacturing

- Heat Treating
- Temperature Control
- Batch Management
- Process Visualization
- Historian & Analytics
- Regulatory Compliance



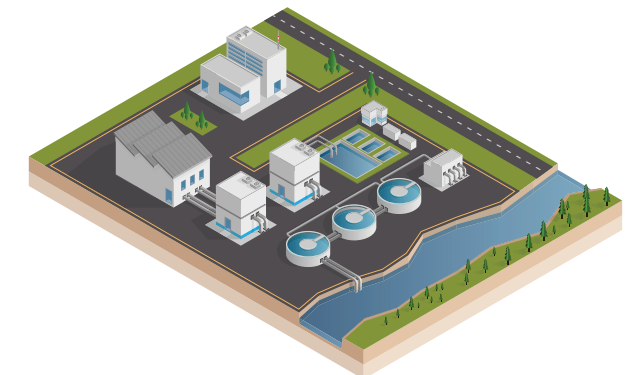
Transportation & Infrastructure

- Tunnel Ventilation
- Airport & Bridge Lighting Control
- Sequence of Events Recording
- Critical Power Monitoring
- High Availability Power
- Building Automation



Water/Wastewater

- Redundant Controller Architecture
- Remote Terminal Unit (RTU)
- Cellular Connectivity
- Plant wide HMI/SCADA
- Protocol Conversion & Networking Infrastructure
- Emissions Compliance & Reporting



PLC/PAC/Process Controllers

Programmable Logic and PAC Controllers

Emerson PACSystems RX3i Modular Controller: provides the foundation for Industrial Internet connectivity. It is a powerful, modular Programmable Automation Controller with a focus on high availability. The RX3i features a single control engine and a universal programming environment to provide application portability across multiple hardware platforms.

- Industry leading high-performance redundancy available
- Hot Swap I/O with Advanced Functions/Modules
- Optional EnergyPAC eliminates the need for batteries
- Wide Range of Standard and Special Purpose I/O
- Direct PROFINET I/O Support right out of the CPU
- Supports OPC UA data transfer standards



Emerson PACSystems RSTi-EP CPE200 Series Compact Controller: Delivers large Programmable Logic Controller (PLC) capability in a small, cost-effective, IIoT-ready form factor. With security-by-design, open programming, and open communications built in, it simplifies connectivity for OEMs and end users.

- Direct PROFINET I/O Support right out of the CPU
- Up to 4 MB User Memory and 32 PROFINET devices
- Over 40 I/O types available
- Supports OPC UA data transfer standards



Emerson VersaMax Modular PLC's: VersaMax Modular CPUs supply a number of features usually found only in PLCs with larger footprints, including up to 128kB of memory for application programs, floating point math, real-time clock, subroutines, PID control, flash memory, and bumpless program store. The serial ports support serial read/write and Modbus master/slave communications.

- Can be mounted horizontally or vertically to maximize enclosure space
- Wide variety of I/O Modules with up to 32 points per module
- Hot swappable I/O Modules
- Cost-effective I/O



Emerson VersaMax Micro PLC: The small-footprint VersaMax Micro PLC offers the flexibility of modular design and a variety of built-in features, including up to 64 I/O points (expandable to 170 I/O points), fast cycle times, a robust instruction set and extensive memory that multiplies your programming options.

- Removable Terminal Strips
- PID, PWM and High Speed Counter Support
- Base units range from 14-64 I/O
- Accommodates up to 4 expansion modules



PLC/PAC/Process Controllers

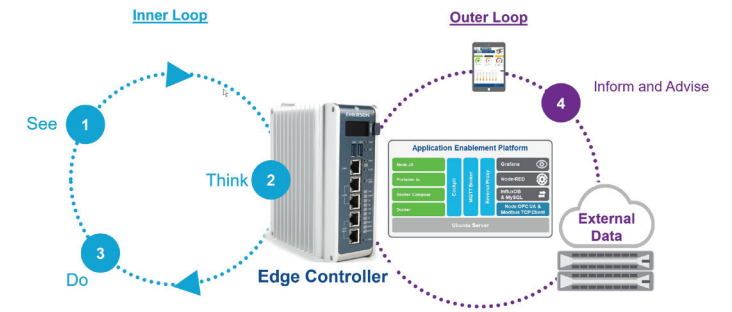
Emerson PACSystems Rackless CPE100/CPE400: part of Emerson's Industrial Internet Control System, is a hypervised, multicore, outcome optimizing controller. It is now possible to combine real-time deterministic control with physics-based analytics to securely connect to, easily collect, and analyze industrial data directly at the machine.

- Redundancy Built-In
- PROFINET I/O Control Built In
- DNP3 Communications
- Open Linux programming with the CPL410 model
- Optional EnergyPAC eliminates the need for batteries
- Supports OPC UA data transfer standards



Emerson PACEdge™ 2.5 Platform: PACEdge, with the unique PACSystems RX3i CPL410 controller, makes reaching and controlling the edge of your operations a straightforward, easily implemented process. PACEdge lets you begin where you are and scale as far as your operations and data demand. PACEdge provides for intuitive application development using proven applications like Node-Red for data processing, Grafana for visualization, and many more. No more command line configuration - PACEdge has web interfaces for device administration, application development and scalability.

- Advanced Analytics
- Several Visualization Options
- Secure Networking
- Cloud Connectivity



Process Controllers

Honeywell ControlEdge HC900 Process and Safety System: an ideal control solution for user needs ranging from thermal control in boilers, furnaces, kilns, and dryers to unit processing in pharmaceutical, chemical, bio-fuel, pilot-plant and other applications. The ControlEdge HC900 can be used in applications requiring SIL2 such as emergency shutdown (ESD), critical controls, burner management systems (BMS), pipeline monitoring, tunnel ventilation systems and other critical applications.

- SIL2 Safety Controller
- High Performance multi-loop controller
- Menu driven functions and variable mapping make it easy to configure and program, with minimal programming skills required
- Purpose built HMI with quick and easy integration
- Full Redundancy available and easy to implement
- Powerful, purpose built, function block library. Designed to save time and frustration with stubborn control loops

Honeywell



Industrial I/O

Distributed

Emerson RSTi-EP: The RSTi-EP remote I/O system is well suited for Industrial Internet enabled applications. It features an extended operating temperature range, enhanced diagnostics, plug-and-play connectivity and high channel density – all designed to simplify machine design and maintenance.

- PROFINET RT, Profibus/Ethernet IP/Modbus TCP-IP, EtherCAT Interfaces
- Hot swappable with advanced diagnostics
- Supports PROFINET System Redundancy
- Best in class I/O density – Up to 64 I/O modules per node. Takes up half the space of traditional systems
- High Density Analog and Digital Modules
- Special function modules including High speed counter, Frequency, SSI Encoder, PWM Output, Serial Communications
- SIL 3 Compliant Safety Module



Emerson RX3i PROFINET Scanner: connect a remote universal RX3i I/O rack of Series 90-30 or RX3i modules to a PROFINET I/O Controller.

- PROFINET RT, Profibus/Ethernet IP/Modbus TCP-IP, EtherCAT Interfaces
- Direct Fiber Interface directly to the remote I/O Rack
- Up to 16 Slot racks can be a single node
- Advanced Sequence of Events recording version available with IRIG-B time synchronization



Emerson RX3i CEP Single-Slot RX3i I/O Carrier: The RX3i CEP Carrier, a single-slot RX3i carrier with integrated PROFINET network interface and redundant 24 VDC power supply inputs, is the latest one-slot (expandable to two) expansion module from Emerson. It offers use of existing, advanced RX3i or Series 90-30 I/O in a small footprint, with superior availability for maximum uptime, and maximum flexibility to reduce operating costs.



Emerson VersaMax Remote I/O: The wide variety of modules available in the VersaMax PLC are also available for many demanding remote I/O applications. PROFINET Scanner I/O support with direct copper or multi-mode fiber interface, redundant power supplies, hot swappable I/O PROFINET, Ethernet Global Data (EGD) and Genius I/O Interfaces System Redundancy Support.



Industrial I/O

Harsh Environment

Emerson RSTi-OM: Edge connectivity and a user-friendly configuration makes RSTi-OM I/O the easiest connection to the intelligent sensors and devices that your operations rely on. RSTi-OM modules are IP67 so they are protected from water, dust, and other extreme conditions. This rugged design allows you to place advanced I/O where you need it, without the use of a control cabinet.



Wireless

Wireless Process Transmitters: Enables easy addition of measurement points throughout your operation. You can now monitor hard-to-reach locations and keep your employees out of dangerous and hazardous areas. The WirelessHART transmitter delivers a cost-effective and reliable solution to monitor your process assets, shorten installation times by eliminating complex wired infrastructures, and lower overall implementation costs of process.

- Most reliable with built in signal routing, dual signal, automatic dropout recovery, mesh network, and redundancy also available.
- Lowest power loss, leading to longest battery life on the market
- Explosion proof



Phoenix Contact Radioline Wireless System: The wireless system for extended systems. Special features include extremely easy assignment of inputs and outputs by simply turning the thumbwheel, without any programming. Thanks to Trusted Wireless 2.0 technology, Radioline is the ideal choice for reliable use in industrial environments.



Ruggedized

Red Lion E3 I/O: Available in DIN-rail and panel-mount form factors, Red Lion's E3 I/O modules feature rugged metal enclosures to support wide environmental tolerances and enable seamless integration into any industrial environment. Wide -40° to 75°C operating temperature, high shock and vibration ratings coupled with industry certifications that include UL Class I, Division 2 listing, ATEX* and IECEx* approvals make each E3 I/O module safe for use with industrial control equipment in hazardous locations.



Industrial/Panel Mount PCs & Monitors

Emerson RXi2 EP/XP/UP Industrial PCs: The RXi2-EP IPC delivers compact, rugged, high level performance computing capabilities to run HMI, historian, and analytics applications right at the machine to enable improved real-time control of operations and better integration into plant-wide systems.

- Rugged Fanless Design with up to 4 PCI Express Slots
- Up to 512 GB SSD, 32 GB RAM
- 5 GB Ethernet Ports
- Quad Core i7 and Xeon Processors available
- RAID Configurations available



Emerson RXi Panel PC/Industrial Monitors and Web HMI Panels: The RXi portfolio ranges from 7" to 24" screens with select models available with outdoor sunlight readability. The modular nature of the unit offers a substantial amount of flexibility. For instance, you can easily swap an indoor screen for an outdoor screen, change screen sizes, or simply replace a damaged screen, while utilizing the same computing unit. For Panel PC applications, multiple compute modules are available allowing upgrades without making screen hardware changes.

- Durable projected capacitive screen technology
- Multi-touch (10 point) screen control
- Sunlight readable option
- Multi-display daisy chaining via Display Port



Emerson RXi2 - BP Industrial PC: The RXi2-BP IPC delivers high compute performance in a rugged and compact enclosure, well suited to run HMI, historian, and analytics applications right at the machine to enable improved real-time control of operations and better integration into plant-wide systems.

- AMD Ryzen Embedded V1000 and R1000 Series CPUs
- Fanless operation in a rugged and extended temperature environment
- DIN rail or bookshelf mounting



Emerson RXi2-LP Industrial PC: RXi2-LP (LowProfile) fills a niche with new processors, fast SSD storage, strong graphics, and enhanced security features in a compact form factor.

- 2nd Generation AMD G-Series CPUs
- Up to 4 Gigabit Ethernet ports



Fault Tolerant/High Availability

Stratus Technologies ft Server: Taking the complexity out of keeping business critical applications running 24/7. Technology that proactively prevents instances of unplanned downtime coupled with services to ensure any issues are addressed before you need to.

- No unplanned downtime
- No data corruption or loss even with component failures



Ruggedized Laptops

Dell Latitude 7424 Rugged Extreme Laptop: The Latitude Rugged family has been trained and tested for some of the world's toughest jobs and most hazardous environments. Built smart and durable to ensure you never have to slow down.

- Multi-touch, sunlight readable 1000 nit brightness
- Glove touch and passive pen enabled
- 6 foot drop tested & IP65 ingress protection
- Can be bundled with Emerson PAC Machine Edition programming software



Safety Rated Tablets

Dell Latitude 7220EX Rugged Extreme Tablet: Intrinsically safe for maximum productivity. Stay focused, even in potentially explosive environments, with the ATEX, IECEx certified* Latitude 7220EX Rugged Extreme Tablet, featuring a 1000-nit sunlight-viewable anti glare screen and glove-touch capability.

- 4G/LTE mobile broadband built-in



IoT Compute Gateways

Freewave ZumEdge®: ZumEdge is ideal for industries that require sensor data capture and measurement in rugged, isolated, and potentially hazardous environments. ZumEdge allows you to automate decision making and use data infrastructure like MQTT and other third-party platforms to build smarter, faster, and more efficient networks without adding infrastructure or modifying systems.

- Up to 15 Analog & Digital Modules
- DIN-Rail-Mountable Case



Operator Interface & Visualization

Operator Interface & HMI

Emerson QuickPanel+ Operator Interface: QuickPanel+ integrates process control, view, and an option to run embedded data historian to improve real-time control and simplify integration into plant-wide systems. The QuickPanel+ takes machine interfaces into the Industrial Internet age for new levels of productivity, insight, and user experience.

- Highly responsive, capacitive and multi-touch functionality
- Control capability with Emerson and third party I/O
- Fully integrated view, control and data historian collector
- Fully-functional browser and multimedia capability including sound and video playback
- User defined email and text alerts
- Custom, web reports and graphs
- Powerful scripting options



Emerson PACSystems™ RXi HMI: With vivid, realistic graphics and smartphone-like usability the PACSystems RXi HMI makes your machine easy to operate from day one. Collaboration and decision making will be faster for your customer because their entire team can see the same machine visualization as the machine operator, from anywhere, on any device. Plus analyzing the past and troubleshooting current issues are simplified with pre-loaded user-friendly data analytics software.

- 12' through 24" widescreen display
- Projected Capacitive Multi Touch
- -20°C to +65°C operating temperature



Red Lion CR1000/CR3000 Series HMI's: The new CR1000 and CR3000 HMIs are available in a broad range of sizes, from 4.3 inches up to 15 inches and feature a wide array of connectivity options to address the real-world challenges of today's multi-vendor manufacturing environments.

- More than 300 industrial protocols available with Crimson 3.1
- Updated and expanded symbol libraries and primitives with anti-aliased rendering, as well as the ability to support 16M colors
- Protocol translation and serial communications
- OPC UA, SQL, DNP3, and connectivity to major cloud providers



All-In-One HMI/Controllers

Horner XL7: The XL7 was designed around a high-resolution, wide aspect ratio color touchscreen with 1000 nits of LED backlighting. The display benefits end-users by providing high outdoor visibility and allowing the XL7 to be used in a variety of ambient lighting conditions. In addition to exceptional display performance, the XL7 contains a powerful logic engine with built-in digital and analog I/O and online programming capability.

- Built-in digital & analog I/O with two 500kHz high-speed counters
- Two CAN ports for fieldbus flexibility
- USB 2.0 ports for programming & FLASH drive support
- microSD slot, up to 32GB, for virtually unlimited data logging



Communications

Protocol/Media/Serial/Ethernet Conversion

Red Lion Data Station: The Data Station Plus (DSP) and DA Series Data Stations are designed to act as a nexus for industrial data collection and management. The units offers multiple protocol conversion, data logging and remote machine access. With three built-in serial ports and a 10/100Base-T(X) Ethernet port, the unit provides serial conversion (serial to/from Ethernet) and protocol conversion to enable seamless communication between disparate devices. The Ethernet port supports up to four protocols simultaneously so even Ethernet to Ethernet protocols can be converted. Built-in communications drivers and protocol conversion let you interface to most PLCs, drives, motion controllers and other automation equipment.

- Easy drag and drop configuration using Crimson
- Over 300 Protocols Supported
- DA Series adds data acquisition and Embedded OPC UA Server
- DSP series support additional plug-in communication options include CANopen, Devicenet and Profibus, as well as additional Ethernet/Serial Ports.
- High performance DSP model converts up to 15 protocols, simultaneously



Red Lion Ethernet & Serial Media Converters: Not only extend communications links, but also bridge connectivity between disparate types of media, connectors or speeds. Providing fast performance and rugged operating specifications, DIN-rail mountable media converters include copper and fiber – up to Gigabit speeds



Specialty Communications

Prosoft Ethernet and Serial Gateways: ProSoft Technology's stand-alone, DIN-rail mounted industrial gateways provide a means to read or write data from devices on dissimilar protocols. All gateways come with our ProSoft Discovery Service feature.



Emerson PACSystems* RX3i Communication Modules: For mission-critical power and water infrastructure systems and industrial projects where redundancy is a key requirement, Emerson has augmented its Ethernet-enabled control systems offering by developing 3 new modules embedded with IEC61850, DNP3 and IEC60870-5-104 standard Ethernet communication protocols, which can be rack-mounted into its PACSystems RX3i controller. With these "in-rack" the RX3i can connect down to the IED level and up to the SCADA level without an external gateway device.



Networking & Communications

PROFINET Enabled Managed Switches

Emerson PACSystems PROFINET I/O Gigabit Ethernet Switches: With the high-performance capability of 10G ports, this latest series of PROFINET managed switches easily prioritize, partition and organize user's network and provide reliable and good quality services. It is ideal for factory automation applications.

- Supports PROFINET System Redundancy
- Provides Gigabit Copper plus SFP (small form pluggable) ports 100FX or 1000BaseF (SX/LX/LH)



Unmanaged, Monitored & Managed Ethernet Switches

Red Lion N-Tron® Series Unmanaged Ethernet Switches: Industrial unmanaged Ethernet switches offer powerful network performance with plug-and-play functionality. With an endless range of port options, these unmanaged switches are set to tackle the demands of industrial data acquisition, control and Ethernet I/O applications.



Red Lion N-Tron® Series Monitored Ethernet Switches:

Monitored industrial Ethernet switches provide network performance monitoring with Modbus or N-View monitoring technology. These rugged, compact switches are built for mission-critical applications and provide cost-effective network monitoring options that can be integrated directly into any industrial control system.



Red Lion N-Tron® Series Managed Ethernet Switches:

Rugged, reliable managed industrial Ethernet switches support industry-standard applications. These hardened switches are ideally suited for harsh industrial environments where real-time performance under extreme operating conditions is required. Built-in redundancy and network management ensure communications stay up and running while providing tools for monitoring and tracking.

POE (Power Over Ethernet)

Red Lion Power over Ethernet Plus (PoE+) Managed and Unmanaged Switches: Red Lion's N-Tron® PoE+ products enable plug-and-play operation for up to sixteen 10/100/1000Base-T(X) devices with PoE+ support on 8 ports.



Networking & Communications

Cellular RTU & Networking Gateways

Red Lion FlexEdge™ Intelligent Edge Automation Platform: FlexEdge is a highly scalable IIoT platform that embodies communication technology at its core and layers on powerful automation features like industry-leading protocol conversion, multichannel alerts, visualization, data logging, IIoT cloud connectivity, and advanced networking features.



- The DA50 is an advanced protocol converter with modular communication and data logging
- The DA70 adds Edge controller capability and integrated, scalable I/O.
- Over 300 protocols available
- Communication sled architecture enables customized connectivity including Serial, Cellular, USB and Wi-Fi Client



Secure Remote Access

Red Lion RA Series Remote Access Routers: The Red Lion RA platform delivers next-generation remote access solutions to meet the most intense, high-security demands of modern industrial applications. Red Lion's Secure Remote Access routers and software centralize equipment management, allowing you to quickly respond to and act on your most crucial data from anywhere.

- Keyed RA70K model enables local staff to enable or disable remote access to systems.
- Ethernet, serial and cellular models available
- Built-in I/O to trigger email or SMS texts



TOSIBOX® Lock 500: The Lock 500 is a high-end connectivity device bringing unprecedented possibilities for customers to manage their operations and to build new IoT solutions. Ideal for demanding industrial environments and opens up new opportunities in security and office networking sectors.

- 2 x Digital Input, 2 x Digital Output, 24V DC out
- Firewall friendly
- Up to 50 concurrent VPN connections



Power Quality

Regulated DC Power

SolaHD Performance and Core SDN Series: These DIN rail power supplies offer extreme reliability and efficiency, easy troubleshooting and our most resilient design for use in harsh environments, extreme temperatures and hazardous locations.

- 5 Year Warranty Standard
- Wide -40°C to +70°C operating range
- Single and three phase Input models deliver up to 960 Watts
- Redundancy ready using RED module
- DC OK Relay Output
- ATEX and IECEx approved models available

SOLAHD



SolaHD Essential SVL Series: When your equipment is installed in a controlled environment, these power supplies convert AC to DC power in a compact footprint.

- 2 Year Warranty Standard
- Single Phase Input delivers Up to 480 Watts



UPS (Uninterruptible Power Supply)

SolaHD SDU AC-B Series DIN Rail UPS: The SolaHD SDU AC - B Series DIN Rail UPS combines an industry leading compact design with a wide operation temperature range, enhanced communication and unique installation options. The SDU Series provides economical protection from damaging impulses and power interruptions. These units include easy to wire screw terminations for critical devices needing battery back up such as PLC/PAC control systems.

- Lightweight, compact industrial design
- Communications port for optional Industrial Ethernet protocols or discrete communication card
- User Replaceable Long-Life High-Temperature Battery



Power Conversion and Protection

SolaHD Complete Power Solutions: Industrial environments depend on electronic equipment to succeed in today's highly competitive, efficiency-driven business world. Computers, drives, motion controllers and sensors have become essential for optimal productivity, consistency and quality. However, these sensitive components require clean, stable, quality electricity to perform properly. Power quality issues, such as voltage fluctuations, harmonic distortions, noise and power outages disrupt production, damage equipment and corrupt valuable data.



Motion Control & Safety

Variable Frequency Drives

Emerson PACMotion® VFD: An integrated, rugged, and modular variable frequency drive designed for a range of applications, including water/wastewater, metro, automotive, mining, food and beverage, packaging, oil and gas, discrete manufacturing and modular machine designs.

The PACMotion VFD easily and seamlessly integrates with PACSystems RX3i applications for quick and cost-effective installation. Incorporated within Emerson's Machine Edition, it offers plug-and-play startup and simplified programming. Customers can leverage native PROFINET System Redundancy support, eliminating the need for an intermediary device and saving up to 15% in control solution costs.



Servo Motion Control

Emerson PACMotion® Servo: PACMotion is tightly integrated with Emerson PACSystems RX3i and PAC Machine Edition engineering tools. With motion, HMI, PLC, and machine logic events integrated into the same view, PACMotion streamlines synchronization for simple setup, maintenance, and troubleshooting. Standard motion blocks make it easy to assemble applications and operators can even dynamically change motion profiles. This gives you the ability to manage smaller lot sizes and rapid changeovers for increased machine utilization.

- Up to 40 axis of control in a single system
- Multiple encoder options
- Functional replacements for legacy FANUC motors utilized in PLC based motion applications.



Machine Safety

Emerson PACSafe Configurable Safety Controllers: The PACSafe Configurable Safety Controllers easily scales from small to complex machines and provides an intuitive graphical-based interface for configuration and programming, easy integration to Emerson's PACSystems and VersaMax controllers over Industrial Ethernet, and fast safe state reaction times. These qualities result in reduced development and commissioning times and smaller overall machine sizes – leading to higher productivity and profitability.

- Flexible and intuitive icon-based programming with drag-and-drop configuration
- Pre-configured safety function blocks to simplify application programming



HMI/SCADA

Emerson Movicon.NExT™: The flexible Movicon.NExT™ software platform allows you to operate in one all-inclusive, easy-to-use development environment. The scalable architecture can be used to design any project, from small HMIs to more expansive control rooms, providing exceptional cost efficiency and time-saving advantages, along with expanded configuration and deployment possibilities. The platform's intuitive configuration environment helps streamline complex project designs, seamlessly integrating native functional modules with third-party solutions for expanded performance capabilities. Core platform features, including configuration, communication, visualization, data recording, analysis, security and control, help deliver superior integration, scalability and interoperability advantages.



Emerson Movicon Web HMI™: The solution to use for running Movicon.NExT projects with Web technology that is hardware independent and offers both I/O Servers and Web Servers for scalable and powerful HMI visualization. The WebHMI Server deploys HTML5 pages to display screens created with Movicon.NExT. Clients are based on Web browsers and can be local on the device as a HMI control panel, or on a remote PC or mobile device. WPF graphics are automatically converted to SVG.



Manufacturing Solutions

Emerson Movicon Pro.Lean™: By deploying Pro.Lean© you will be able to communicate with any field system or device, collect and record data on database to analyse the Key Performance Indicators (KPI), calculate the Overall Equipment Effectiveness (OEE) and measure Downtimes with the aim to reduce loss and maximize profits.



Emerson Movicon Pro.Energy™: Implementing energy management systems is even more important than ever in today's world to help reach goals to become more efficient and reduce energy consumption that take up a large percentage of company running and building management costs. Pro.Energy aids Energy Managers and users in analyzing company consumption in order to manage energy more efficiently through valid decision-making strategies.



OPC UA

Emerson Connex™: Connex is an OPC UA Server that supports a large number of protocols for industries, infrastructures and buildings. It supports advanced features that include Gateway, Historian / Data Loggers, redundancy, OPC UA server and Client IIoT protocols and many more. Connex is the ideal solution for every M2M, IT and OT factory level connectivity need. The Connex Server offers the option to use the Historian to record data on relational databases (SQL Server is used for default) or in the Cloud (SQL Azure). By supporting OPC UA Historical Access, the Connex data server can therefore be used as a data collection system to provide historical data as well.



Reporting

SyTech XLReporter™: The leading reporting software for industry. It provides automated and on-demand reports for compliance, regulatory, production, efficiency, batch, performance, productivity, quality, alarm analysis and maintenance. The software is for anyone who wants to use their existing knowledge of Microsoft Excel to produce results in minutes, not days. It is priced for any budget, seamlessly integrated into any existing system and requires no executive decisions or additional hardware.

- Connect to over 70 data sources
- Industry analytics and calculations
- Publish to PDF, workbook and web
- Distribute to Email, FTP and more
- No limits on tags, templates or reports



Alarm Management

WIN-911 Alarm Notification Platform™: WIN-911 is the world's leading software platform for securely interacting with industrial equipment alarms. You can receive and send notifications in real-time via mobile app, text message, email, voice or in-plant announcement, reducing downtime and operational costs.

WIN-911's secure software notification platform allows your team to remotely interact with your plant's equipment alarms via mobile app, text, voice, email, or in-plant announcements, which means problems get fixed faster, waste is reduced, and maintenance and staff costs go down.



