



Intelligent Building Automation and Control



CREATING BETTER BUILDINGS





## Integrating environmental

VYKON® by Tridium® is an open, intelligent building automation and control solution that meets all of the challenges of real-world integration and enterprise connectivity and ensures complete interoperability among diverse facility systems.

Powered by the Niagara Framework®, VYKON solutions enable facility managers, building owners, and systems integrators to integrate proprietary and otherwise incompatible products into a unified enterprise solution through the synchronization, management, and control of major building system functions vital in a facility. These functions include heating, ventilating, and air conditioning (HVAC), energy, lighting, video, security, fire, life safety, and more.

Utilizing a highly scalable architecture that fits a single building or an entire global campus, VYKON solutions are currently deployed in office and residential buildings, data centers, hotels, airports, manufacturing plants, hospitals, convenience stores, restaurants, churches, schools, and universities around the world.



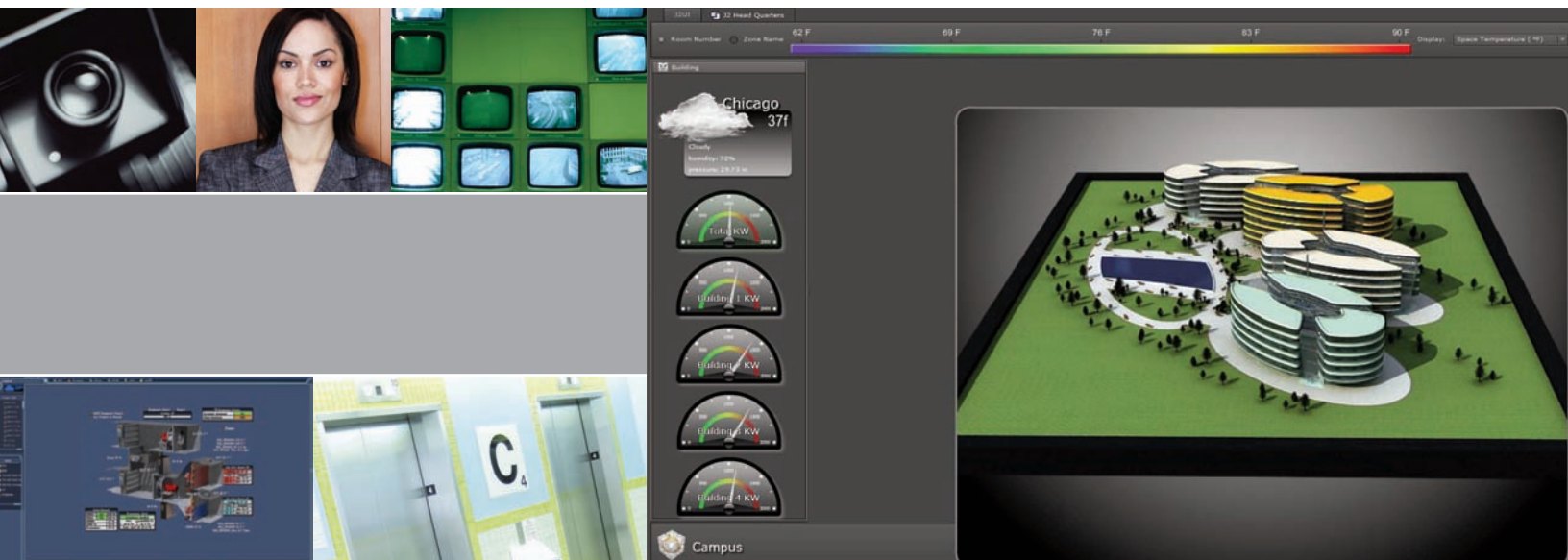
control, energy management, lighting, video, and security.



VYKON solutions offer compelling value to building owners and facility management, including the ability to:

- Preserve existing investments in control and monitoring devices and integrate them with new standards-based technologies.
- Access and control all diverse systems through a standard web browser.
- Combine information from different systems to improve overall facility management.
- Specify interoperable systems and applications from multiple vendors, thereby reducing vendor lock-in.
- Receive rapid financial payback, lower operational costs, reduced energy expenses, greater control and manageability of facility operations, higher security, and increased occupant/tenant satisfaction.

VYKON makes better buildings – ones that are smarter, use less energy, are more efficient, have lower operating costs, are safer, and contribute to a sustainable environment.



Built on the Niagara<sup>AX</sup> Framework<sup>®</sup>, VYKON intelligent building solutions integrate open and proprietary building automation systems, energy management, lighting, video, and security.

Designed for a wide range of single and multi-site environments. VYKON intelligent building solutions enable facility managers, building owners, and systems integrators to integrate proprietary and otherwise incompatible products into a unified enterprise solution. This allows personnel using a standard web browser to measure, manage, and control a wide variety of facilities, energy, and security applications from anywhere in the world.



Powered by Niagara.

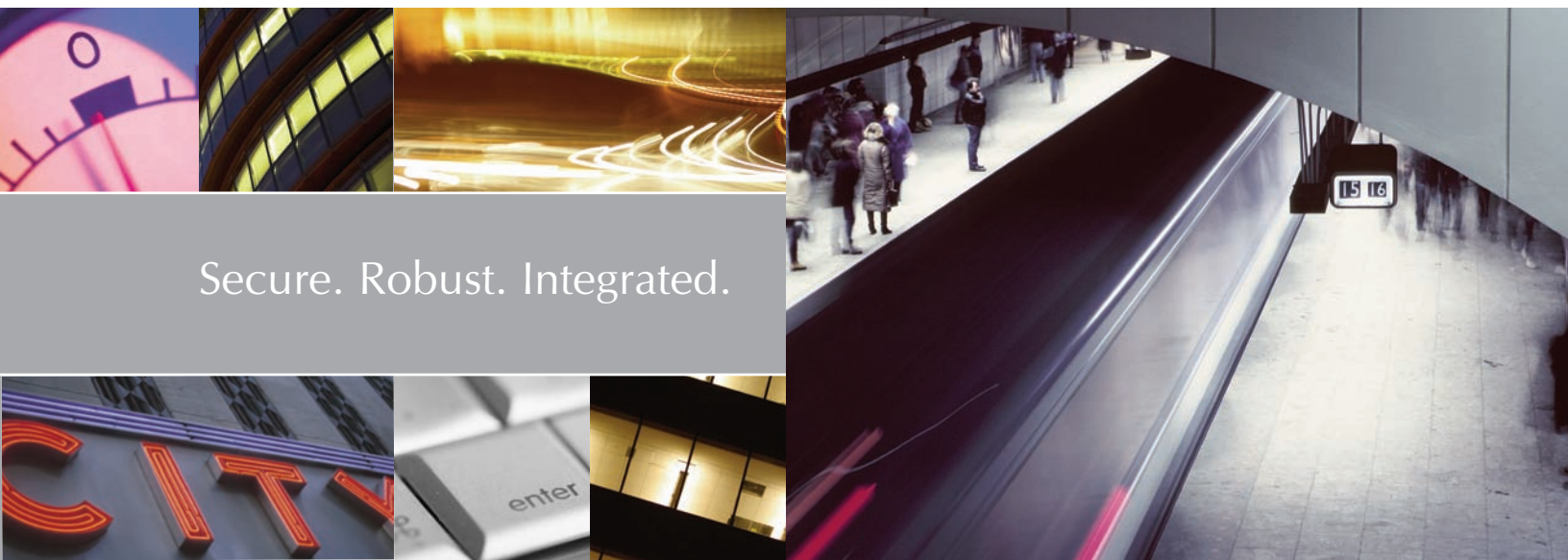


Meeting all of the complex challenges of real-world integration and enterprise connectivity, VYKON ensures *complete interoperability* among diverse systems and devices by providing a single unified platform that connects these devices to each other, to enterprise systems, and to the Internet.

Built on Tridium's proven Niagara<sup>AX</sup> Framework, VYKON is a comprehensive set of applications that synchronize, manage, and control major building system functions required in a facility, such as heating, ventilating, and air conditioning (HVAC) systems, energy, lighting, security, video, fire, safety unitary devices, and more.

VYKON has been used to integrate numerous other facility systems, including energy metering, electrical switch gear, irrigation, elevators, generators, utility real-time pricing, and many other specialized applications.

Whether the systems are based on BACnet®, LonWorks®, MODBUS®, SNMP, OPC, or a host of supported legacy protocols, VYKON connects to almost any device imaginable, regardless of manufacturer or communications protocol. Supporting both wired and wireless technology, VYKON provides a unified solution to connect and integrate all of your building and facility systems.



Secure. Robust. Integrated.

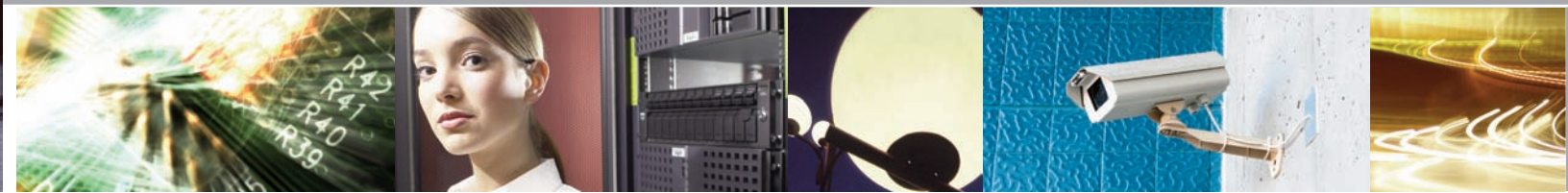
Scalable for facilities of all sizes, the VYKON automation and control software platform consists of three applications: Building, Energy Analysis, and Enterprise Security. The applications are available as one fully integrated solution or as individual components. You can add and mix applications as your needs grow for rapid expandability and true investment protection.

**VYKON Building.** VYKON Building provides building owners and facility management with a web-based building automation system that unifies diverse equipment systems and control devices into a single, easy-to-navigate website. With the ability to integrate standard protocols with legacy systems from a wide variety of building automation providers, VYKON Building breaks through the traditional barriers between systems to create a seamless solution. As a web-based application suite, VYKON Building can be accessed anywhere, at anytime, from any PDA or other web-enabled device. With VYKON Building, your standard web browser is your management and control console. Comprehensive tools make it easy to create custom displays to meet specific requirements. In addition, there are pre-built graphics in the library that can be used to represent mechanical and electrical systems. The result is an intuitive user interface, making your entire facility a dynamic easy-to-navigate website customized to your specific needs.

The VYKON intelligent building automation and control software platform connects your building, energy, lighting, video, and security systems to each other, to your enterprise, and to you. VYKON solutions are accessible via a web browser, anytime and anywhere, so you can manage any and all applications, simultaneously, in real time.



HVAC. Lighting. Energy. Video. Enterprise security. And more ...



**VYKON Energy Analysis.** VYKON Energy Analysis is a comprehensive enterprise energy management application that helps businesses manage energy and facility performance. VYKON Energy Analysis gathers, analyzes, and communicates energy consumption and cost information based on real-time interval data. Users gain a clear visibility into the energy consumption patterns of their facilities, making it easier to manage and optimize energy usage while identifying opportunities for performance improvement and cost savings.

VYKON Energy Analysis provides analysis tools to analyze and aggregate load profiles, benchmark facilities, and determine how building characteristics – such as size, equipment type, schedules, and climate – correlate with energy use. Combined with the real-time control capabilities of Niagara<sup>AX</sup>, VYKON Energy Analysis lets you take action to avoid unfavorable peaks, reduce consumption, optimize equipment run times, evaluate utility rates, and take advantage of demand response and real-time pricing programs.

**VYKON Security.** VYKON Security is an advanced web-IP based enterprise security management solution providing physical protection for your facilities, whether a single building or a large multi-site environment. VYKON Security is the only security system today that can connect to any building automation system while seamlessly integrating to the HVAC, lighting, and energy management systems of any facility.

As a fully-embedded access control, intrusion detection, video, and security alarm monitoring system, VYKON Security eliminates the need for a conventional PC to be installed as part of the security system. This lowers costs while improving reliability and security. VYKON Security supports a network of door control modules and remote input/output devices, and provides global supervisory access control functions over all devices connected to the security appliance.



VYKON's scalable, modular architecture is designed to meet the needs of today's fast-changing, fast-growing enterprises, whether it's a single facility, multi-building environment, or global application.

## A range of benefits and ROI across multiple business functions.

### Financial/Business Management

- Streamlines operations by integrating all building systems in the enterprise.
- Speeds resolution of revenue-impacting problems.
- Improves profitability by lowering cost of operations.
- Provides better control and manageability of multiple facilities from a central office location.
- Enhances reporting to support decision-making.
- Helps identify best practices from each facility.
- Improves workflow and resource management.
- Increases tenant/occupant satisfaction.

### Energy Management

- Reduces consumption and energy costs with energy analysis tools.
- Provides knowledge of individual energy consumption patterns and trends.
- Supports improved energy control and management.

### Facility and Equipment Management

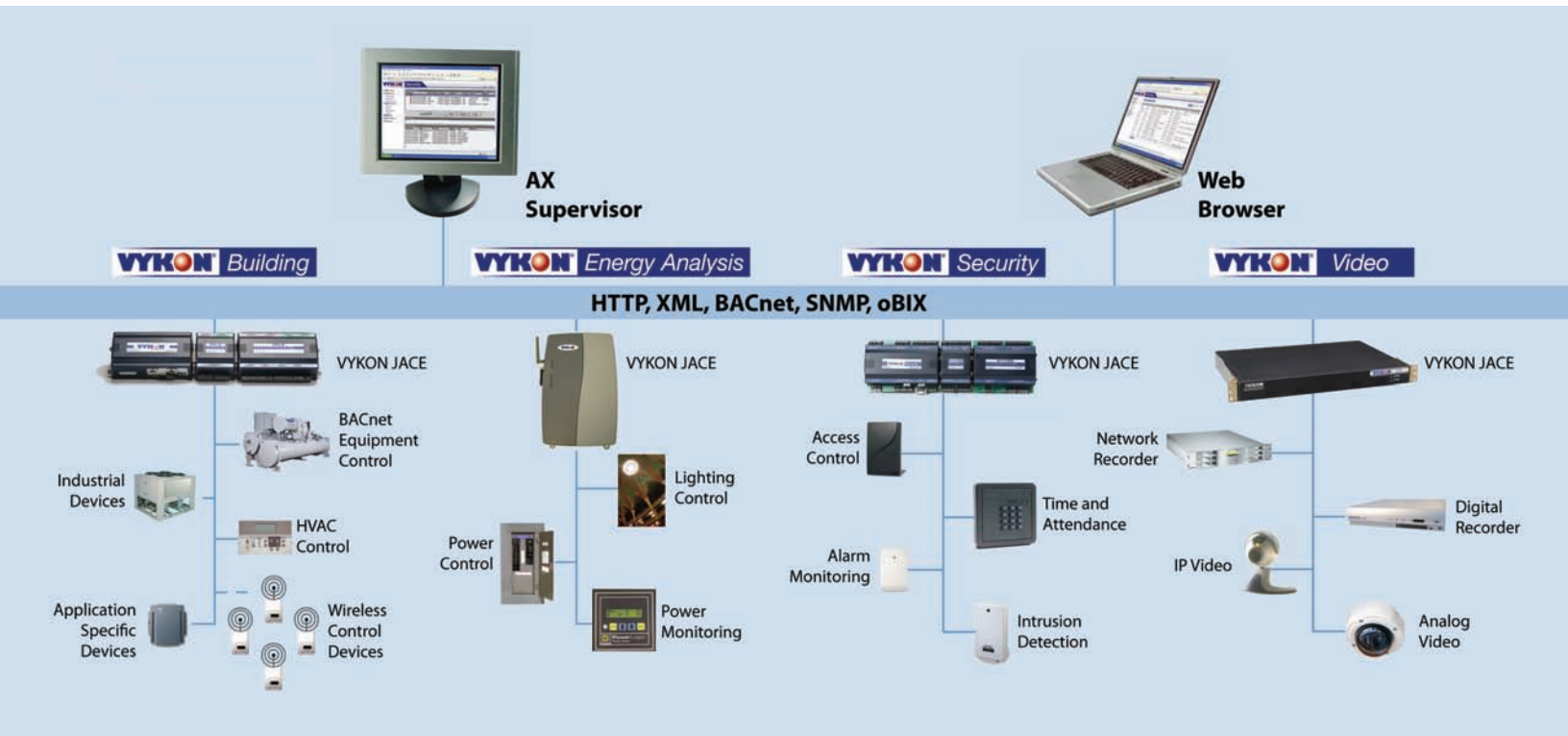
- Increases system and equipment functionality.
- Improves facility operations.
- Improves customer comfort, enhancing the customer experience.
- Reduces downtime caused by equipment failure.
- Improves visibility into mission-critical operational assets via a web-based interface for all facilities.

### Maintenance & Operations

- Speeds maintenance and problem resolution.
- Supports preventive maintenance.
- Reduces equipment downtime.
- Enables performance-based prioritization of equipment maintenance.
- Enables remote diagnostics and repair.
- Lowers renovation and construction costs.

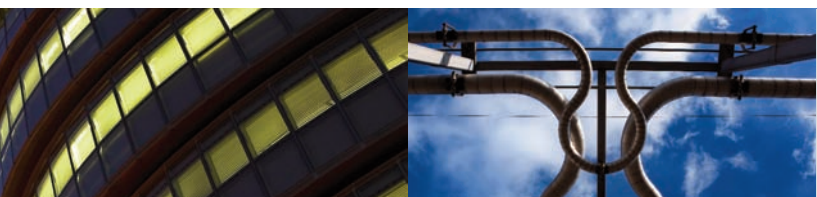


Integrating diverse systems requires a physical connection to a device's network. VYKON's JACE is the mechanism that provides this connectivity to systems within any facility.

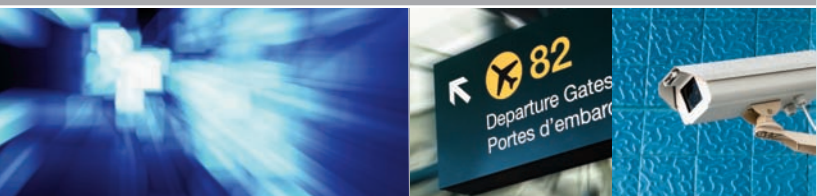


The Java Application Control Engine (JACE®) is a powerful embedded server that connects multi-protocol field devices to the LAN/WAN and provides energy management, alarm trending, and control capabilities.

A robust, scalable solution supporting as many systems as you need. VYKON combines the power of the latest Internet technology with a unique, highly-distributed architecture. Reliable real-time control takes place locally in each VYKON JACE® network controller, meaning that you are not dependent on communication with a central server for execution of critical control decisions. Every VYKON node can function as an independent feature-rich server, serving live data to multiple users simultaneously or connecting to a central server for data aggregation, interface with standard relational databases, and enterprise applications. The result? Unsurpassed reliability and scalability.



## About VYKON



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VYKON solutions are available worldwide through a network of distributors, systems integrators, and value-added resellers.

[www.vykon.com](http://www.vykon.com)

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