
DISTECH
CONTROLS™




Meet the New Standard

in **Sustainable** Buildings



DISTECH
CONTROLS



An innovation leader in energy management solutions, Distech Controls provides unique building management technologies and services that optimize energy efficiency and comfort in buildings, all the while reducing operating costs. We deliver innovative solutions for greener buildings

through our passion for innovation, quality, customer satisfaction, and sustainability. Established in Canada in 1995, Distech Controls serves multiple market segments through its worldwide business divisions, service offices, and a superior network of Authorized Partners.

Distech Controls' building management systems provide a complete solution for commercial, institutional, and government portfolios, integrating HVAC, Lighting, Access Control, CCTV, and Energy Management solutions.

As an ISO 9001 company, Distech Controls has implemented a total quality system that affects every facet of our organization, from research and development, to customer services, and maintained throughout all international service points and offices.

Distech Controls' commitment to quality also means that every product is fully tested before leaving the factory, ensuring optimum performance, unequalled reliability, and reduced maintenance and service calls.

EC-Net^{AX}: Web-based Integrated Building Management System



BACnet[®] and LonWorks[®] HVAC Controllers: Air Quality and Comfort



EC-Light: Lighting Control for Indoor, Outdoor, and Signage



EC-Net^{AX} Security: Access Control and CCTV



Open-to-Wireless[™]:
Wireless, Battery-less Sensing,
Wireless Mesh Networks



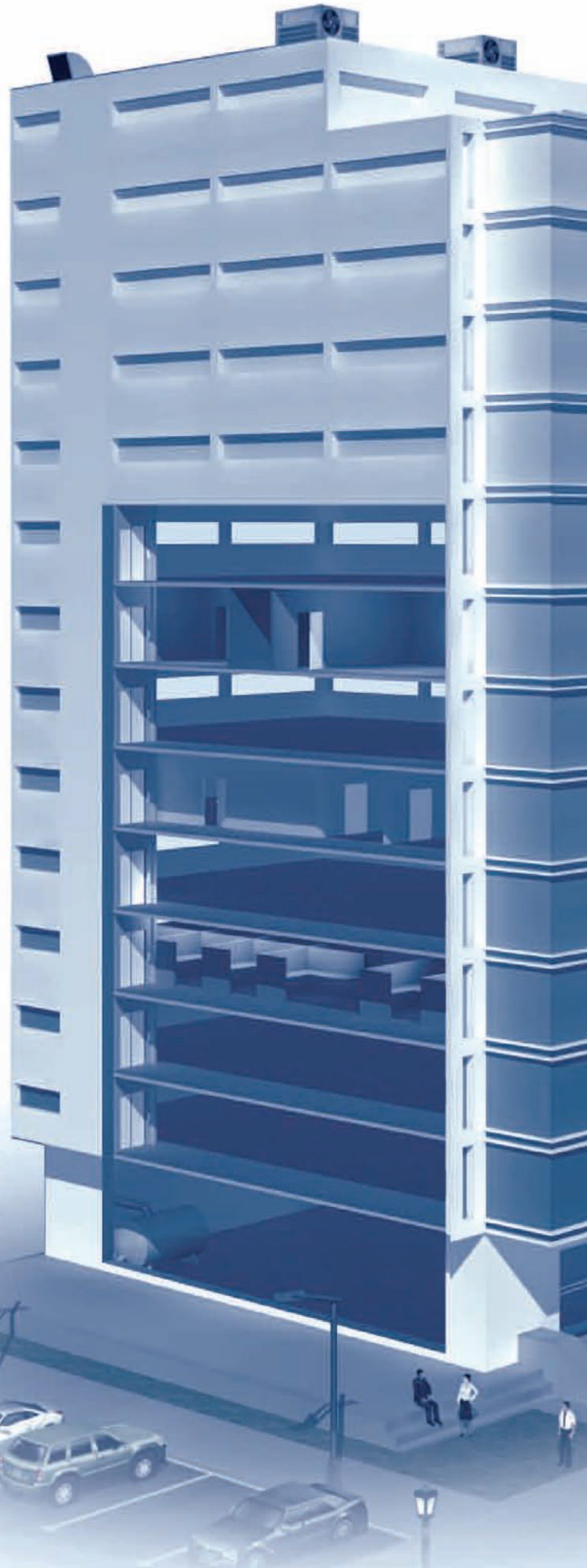
Energy Management and Metering



Multi-Site and Campus Solutions



Other Building Systems and Applications: Elevators, Networked Equipment, etc.





EC-Net^{AX}

Web-based Multi-Protocol Building Management Solution

The EC-Net^{AX} solution's multi-protocol, multi-function capabilities provide seamless and intelligent integration of HVAC, Lighting,

Access Control, CCTV, Energy Management, and other building systems.

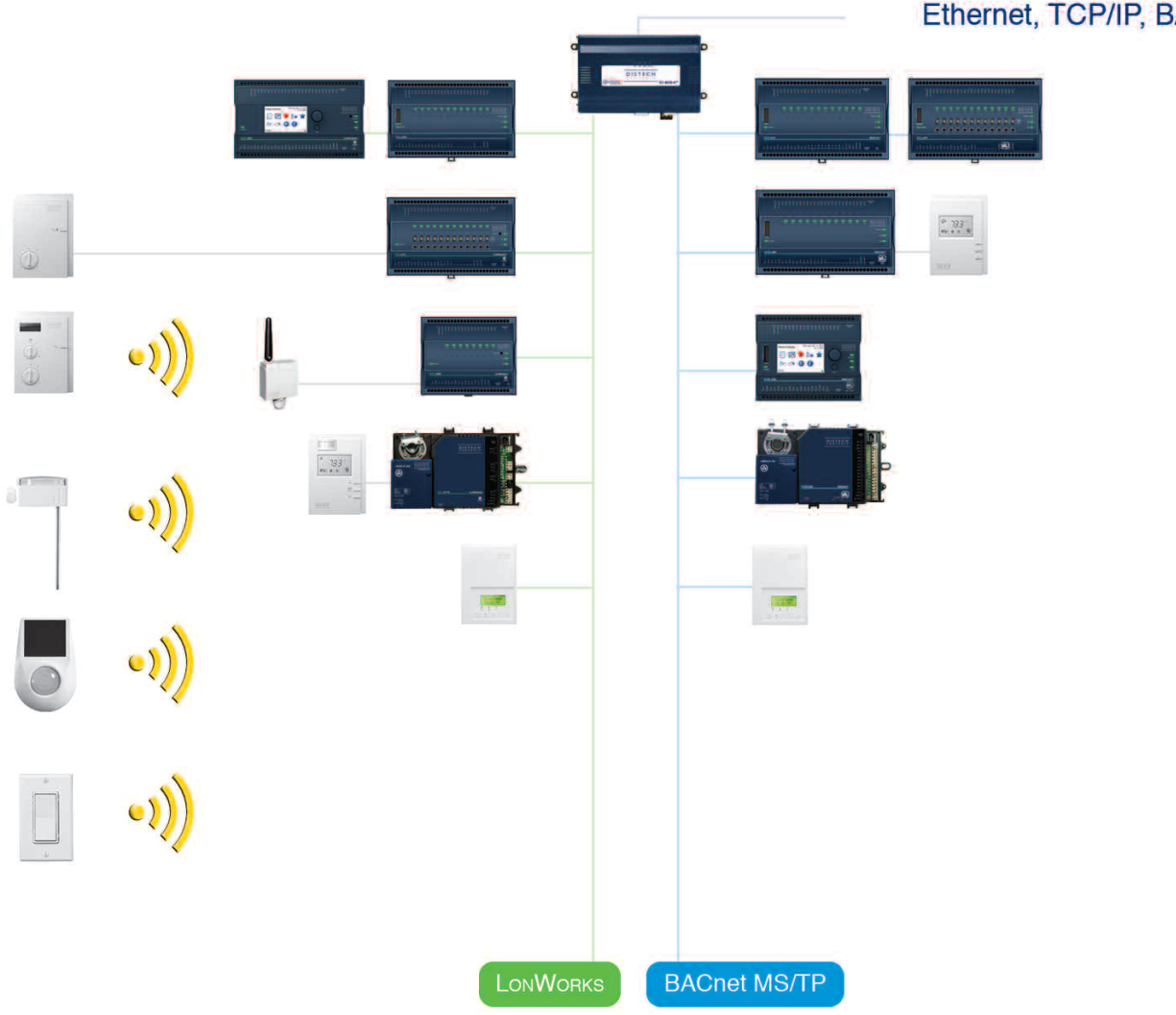
Distech Controls' EC-Net^{AX} building management solution provides the power to do more, with cost-effective and scalable integration of all your control, monitoring, and operational needs. A truly open solution, the platform creates a sustainable foundation that supports and evolves with your building system's lifecycle.

EC-Net^{AX} Integrated Building Management



Inter

Ethernet, TCP/IP, BACnet



Sensors and Wireless, Battery-less Sensors

HVAC Control and Custom Applications

Building Management System

System

- Web-based User Interface
- Remote Access Monitoring and Control
- Embedded EC-Net^{AX} Pro



Web Browser

Integrated HVAC, Lighting, Access Control and CCTV



Web Browser

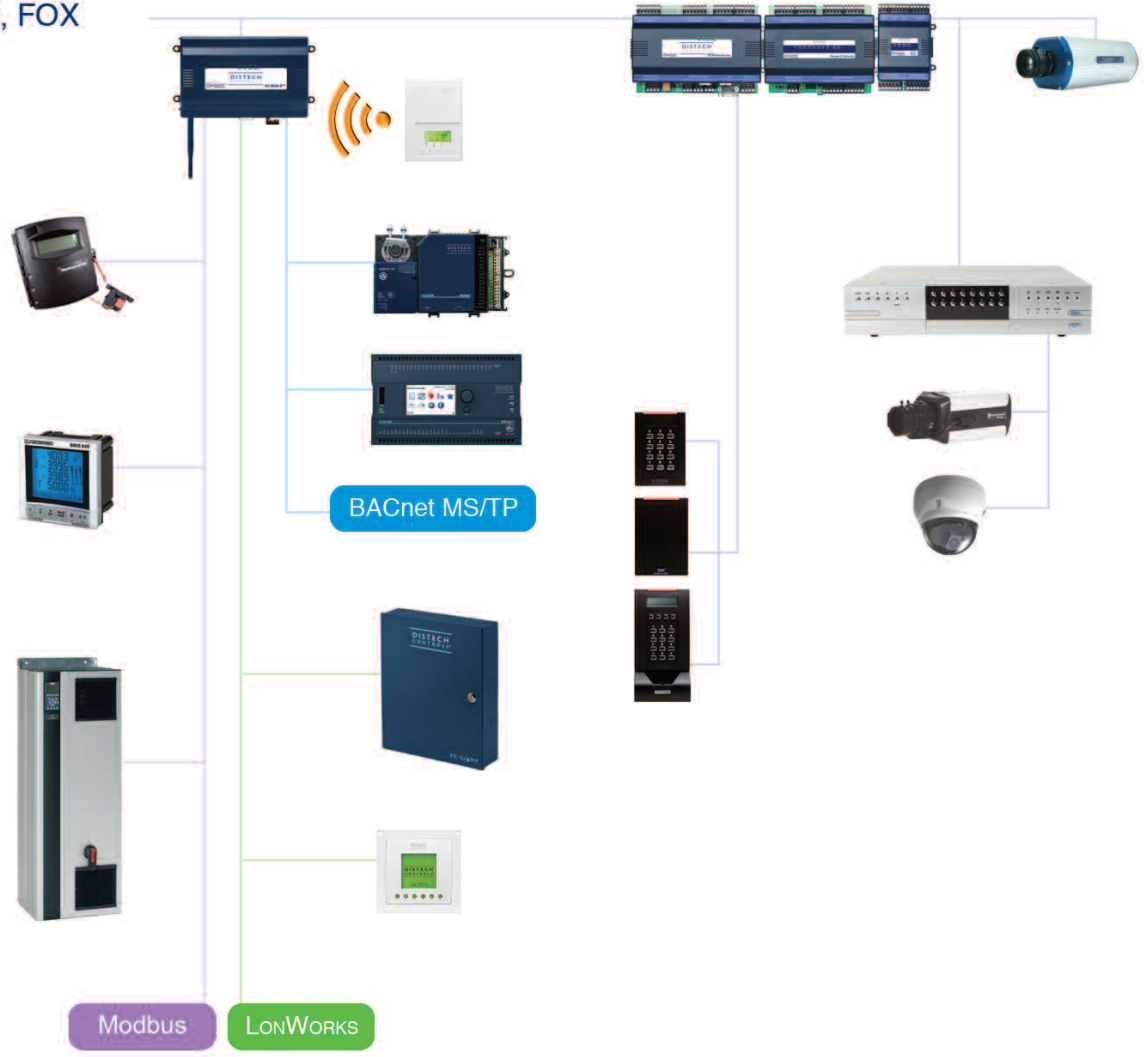
- Energy Monitoring and Reporting
- Personalized Energy Dashboards



EC-Net^{AX} EnerVue

net

/IP, XML, HTTP, Obix, FOX



Energy Management and Metering

Lighting Control

Access Control and CCTV



EC-Net^{AX}

Web-based Multi-Protocol Building Management Solution

The EC-Net^{AX} building management system (BMS) is a comprehensive Web-based platform powered by the Niagara^{AX} Framework[®]. Its open structure creates a common development and management environment for the integration of BACnet, LonWorks, Modbus[™], and other standards.

More than a building management system, the EC-Net^{AX} solution provides all the tools you need to gain intelligence into your buildings' performance and arm you with the ability to rapidly react to any situation that may adversely affect energy costs, business performance, and ultimately, your bottom line.

- **Program, manage, and monitor** your building management system using a Web browser
- **Common platform** provides global functions such as network control, monitoring, alarming, database and log management, and audit trails for all building functions
- **Monitor, acknowledge, and review** alarms with sophisticated alarm processing and routing, including e-mail and paging
- **Manage** geographically dispersed sites with one system
- **Choose** best-of-breed products and prolong the useful life of existing systems by extending their capabilities, regardless of manufacturer or protocol
- **Leverage** real-time business intelligence through connectivity with enterprise applications such as accounting, tenant billing, and energy management and utility monitoring interfaces
- **Open standards** provide a useful, cost-effective infrastructure for convergence with IT networks
- **Supports** the development of applications for mobile devices like smartphones and tablets



EC-Net^{AX} EnerVue

EC-Net^{AX} EnerVue, graphics oriented, Web-based energy management dashboard provides proven visualization of vital building metrics through an easy-to-use, browser-based dashboard application. Suited for single or multi-site projects, EC-Net^{AX} EnerVue allows users to quickly identify issues, assess relationships, and take action in order to optimize resource efficiencies and sustainability.

- Designed for a wide range of users, including system integrators, energy managers, facility managers, and consulting engineers
- Customizable interface from a library of viewlets

EC-BOS^{AX} Web Building Controllers

The EC-BOS^{AX} embedded building controller combines integrated control, supervision, data logging, alarming, scheduling, and network management functions with Internet connectivity and Web-serving capabilities, all in a compact design. It is designed to integrate diverse systems and devices into a single seamless system and support a wide range of protocols including BACnet, LONWORKS, Modbus, and other standard protocols.

- BTL listed as BACnet Building Controller (B-BC)
- Scalable applications ranging from small buildings to multiple site and campus-wide solutions
- Several models available for distributed control and monitoring throughout larger facilities





BACnet & LONWORKS

HVAC Controllers

Distech Controls offers an extensive line of quality, feature-rich controllers for BACnet and LONWORKS that allow for efficient and cost-effective

implementation and operation of a building management system.

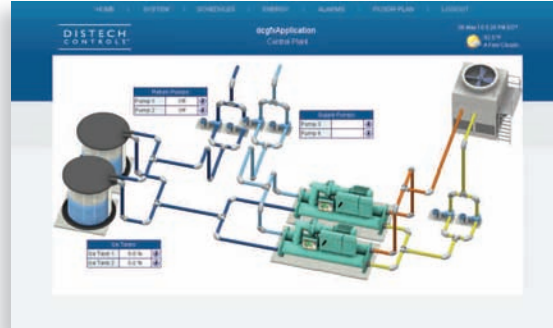
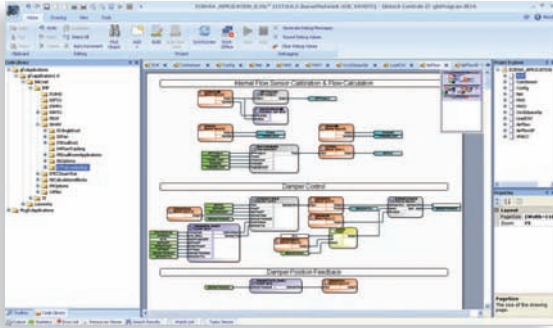
Our controllers are based on a robust common hardware platform and share the same programming and productivity enhancing toolset, providing increased efficiency and options for system design, installation, service, and maintenance.



BACnet & LONWORKS HVAC Controllers

Distech Controls controllers offer the features and flexibility to address the demands of even the most sophisticated projects, while providing a competitive value offering. In addition, numerous labor-saving tools and features minimize the learning curve, decrease engineering and installation time, and improve the functional use of the system.

- **Extensive line** of BTL listed BACnet and LONMARK® certified LONWORKS controllers
- **Common hardware platform** increases serviceability and choice of protocol based on required application
- **Wide array** of controllers allows selection of the most appropriate model to cost-effectively address specific application requirements
- **Choice** of custom programmable controllers or plug-and-play, pre-configured application specific controllers provides unmatched flexibility at installation
- **BACnet ECB and LonWorks ECL 50 Series** controllers with live graphics color display provide quick access to a wide range of internal controller functions, while color-coded icons provide at-a-glance indication of alarms and override conditions
- **Support** of Allure™ EC-Smart-Vue communicating LCD sensors offers time-saving features such as air flow balancing and pre-configured application selection
- **Unique** embedded Open-to-Wireless solution provides support of multiple wireless, battery-less sensors
- Select models allow for **auto diagnostics** and alerts based on performance algorithms
- **Fast-response** microprocessor provides accurate control and advanced math functions
- **Optional HOA switch** with potentiometer locally overrides and monitors overridden outputs
- **Software configurable I/O** are jumper-less selection, eliminating frequent input configuration errors
- **High precision inputs** support a wide variety of RTD or thermistor for increased versatility at installation



Programming & Productivity Enhancing Toolset

Distech Controls' programming and productivity enhancing toolsets are designed with a comprehensive, integrated approach that improves serviceability options and efficiency, while providing the necessary agility to address the specific operational requirements of a facility.

This toolset facilitates device configuration, reduces programming time, and **increases installation, troubleshooting, and commissioning efficiency by over 25%**, and includes:

- Common graphical programming interface for BACnet and LonWorks controllers
- Pre-engineered applications and images libraries
- Pre-built, auto-generated graphics pages, with pre-defined devices, alarms, and logs

Our control sequences **comply with the highest standards in energy efficiency**, including California Title 24, ASHRAE® Indoor Air Quality, and ASHRAE HVAC applications. Distech Controls has developed a series of intelligent sequences to automatically provide maximum energy efficiency, while reducing energy waste.

In addition, Distech Controls' unique ECO-Vue™ leaf pattern can be used to deliver energy efficiency level indicators to pre-built graphics pages. The ECO-Vue feature provides the building operator with instant feedback on the level of energy efficiency that will be realized by the chosen comfort setting. The more ECO-Vue leaves appear on a page, the more energy efficiency is being achieved.







Allure™ Series Room Devices

Designed to satisfy interior designers, architects, building occupants, and consulting engineers alike, our Allure Series of room devices offers a broad array of models suitable for a wide range

of environments and applications. The line ranges from wired and wireless, battery-less discrete sensors to intelligent communicating sensors and communicating thermostats.

The Allure Series features an industry-leading and contemporary look suitable for any facility. Additionally, the Series' built-in features, such as the Allure EC-Smart-Vue communicating sensor's innovative ECO-Vue feature, put energy consumption decisions in the hands of the occupant, enhancing the user experience and increasing energy efficiency.



ECO-Vue
Leaf Pattern

Allure Series Room Devices

Distech Controls' Allure Series room devices offering includes:

Allure EC-Smart-Vue

Communicating sensor with backlit LCD display and icon-driven menu feature integrated sensors for temperature, humidity, CO₂, and motion

Allure ECW-Sensor

Innovative wireless, battery-less room temperature sensor line

Allure EC-Sensor

Discrete analog room temperature sensor line for all terminal and sensing applications

Allure ECB-STAT & ECL-STAT

Broad range of quality microprocessor-based communicating thermostats for heat pump, roof top, fan coil, and zoning applications

Allure ECW-STAT

Wide array of wireless network communicating thermostats for heat pump, roof top, fan coil, and zoning applications that work on a wireless self-healing mesh network

Unique features of our Allure Series room devices:

- All Allure **ECB-STAT**, **ECL-STAT**, and **ECW-STAT** thermostat models are PIR motion detector ready, allowing for incremental energy savings
- Allure **ECW-STAT** wireless thermostat offers all the benefits of wireless mesh network communication, including the elimination of all communication wires, as well as the ability to cost-effectively and easily install communicating thermostats in new or retrofit projects
- Allure **EC-Smart-Vue** communicating sensors allow you to configure, commission, and trouble-shoot a controller locally and access the BACnet and LonWORKS network



- Allure **EC-Smart-Vue** communicating sensors include air balancing menus to perform VAV air flow balancing without the aid of an onsite building automation system control engineer
- Allure **EC-Smart-Vue's** four integrated sensors support demand-controlled ventilation and occupancy-based control for additional energy savings
- Allure **ECW-Sensor** temperature sensors support the 315 MHz and 868 MHz EnOcean wireless communication standards and feature a solar cell for energy harvesting, meaning that they require no batteries to power and maintain themselves, making them both environmentally friendly and virtually service-free

ECO-Vue

Allure EC-Smart-Vue sensor's innovative ECO-Vue leaf pattern graphically indicates energy consumption in real time to **promote an occupant's energy-conscious behavior**. The more leaves appear in the LCD display, the more energy efficiency is being achieved, while less leaves will encourage the occupant to take corrective action to optimize the system's environmental performance.



EC-Display

The EC-Display LCD interface is the ideal solution for small to medium-sized systems where a PC front-end is not necessary or where rapid access is required, such as in mechanical rooms and offices, providing quick and convenient access to any point on the network.



EC-Light Lighting Control

- Reduces energy usage by employing a combination of **lighting control methods**, including event-based scheduling, occupancy detection, timed switching, daylight sensing, task tuning, and load shedding
- Integrates various **control strategies** that comply with standard building energy codes such as ANSI/ASHRAE/IESNA Standard 90.1, and IECC, providing energy and cost savings
- **Standard sized panels** of 8, 16, 32, and 64 relays are convenient for simple to complex installations consisting of several lighting panels networked together
- Panel components come **pre-installed and pre-wired** including transformer, relays, and input and output controllers, thus simplifying and reducing installation time
- Manages individual or groups of relays, allowing for a variety of **lighting scenes**
- **Configurable** using EC-Net^{AX} EC-Configure wizards or LNS-based EC-Configure plug-ins to quickly and easily create energy saving lighting control sequences
- **EC-Light Display** LCD interface provides option for integrated astronomical clock for lighting control based on time of day or relative time to sunset and sunrise
- **Integration** of Distech Controls' wired or wireless, battery-less switches, occupancy detection sensors, and photocells enhances the lighting control system's operation and optimizes energy efficiency



EC-Light

Lighting Control

EC-Light lighting control system is a complete and flexible indoor and outdoor network solution designed to meet the requirements of any

commercial, retail, educational, or governmental site, including accent and general lighting.

EC-Light lighting control system can cut lighting energy usage by up to an estimated 70% by employing a combination of several energy saving lighting control techniques.



EC-Net^{AX} Security

Access Control & CCTV

- Allows for **integrated control** of HVAC, Lighting, and Access Control, resulting in energy savings through occupancy-based control when connected to the EC-Net^{AX} building management solution
- **Integrates** access control and security systems with your building management system, IT, and enterprise applications
- Allows users to **monitor and control** elevator/floor access, specific preset locations, and video via a single interface
- **All-in-one controller** for HVAC (BACnet and LONWORKS), Access Control, and CCTV from a single device
- **Quick and easy** set-up and rapid deployment
- **Integrated CCTV** solution interfaces to many leading video equipment manufacturers
- **Integrated closed circuit television (CCTV)** solution interfaces to many leading Digital Video Recorder (DVR) equipment manufacturers
- Quick access to **video playback** related to individual alarm events



EC-Net^{AX} Security

Access Control & CCTV

EC-Net^{AX} Security, comprehensive, easy-to-use Access Control management solution is built on a truly open, Web-based platform, seamlessly extending intelligent buildings and

creating a unified building management system. When connected to the EC-Net^{AX} platform, it allows for integrated control of HVAC, Lighting, and Access.

EC-Net^{AX} Security Access Control solution is a fully scalable system suitable for projects ranging from single door installations to multi-building deployments, and features an intuitive Web interface that can be configured and managed by IT, security, or human resources staff with little or no training.







Open-to-Wireless™

Wireless, Battery-less Solution

Distech Controls offers a wide variety of wireless, battery-less sensors and switches for various applications ranging from room temper-

ature and humidity sensing, to duct and cable temperature sensing, to occupancy detection.

A true green building alternative, our Open-to-Wireless solution offers many benefits for building management, from flexibility and adaptability, to cost and time reduction at installation, to optimized tenant comfort.

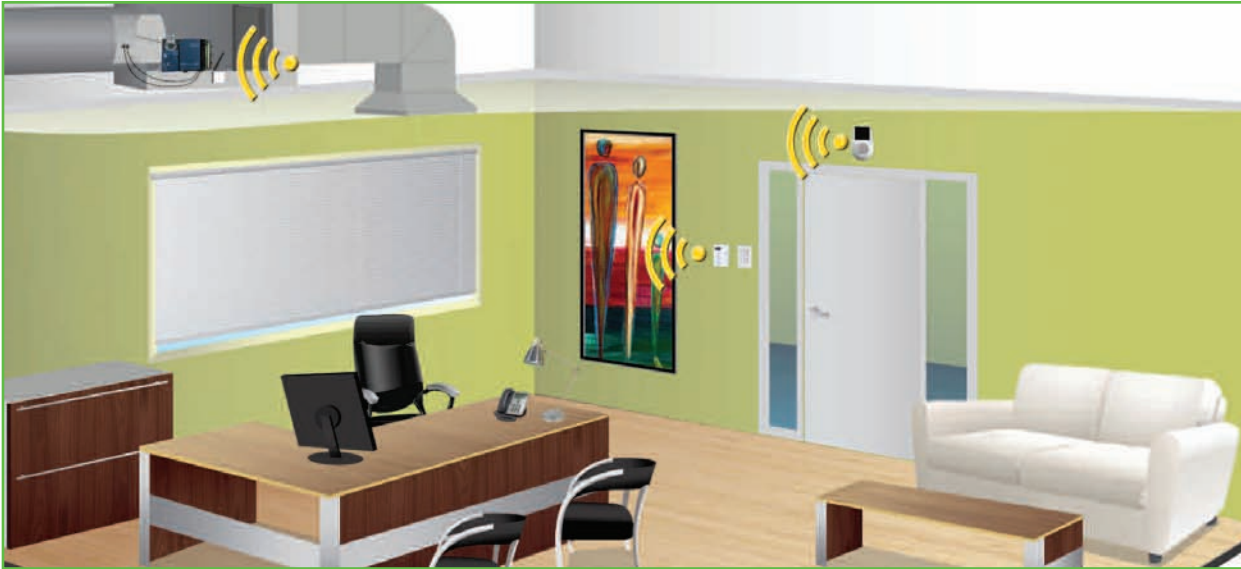


Open-to-Wireless

Wireless, Battery-less Solution

A Truly Sustainable Green Building Solution

- **Energy harvesting** eliminates the need for batteries
- **Reduces** cable and wiring materials to preserve building envelope and architectural integrity
- Provides **enhanced comfort** and functionality through easy relocation of sensors and switches
- Contributes to **LEED®** points



Multiple Applications

- Wireless, battery-less sensors and switches require no drilling or external wiring, simplifying installation
- Readily mount on any surface including concrete, brick, glass, or stone
- Increase occupant comfort and reduce energy consumption by easily placing wireless sensors in optimal locations
- Control spaces where sensor placement would otherwise be difficult, including atriums and greenhouses
- Optimizes conditions in large open spaces with localized needs, such as office cubicles

Cost & Time Reduction

- Easy, quick, and low-cost relocation of devices when room configuration or floor plans change
 - Removes expenses for wiring plans, wire and conduit installation, electrician fees, and other associated labor costs, at installation or retrofit of space
 - Easily correct design errors in initial sensor placement
 - Significantly improves a system's quality and reliability since devices are virtually service-free
- Up to **15% cost savings in new construction** projects and **70% in retrofit** projects



Delivering the New Standard

Distech Controls' building management system provides a complete, integrated solution for HVAC, Lighting, Access Control, CCTV, and Energy Management, achieving over **30% energy and operational cost savings**.

Designed to meet the highest standards of green stewardship and durable performance, our open solutions provide not only a competitive advantage today, but sustainability tomorrow and beyond.

- **Prolong** your building management system's life-cycle with a Web-based multi-function platform that provides the **flexibility** to address varying needs, conditions, or advances in technology
- **Leverage** our scalable solutions to seamlessly address your needs for enterprise connectivity, business intelligence and reporting, and energy management for **single buildings to multi-site** and multi-tenant applications
- **Implement** a **common hardware and software** platform for BACnet and LONWORKS, ensuring the right solution to your application needs, while enhancing serviceability
- **Select** from an extensive range of controllers capable of providing the most **cost-effective** solution for any application
- **Reduce** costs with a **powerful common productivity enhancing toolset** for BACnet and LONWORKS, while helping maintain programming standards and facilitating troubleshooting
- **Provide** technicians and managers with a local user interface to view, edit, and configure operating parameters of your HVAC system in real time with our unique BACnet ECB and LONWORKS ECL 50 Series controllers featuring live graphics color display
- **Benefit** from unprecedented agility and adaptability with our **market-leading technology**, led by our wireless, battery-less solution
- **Maintain** indoor air quality and optimize occupant comfort with the Allure EC-Smart-Vue communicating sensor's integrated temperature, humidity, CO₂, and motion sensors
- **Engage** occupants and facility managers to achieve **optimum energy efficiency** with unique features such as the ECO-Vue™ leaf pattern, which graphically indicates energy consumption in real-time
- **Protect** your investment with a partner dedicated to **open standards**, providing interchangeable components and availability of hardware and software compatible with the original system
- **Opt** for dependable **long-term performance**, serviceability, and products and services designed and marketed with a commitment to quality, reliability, and customer satisfaction
- **Choose** from an **extensive network of Authorized Partners** capable of delivering Distech Controls' innovative energy management solutions to over 60 countries worldwide

DISTECH

CONTROLS™

Innovative Solutions for Greener Buildings™

Distech Controls

www.distech-controls.com

North America: +1-800-404-0043

International: +1-450-444-9898

sales@distech-controls.com

Delivering the New Standard



Distech Controls, the Distech Controls logo, Open-to-Wireless, Innovative Solutions for Greener Buildings, ECO-Vue, and Allure are trademarks of Distech Controls Inc. LONWORKS, LNS, and LONMARK are registered trademarks of Echelon Corporation. Niagara^{AX} Framework is a registered trademark of Tridium, Inc. BACnet is a registered trademark of the American Society of Heating, Refrigerating and Air-Conditioning Engineers. enocean, enocean alliance, and enocean logos are registered trademarks of enocean GmbH. BTL is a registered trademark of BACnet International. The ZigBee logo is a registered trademark of ZigBee Alliance. All other trademarks are the property of their respective owners.

©, Distech Controls Inc., 2010. All rights reserved.

MDI-TECHNO-XX005