Can I customize a building automation system to meet my building needs and my budget?

The Web-based TALON® system gives you the cost-effective control you need.

Answers for industry.

SIEMENS

Scalability made simple

Achieving high-performing, comfortable, and energy-efficient facilities is seamless with the TALON® Building Automation System with BACnet.

Regardless of the size of your facility, or your control requirements, TALON provides the scalability and flexibility your facility needs for today and tomorrow.
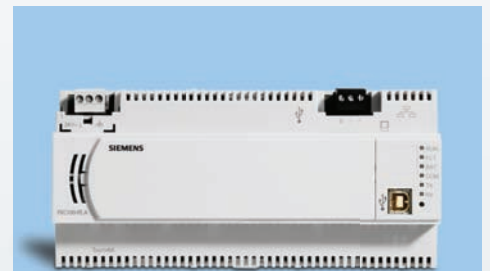
From standard to complex applications, TALON provides a comprehensive and affordable solution that expands and grows with your facility.

Whether you are building a new facility, or expanding, upgrading, or optimizing existing facility systems, a customizable TALON solution makes buildings of all sizes more comfortable, safe, productive, energy-efficient... and less costly to operate.

Freedom from a proprietary system, adaptability for today and tomorrow

Today, we're creating smart buildings that help reduce costs, improve comfort and productivity, and lessen the impact on the environment. Building automation systems don't just control the basics. They regulate airflow, monitor energy use and are being called upon to integrate with fire, security, lighting and other systems throughout buildings to deliver comfort, safety and energy efficiency.

TALON 's open architecture gives you control of all systems and equipment — from any location — and allows you to realize the full advantages of integrated systems. System scalability ensures your future expansion demands, energy-efficiency goals, and operating budget needs are realized — whether you are operating a small facility, large facility, or multi-site campus.

Installing two TC-1000 Modular controllers with Web servers in an average 60,000 sq. ft. school provides up to 60% savings on installation costs.

A larger building would save up to 20% by installing five TC Compact or TC-1000 Modular Controllers. (List price comparison.)

Management Level
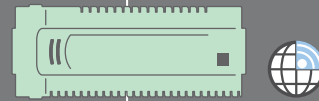
TALON® View Workstation

Web Client and Wireless Devices

BACnet/IP and Web Services

Automation Level

TC Compact Series
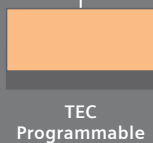
TC Compact and TC Modular Controllers

BACnet MS/TP

BACnet MS/TP

Field Level
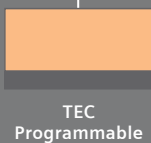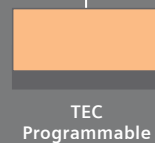
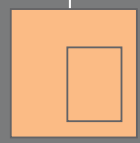TC Compact Series

TEC Programmable

TEC Programmable

TEC Controller with Actuator

TEC Programmable

Point Pickup Module

TALON's Web-based BACnet solution makes every level of your system accessible and configurable.

Flexible solutions at a maximum value

Scalable and fully programmable, our complete selection of BTL-listed components means your TALON Building Automation System is uniquely designed to meet your exact building needs. Tools and programming environments are consistent and integrated into the system for ease of use and system configuration efficiencies.

TALON is comprised of all BTL components, eliminating the need to overspend on features that might not be needed for a particular job and integrating with a wide range of other building automation products. Through innovative software updates and powerful hardware components, your facility can make the most out of current technology and remain prepared for maximum efficiency well into the future. As new technologies emerge, TALON ensures a smooth migration, so your initial investment is preserved and your buildings remains up-to-date. With its integration power, open architecture, Web-enabled programmability and BACnet controllers at every level, TALON is an investment that will pay you back for years.

Two User Interface Options!

TC-1000 Modular and TC Compact Web Server Interface for BACnet Networks

Cost-effectively and efficiently view, configure, command and control your system from any location. These Web-enabled controllers allow remote Internet access of managed network information. Get reports and graphs representing historical trend information via an integrated Web server interface. Configure field panels and troubleshoot through the Web for speedy and cost effective system start-up and servicing.

With the Web server, the facility operator can easily monitor and control the TALON system through an intuitive Web-based user interface that is ideal for small or remote facilities.

Internet security is managed via a 32-bit encrypted password limiting access to only users with administrator provided access rights.

TALON View Workstation

Manage and control your facility with this easy-to-use, PC-based interface and gain facility-wide efficiencies and cost-effective information sharing. The TALON View Workstation is a comprehensive integration platform for connectivity to third party products and systems. Access this station to monitor equipment, schedule and modify operations, run reports and link to other workstations. It's all accomplished through a simple, easy-to-use interface.

A straightforward and robust system interface provides efficient facility monitoring and control that allows you to:
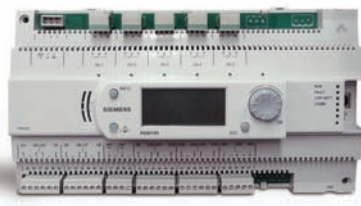- Monitor and control your facility environment whether it's a single building, a campus or base, or an entire school district
- Schedule and modify mechanical equipment operations
- Run reports on various system conditions
- Collect and view trend information
- Conduct network troubleshooting

Smart devices for smarter buildings

Access all of your building systems and equipment — lighting, HVAC, elevators, security — more cost effectively and efficiently with TALON's Web-based BACnet solution.

TC-1000 Modular

PXM10S TC Compact and TC Modular Controller Mounted Operator Display

TC Compact 24 Unitary Equipment Controller

TC-1000 Modular and TC Compact Series Controllers

High-performance Direct Digital Control (DDC) supervisory equipment controllers with energy management applications and DDC programs offer complete facility management that's scalable to your needs. TC Compact Controllers operate as a stand-alone or can be networked to perform complex control, monitoring, and energy management functions without relying on a higher-level processor. 16, 24 or 36 Expanded point capacity models cost-effectively match the needs of the application.

- Programmability at lowest level of controller to meet new and emerging sustainability initiatives
- Integration with Web servers for anywhere access and system-wide control
- Integrated I/O based on state-of-the-art TX-I/O™ technology provides superior flexibility of point and signal types
- TC-1000 Modular on BACnet/IP with BACnet MS/TP ALN, and BACnet MS/TP FLN and optional TX I/O expansion module support
- Native BACnet/IP communications over 10/100Mb Ethernet networks
- Native BACnet MS/TP on RS-485

- Comprehensive alarm management, historical data trend collection, operator control and monitoring functions
- DIN-rail mounted TC Compact Controllers with removable terminal blocks simplify installation and servicing
- "Plug and play" functionality
- Advanced customized applications to assist with LEED® or ENERGY STAR® programs

PXM10S and PXM10T TC Compact and TC Modular Controller Mounted Operator Display

This local user interface to a single TC Modular or TC Compact controller and its sub network features a user-friendly navigation and menu structure. The large interface screen with clear text provides local alarm annunciation and the ability to command and override equipment, plus manage alarms locally at the field panel. "Plug and Play" allows for the device to be automatically recognized and fully functional once plugged into the host field panel. A hot swappable feature allows for the device to be moved from device to device for local display without having to power down the controller and interrupt facility operation.

HOA (Hand-Off-Auto) Accessory for TC Compact Controllers

Provides a cost effective and easily installed hot swappable HOA solution for TC Compact, complete with LED indication of point override and I/O status. HOA accessory replaces the TC Compact cover. New installations requiring HOA functionality should be specified using TC Compact for a lower cost solution, or upgrade an already installed TC Compact controller to expand its capabilities.

TC Modular and TC Compact Web Services

Use in conjunction with a TC Modular or TC Compact 36 based Web server for graphical representation of system information over the Internet and for anywhere, anytime Web-based system application interaction and configuration, including programmability.

TC Modular and Compact Controllers, which feature integrated on-board universal I/O (Inputs/Outputs), based on state of the art TX I/O™ technology, assure the right mix of I/O. They are BTL certified

Point Pickup Module (PPM) Series

BACnet Programmable Terminal Equipment Controllers (TEC)

Series 2300 TEC Room Unit

BACnet VAV ATEC

as a B-BC (Building Controller) to leverage standard protocol networks for interoperability and provide assurance in meeting strict BACnet protocol implementation guidelines.

The TC Compact Controller Series features the most flexible point configuration of any compact controllers on the market, with universal points capable of supporting many different signal types. Optionally, the controllers may supervise BACnet MS/TP controllers such as the PTEC (Programmable Terminal Equipment Controllers), ATEC (Actuator Terminal Equipment Controllers) or the wide array of other available BACnet MS/TP products. The TC Compact 36 also optionally offers a high speed Island Bus connection, providing the ability to expand using the TX-I/O product range.

TC Compact 24 Unitary Equipment Controller

Cost effective, freely programmable unitary equipment controller on BACnet MS/TP network, for flexibility to fit the controller capability to the equipment control needs. BTL certified as a B-AAC (Advanced Application Controller), to leverage standard protocol networks for interoperability and provide assurance in meeting strict BACnet protocol implementation guidelines.

Point Pickup Module (PPM) Series

This cost-effective solution includes a 6 point analog, 6 point digital and 12 point combination module. Each of the modules has Universal Input capabilities for greater flexibility in distributed control and environmental sensing applications. The TC Modular and Compact Series provide the control logic, while the PPM provides the networkable I/O.

Series 2300 TEC Room Units

Wall-mounted sensors for use with all TEC (Terminal Equipment Controller) and ATEC (Actuator Terminal Equipment Controller) zone controllers or TC Compact and TC Modular controllers.

BACnet Programmable Terminal Equipment Controllers (TEC)

These BACnet MS/TP protocol and BTL Listed devices provide high performance Direct Digital Control (DDC) that can operate stand-alone or can be networked to perform complex HVAC control, monitoring and energy management functions. Pre-loaded and tested applications make these controllers ready to use out of the box. They are field configurable and programmable using familiar PPCL programming language for superior application flexibility. Custom programmability gives these devices the flexibility to meet a customer's most unique job specification without requiring a costly customized solution.

BACnet VAV Actuator Terminal Equipment Controller (ATEC)

Designed to reside on any BACnet control system, this integrated controller and actuator delivers high performance direct digital control (DDC) of pressure independent and variable-air-volume zone level routines. It can operate as a standalone or can be networked to perform complex HVAC control, monitoring and energy management functions.

Building operating system access from anywhere via the Web

Let the TALON system with BACnet advance your building's performance with anywhere accessibility and programmability.

Remote Communication with TALON View

- Centralize programming throughout architecture
- Access remote sites simultaneously
- Monitor and command every level of the system remotely via the Web and plug & play controllers
- Secure access via SSL
- Send critical alarms and system event notifications to pagers, phones, SMS or Web-based email

Information Management using TALON View

- Create and automatically schedule reports to any Ethernet printer or file
- Achieve long-term, enterprise-wide data processing, archiving. Includes a wide range of applications designed to give the right people the right information at the right time
- Maintain accreditation, regulatory and energy conservation goals
- Manage the entire life cycle of an alarm issue through tracking and enforcing mandatory operator actions toward alarm resolution

Unique System Scalability with TALON View and the Web Server Solution

- Unlimited users with the Web server solution
- Wide array of system configurations optimally engineered for facilities small to large
- Sophisticated facility-wide control applications with an enterprise network
- Application specific controllers tailored to your specifications
- Accommodate future expansion with flexible I/O point options
- Custom control sequences for any unique facility need

Efficient Facility Management

- Auto learn and connect with network
- No PC hardware to maintain when using Web server
- Monitor, command and program system controllers through the BACnet Web server
- Review automatic logs of commands, overrides and system changes made by system operators
- Locate and troubleshoot problems quickly

- Quickly schedule and modify facility usage
- Use site-wide licensing solutions to cost effectively add multiple TALON View workstations
- Assign each user unique system-wide access privileges based on name and password
- Make modifications using complete suite of system design and commissioning tools

Interoperability and adaptability at every level

BACnet protocol performs across multiple systems,
providing the necessary foundation for future expansion.

The BACnet Solution

TALON offers the functionality of a native BACnet Web-based system protocol. With BACnet incorporated into every level — from the workstation or controller embedded Web server down to the field level network devices — facility operators are empowered with a system that brings together standard protocol interoperability with time-saving features and functions. Boost productivity and enhance efficiency with remote paging, reporting and archiving, and Web-based functionality.

BACnet is the Heating, Ventilation and Air Conditioning (HVAC) industry standard protocol, according to its founding organizations, American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE), International Standards Organization (ISO), and American National Standards Institute (ANSI). Its reputation and growing use make it the best choice for a standard protocol across a system, or to use as an interoperability tool to help knit together a cohesive, tightly integrated system despite disparate technologies or vendor systems.

BTL (BACnet Testing Laboratories) listed components provide assurance that controllers are certified as interoperable and compliant to the BACnet protocol. Full programmability and flexibility of applications provides a complete, adaptable, and scalable Web-based solution that focuses your investment on value added capabilities.

The benefits of open TALON building automation with native BACnet:

- Simplified operation of complex building controls and multi-building sites
- System-wide control and operations management through a single, easy-to-use interface
- Anywhere system access and Web programmability
- Fast interpretation of control data for system optimization and cost savings
- Centralized programming throughout architecture for time and labor savings
- Cost-efficient retrofits and expansions within existing infrastructures

- Address and incorporate future trends, such as zero-energy and carbon neutral buildings
- Plug and play controllers
- Seamless interoperability of system level control applications
- Incorporation of industry standard BACnet protocol
- Backward/forward compatibility protects investments and eliminates system obsolescence
- Flexible, programmable, and field configurable controllers for terminal boxes

Exceptional occupant comfort in even the most demanding environments

TALON's powerful energy management applications like chiller plant optimization and demand control ventilation reduce energy waste and lower greenhouse gas emissions while creating a better indoor environment.

Wireless Products

Wireless components eliminate the need for interconnecting wiring, require no AC power, and utilize low-power designs that allow for multi-year battery life. Take advantage of wireless devices to:
- Modernize facilities; outdated or ineffective energy management systems can be replaced or updated quickly, easily and economically.
- Use significantly less wire and materials, both today and when reconfiguring space in the future.
- Speed up installation and minimize disruption to business operations and occupants.
- Move sensors in frequently redesigned spaces quickly and easily while using less wire and materials.

Energy-efficient Products

The design and construction of energy-smart buildings offers tangible benefits to building owners and occupants. Building owners can lower their energy costs by 50% or more while lessening maintenance and capital costs. Building occupants realize increased comfort, health and productivity. TALON building automation and HVAC field devices from Siemens help you achieve your building performance goals:
- Assist with gaining LEED credits for energy efficient and green building initiatives
- Engineered and proven control applications with extensive libraries limit rework and uncertainty
- Programmability at field level controller for quick and simple control application changes to meet the needs for advanced control capabilities

- Complete line of dependable and compatible HVAC field devices: valves and damper actuators, sensors, controllers, thermostats, switches and relays, and variable frequency drives

Sustainability Initiatives

As a global leader, Siemens has voluntarily incorporated environmental practices into many of their design and manufacturing process:
- Use of less materials in products
- Use of maximum allowable recycled materials
- Elimination of lead/tin-plating in all metals
- Reduction or elimination of paper labels when possible

Full-featured wireless sensors provide sensing, display, setpoint, and override for optimum consistency.

Complete solutions, from engineering to ongoing maintenance

With the backing of a leading manufacturer, Siemens Solution Partners are able to offer the best products and service — now and in the future.

Systems Integration

We offer a series of software drivers that makes integration as simple as possible. You won't find these drivers on any other system, and that's part of why the TALON system is a smarter choice.

Integrate facility subsystems into TALON for single point decision-making.
- Barber-Colman Network 8000
- CSI Driver
- Johnson Controls N2 Master
- Modbus Driver
- Pneumercator Driver
- Staefa SMART
- Trane Driver
- Veeder-Root Driver

A Siemens Solution Partner is your first, local source for industry-leading TALON Building Automation and world-class HVAC controls. Our company provides mechanical and HVAC system engineering expertise for optimum effectiveness at every phase of a building's life cycle.

Count on us for superior products and customizable solutions, fast commissioning and installations, and outstanding service.

- Extensive experience working with owners and consulting engineers in the design of BAS systems and BACnet integration
- Fast commissioning, installations and long-life dependability that reduce costs
- Environmentally friendly products — Siemens has voluntarily incorporated environmental practices into many of their manufacturing and packaging processes

- Continuous specialized training of Siemens Solution Partners to ensure you get the most out of your building
- Siemens research, development, and global expertise incorporated into the latest technology
- Energy-saving and cost-efficient HVAC products — a complete range of reliable and long-life temperature, humidity and CO_2 sensors, valves and actuators, damper actuators, and variable frequency drives that provide state-of-the-art control

Build upon past investments, meet today's needs, and prepare your building for the next emerging technologies. Contact your Siemens Solution Partner today to discuss building automation solutions that save energy, time and money.

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