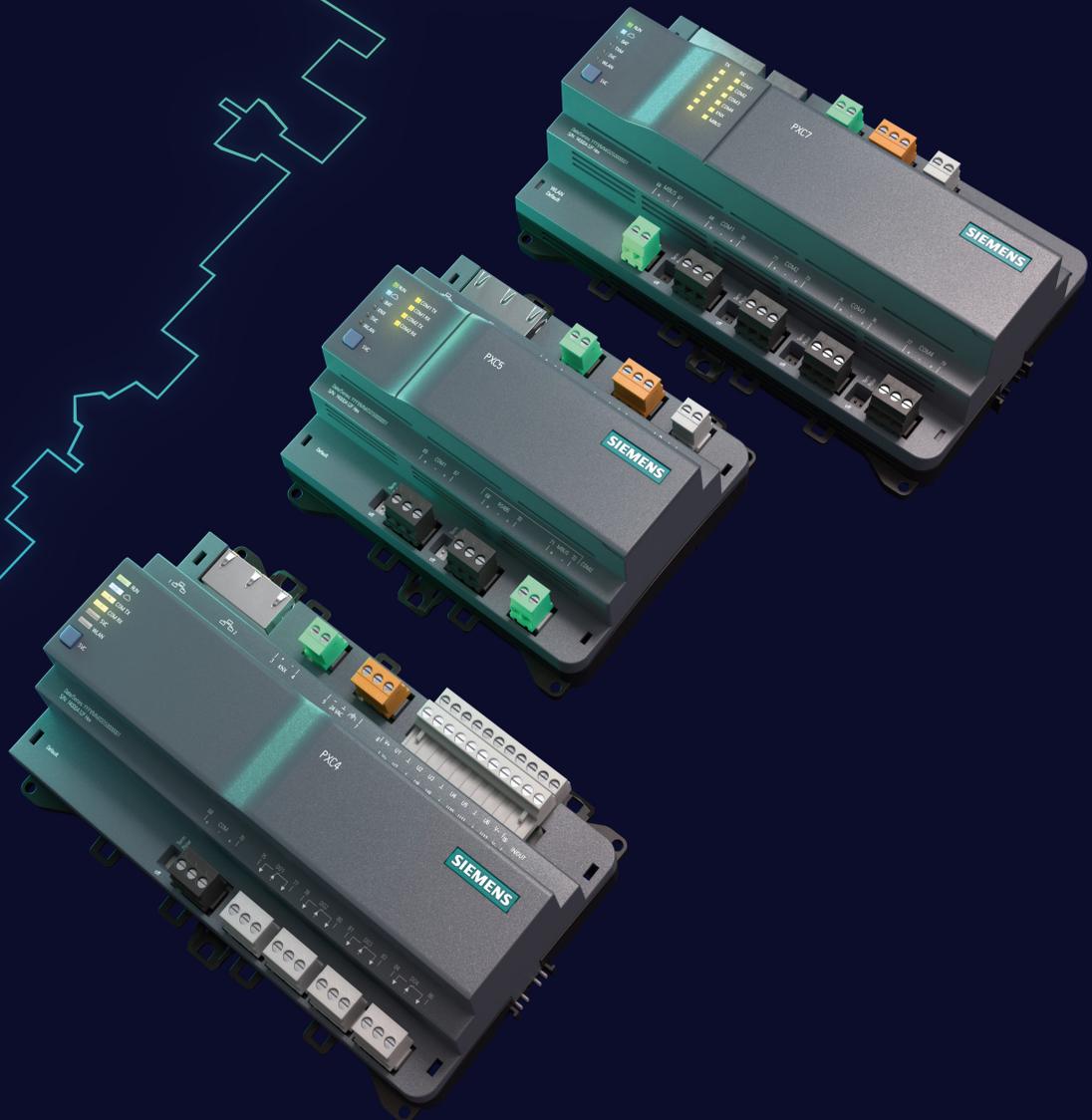


SIEMENS

DESIGO PXC CONTROLLER PORTFOLIO

Create High-Performing Buildings

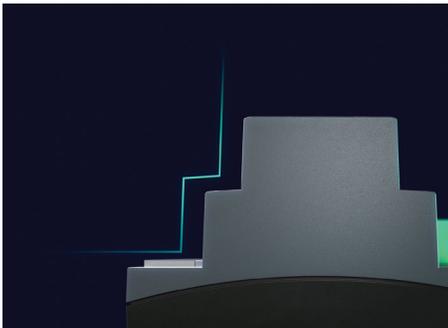
usa.siemens.com/desigo-automation



The next step in **Building automation control**

Today's buildings must be ready to effectively manage energy consumption, securely connect intelligent devices, and ensure the well-being of their occupants. This digital transformation future-proofs your building and starts at the core of a building automation system to optimize HVAC asset performance with powerful Designo PXC primary controllers. Designed to integrate with a full range of open building automation platforms, including Designo Optic's FIN Framework, the Designo PXC family of controllers delivers increased data processing power and memory. With these features you'll quickly transform your building into an IoT-enabled high-performing building in days, not weeks.

Designo PXC controller portfolio offers significantly faster, more efficient programming.



Flexible solutions

For use in a variety of buildings from small to large, the PXC4, PXC5 and PXC7 controllers allow you to configure, scale and accommodate a broad range of HVAC applications from central plant to room control.

Benefits include:

- Increase and adapt automation as your portfolio and system needs grow
- Expand to meet your building's unique automation needs – now and in the future – with software configurable I/O points so you use what you need without replacing the controller
- Open connectivity to third party devices and software via the latest standards and protocols including Modbus TCP/RTU, BACnet MS/TP or /IP, and easy access to BACnet/SC firmware updates

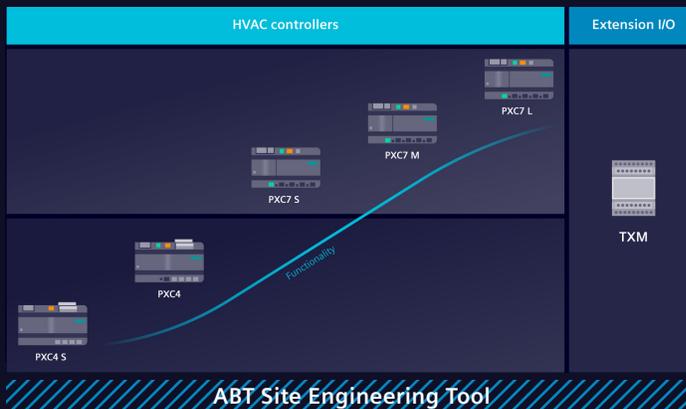


This project took us about half the time due to the PXC controller's custom saved library."

David Carpenter

Controls Manager, Holbrook Service

Designo PXC Scalability





Maximize implementation and commissioning workflows with easy simulation and troubleshooting tools.

Intuitive engineering

This comprehensive engineering solution allows you to use the same workflow to engineer and commission your complete HVAC plant, from primary to room automation, and various connected field devices.

Benefits include:

- Seamless programming from a single, license-free tool – ABT Site – used for PXCs and DXRs, provides an intuitive user-experience to get things done easier, faster, and more reliably
- Graphical block programming guides workflows and eliminates redundant coding for faster engineering and project replication to keep your workforce productive
 - Save and access pre-programmed libraries to speed engineering workflow
 - Low-code solutions make it easier for a less experienced engineering workforce
- Easy simulation and troubleshooting tools maximize implementation and commissioning workflow
 - Built-in simulation tool allows remote data point modeling prior to installation
 - Live data de-bugging while programming logic operates without interruption or system downtime
 - Faster point checkout and commissioning with instant access to the data through wireless on-site connection to your PC or ABT Go mobile app
 - Effortlessly deliver remote digital service and diagnostics through a built-in web interface to reduce truck roll costs
- Across the controller network, central functions automatically distribute intelligence and aggregate information to simplify system set up and further reduce engineering code



Advanced cybersecurity

Today's advanced devices require the highest level of data security. That is why the PXC controllers come with strong, built-in features. Server communication is encrypted via https and the system benefits from password protection and hotspot disabling when unused. Designo PXC7 brings the new standard communication protocol BACnet Secure Connect to the line of PXC controllers, a crucial requirement to secure connected building automation systems and defend them against cyber attacks.

- BACnet/SC compliant to harden buildings to the highest security standard with encrypted and authenticated datalink
- Secure local connectivity with WLAN access
- Certificate management provides secure connectivity – remote and onsite – to the device's browser-based web interface
- Proactive firmware management with signature protects your device before it leaves the factory

Powerful controllers with extensive functionalities for all building sizes

Desigo PXC4, PXC5 and PXC7 support you throughout all the phases of your building project to make your work better, faster and easier. And they grow with you as your building automation needs expand, through seamless integration with Desigo Optic building automation software or other open platforms.

Discover the power of Desigo PXCs to eliminate inefficiencies, improve decision-making and sharpen building operations. They're your entry to a new era of automation control.



Engineering

Start the engineering of your PXC controllers with ABT Site. Easily set-up the data points no matter if they are from BACnet or Modbus. The hardware and software remain the same, making your work much easier. With easily configurable I/O points, you can expand based on your building's unique needs without the added cost of replacing the controller.



Programming

Still on ABT Site, use the program and function blocks to save valuable time on your programming. Add the application examples and assign the field devices with the click of a mouse and simply drag and drop. Graphical block programming reduces code and speeds up engineering workflow through the use of saved and pre-programmed libraries.



Commissioning

Download the application and enjoy fast commissioning with live values displayed in ABT Site or the built-in web interface. To ensure maximum flexibility, use the ABT Go mobile app for efficient point testing and essential documentation.



Maintenance

It has never been easier to maintain your automation system than with ABT Site to reduce equipment downtime and improve response times. No need to travel on-site, just access the device using your preferred remote connection through the cloud to identify the error and correct it from your PC.

Functions at a glance

	PXC4 HVAC controller	PXC5 System controller	PXC7 Building Automation controller
BACnet/SC compliant with encrypted and authenticated datalink	✓	✓	✓
System functions (alarming, scheduling, trending)	✓	✓	✓
Increased system functions and supervisory capabilities		✓	✓
Freely programmable with function blocks libraries	✓	✓	✓
Built-in web interface to view and command datapoints	✓	✓	✓
Flexible I/O functionality via onboard and/or expansion (Total = Onboard + Expansion)	✓ (40) ^a		✓ (400) ^b
Integration of Modbus data points, TCP and/or RTU (Modbus points)	✓ (40) ^c	✓ (500)	✓ (400) ^d
MS/TP to IP routing with 60 devices per trunk (trunks x devices per trunk)		✓ (2x60)	✓ (4x60) ^e

See datasheet for details.

a - All PXC4 types have 16 onboard I/O with optional 24 expansion I/O.

b - Up to 400 expansion I/O points. Depends on PXC7 type; S, M, or L.

c - PXC4.x16S models do not include Modbus integration.

d - Up to 400 Modbus points. Depends on PXC7 type; S, M, or L.

e - Up to 4 MS/TP trunks. Depends on PXC7 type; S, M, or L.

Extension I/O examples

Type	Description
TXM1.16D	16 Digital input module
TXM1.8D	8 Digital input module
TXM1.6R	6 Relay output module
TXM1.6R-M	6 Relay output module (with override)
TXM1.4D3R	4 Digital input and 3 relay output module
TXM1.8T	8 Triac output module
TXM1.8U	8 Universal I/O module
TXM1.8U-ML	8 Universal I/O module (with override and display)
TXM1.8X	8 Super universal I/O module
TXM1.8X-ML	8 Super universal I/O module (with override and display)
TXA1.K12	Address keys 1-12 (other addresses available)

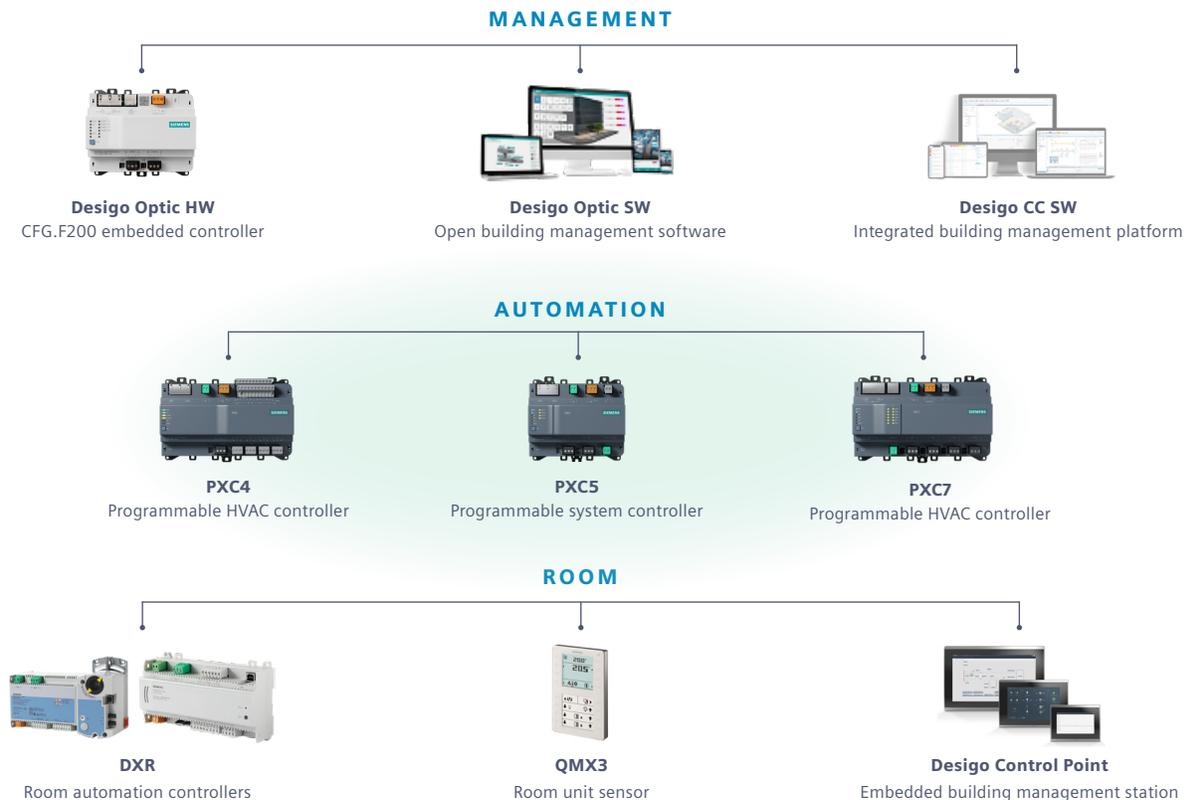
Further I/O extension modules, devices and accessories can be found in the product catalog on hit.sbt.siemens.com

Desigo Building Automation solutions for optimal building management

Desigo Building Automation PXC4, PXC5 and PXC7 controllers share a single platform for optimal building management that allows you to configure, scale, and accommodate a wide range of HVAC applications: from central plant to room control. Creating high performing buildings requires a holistic system that can constantly evolve and provide the perfect tools for getting the most out of any building.

Desigo provides the right hardware and software for every level in small, medium or large buildings. Our solutions can address connected devices, room automation, HVAC automation, building automation systems software, and cloud solutions. With the Desigo Building Automation system, it is easy to automate, engineer, operate, and manage any high performing building, regardless of size.

Desigo Building Automation Solution





We have to maintain this building for our tenants under contract and for health and safety standards. So, when you have something that's quick and easy to install, you just can't put a price on that."

Mike Spratt, Lowell 17^{LLC}
Lead Building Engineer of Mixed-Use Medical Building
Denver, Colorado

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