



MAXIMUM COMFORT AND ENERGY EFFICIENT

Save energy while maintaining a constant room climate

Room thermostats that maximize control accuracy for heating, ventilation and air conditioning.

usa.siemens.com/thermostats

SIEMENS



Room thermostats for maximum comfort and energy efficiency

The Siemens line of communicating and non-communicating thermostats features a range of products for simple to more complex buildings to optimize building efficiency and achieve more energy savings and a higher degree of comfort.

Efficient facility management is made easy with basic climate control to advanced BACnet integration into building automation systems turning complete room control into a reality.

In a world where demands for comfort and efficiency are high, these reliable products are simple to install and are maintenance free making healthy indoor environments achievable, all while reducing energy costs without compromising comfort.

With special emphasis placed on easy installation, operation and reliability with fewer callbacks, this portfolio is backed by intuitive engineering and a simple selection process.

Stand-alone room thermostats cover all room HVAC system applications including Rooftop Units (RTUs), heat pumps, and fan coils.

BACnet communicating thermostats offer powerful yet cost-effective room automation. These communicating thermostats are offered for room climate control and more sophisticated room automation in projects with Siemens Desigo controllers.

The option to integrate Siemens thermostats into building management systems including Desigo CC, Desigo Control Point and Desigo Optic helps to enable remote operation and service.

Increase building efficiency and reduce operational costs. Your single-source solution starts here.



Siemens offers a 5-year warranty on thermostats.



Communicating thermostat range

Energy savings without compromising room comfort

This range of communicating wall-mounted thermostats fits your application while reducing energy costs for optimal building efficiency. These products offer extensive features designed to cover a broad array of applications especially suitable for multi-use and managed residential spaces.

Powerful solutions for a broad range of applications

The RDB160BNU and RDY2000BN thermostat range of communicating wall mounted room thermostats feature built-in temperature and humidity sensors with configurable IAQ applications. These products undergo continuous developments to meet new market trends and requirements, and they offer extensive features to cover a broad range of applications.

RDB160BNU Communicating Fan Coil Thermostat

One product for all applications

Built for small- to medium-size commercial and public building applications, the RDB160BNU is designed for commercial fan coil unit applications with BACnet MS/TP communication. The device has a tailored combination of on/off and modulating output signals, making it versatile to control 16 different types of fan coil units. This simple, cost-effective room automation solution enables various control strategies including Comfort, Standby (Economy), and Mold Protection. The mold protection

feature improves indoor air quality and helps eliminate mold growth from moisture due to a lack of air circulation. A built-in temperature sensor and configurable inputs enable advanced room controls. Analog, universal, and digital inputs are also available and can be configured to further enhance the operation and reduce energy consumption.

Features:

- Controls 2-pipe with or without electrical heater and 4-pipe fan coil units
- Security functionality to lock the device from unpermitted access
- Set point limitation for the permitted set point offset can be limited upward or downward
- Valve exercising feature operates valves sporadically after long periods of inactivity
- BTL listed MS/TP for compatibility with any BACnet system for easy integration into Apogee and Desigo systems



- Pre-programmed, pre-configured control programs
- Built-in temperature sensor in addition to configurable inputs
- Changeover between heating and cooling mode
- Low voltage (24 VAC) control circuitry
- Setup wizard
- No special tools required

System Applications:

- Fan coil

RDY2000BN BACnet Commercial RTU

Versatile and flexible

Designed with a special focus on versatility in order to cover an extensive range of HVAC applications for schools, medical and financial offices, retail establishments, restaurants and light manufacturing facilities, this BACnet MS/TP-enabled device is highly flexible. It supports multi-stage conventional, RTU and heat pump applications. It features a modern and slim design that includes multiple, configurable inputs and outputs for flexible sensing schemes and sensors such as CO₂ occupancy and output relays for economizer and humidity control. Built-in IAQ applications and humidity control ensure occupant comfort with simple configurations.

Features:

- Compatible with conventional and heat pump applications
- BTL listing
- BACnet 7-day scheduler, COV support for BMS integration
- Support auto-baud, -address & -discovery*
- Mass configuration*
- Pre-built graphics*

System Applications:

- RTU, Heat Pump

*when using Siemens tools software

Non-Communicating thermostat range

Flexible devices covering a broad range of applications

Our selection of non-communicating thermostats are manufactured to the same Siemens quality as other HVAC products to provide outstanding control to reduce energy costs and increase occupant comfort. These highly flexible devices cover a range of applications with fewer SKUs making stocking and servicing simple.

The RDY range features a touch screen with multiple built-in sensors and configurable IAQ applications, and the RDG range is for stand-alone applications and is easy to configure to cover most simple HVAC applications.



RDY2000 Thermostat

The Siemens Series RDY2000 Commercial Room Thermostat is designed for light commercial HVAC systems that utilize 24 Vac control circuitry. It is compatible with forced air, hydronic, or steam systems fired by gas, oil or electricity. The thermostat can control up to three stages of heating and three stages of cooling in a conventional system and heat pump systems with up to two compressors and two stages of auxiliary heat. It can interface with remote sensors and devices to completely manage all aspects of room comfort, including temperature, humidity, and air quality.



RDG110U Thermostat

Siemens RDG110U is a versatile wall-mounted thermostat for low voltage, stand-alone applications such as in hospitality, dormitory or light commercial applications. Multi-functional inputs can be configured for keycard input, window contacts or external sensors. Designed for commercial applications based on Siemens vast controls expertise.



RDG160TU Thermostat

Siemens RDG160TU is a versatile wall-mounted thermostat for low voltage, stand-alone applications such as in hospitality, dormitory or light commercial applications. Multi-functional inputs can be configured for keycard input, window contacts or external sensors. Designed for commercial applications based on Siemens vast controls expertise. The RDG160TU supports modulating valve and fan control.



RDG400 Thermostat

Siemens RDG400 is a versatile Single Duct VAV Thermostat Controller for low voltage, stand-alone applications such as hospitality, dormitory or light commercial applications.

System applications at a glance



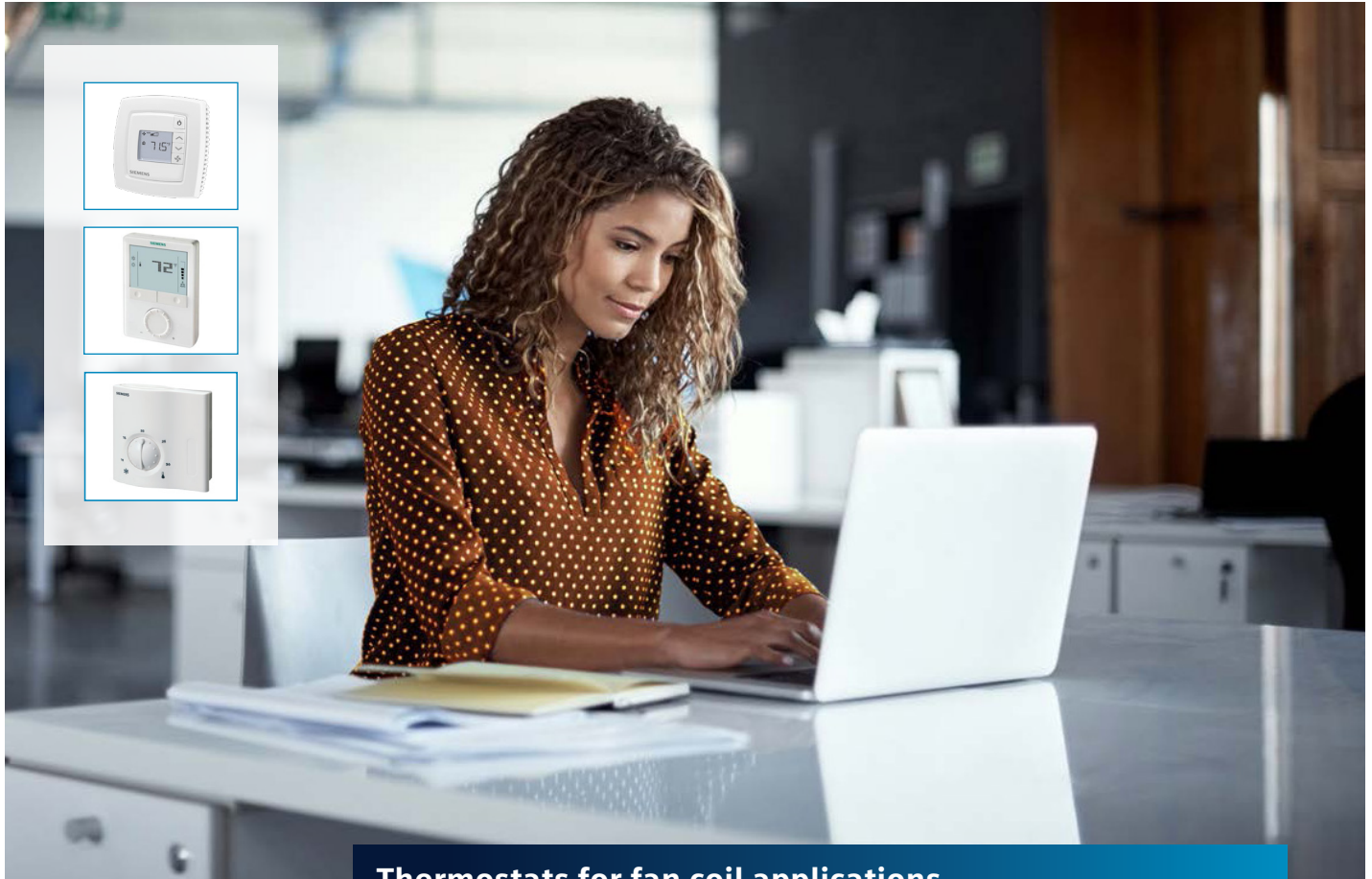
Energy-efficient room temperature control

We offer room thermostats for optimal control and programs for building types such as commercial, light residential, multi-use, high rise, educational facilities and hospitals. These systems can be applied to RTUs and heat pumps, and fan coil applications. Multifunctional inputs allow activation of functions like dew point monitoring, window contact and remote changeover, if desired. Variants with a BACnet communication interface make it possible to control the primary system with even greater energy efficiency. Configurable time programs (day/week/vacation) prevent unnecessary energy consumption when rooms are not in use for optimal energy savings.



Thermostats for RTU and heat pump applications






From manual operation to automatic control, room thermostats for RTU and heat pump applications address the heat pump directly; in other words, they can control and release the pump according to the desired room temperature. This prevents overheating from sun exposure or energy from an external source. In applications with reversing valves, the room thermostats control compressors in heating or cooling mode with automatic or manual changeover. The configurable parameter for the minimum on and off times prevents damage to the compressor that would result in a shorter service life.



Thermostats for fan coil applications

Fan coil systems are especially appropriate for individual room control in hotels, offices, dormitories and multi-family housing. The wall- or flush-mounted room thermostats control 2/4-pipe fan coil applications directly, even with add-on functions like electrical heating or underfloor heating. Thanks to configurable parameters, the room thermostats can also control different types of drives (PWM, 3-point and DC) and fans (DC signals). Integrated functions like time programs, presence detectors and supply-air temperature limitation automatically optimize energy demand – without sacrificing room comfort.

An overview of the room thermostat portfolio

Applications	Non-Communicating Thermostats			Communicating Thermostats	
	RDG110U, RDG160TU, & RDG400	RAA20	RDY2000	RDB160BNU	RDY2000BN
					
Heating	•	•	•	•	•
Cooling	•	•	•	•	•
Heat Pumps	•		•		•
Fan Coils	•			•	
VAV	•				
Humidity	•		•		•
Indoor Air Quality	•				

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Room thermostats

Detailed view of thermostat portfolio

		Applications													Functionalities										Outputs				Inputs				Power Supply																											
		Heating only	Cooling only	Heating or cooling	Heating and cooling	2-stage heating	2-stageheating or cooling	2-pipe/heating only	2-pipe/cooling only	2-pipe heating or cooling	2-pipe with electric heater	2-pipe with radiator	4-pipe cooling and heating	Indoor air-quality control	Control algorithm	Flush-mounted unit	Automatic heating/cooling changeover	Manual heating/cooling changeover	Vmin, Vmax limitation of supply air	Floor heating limitation	Dew point monitoring	24-hour time program	7-day time program	Manual fan speed Off/III/II/II	Automatic fan control	3-or 1-stage fan	Electronic communicated fan motor1)	Fan function enable/disable	Communication interface	On/Off	PWM	3-position	DC 0...10 V	Operating mode/ remote contact	Heating/cooling changeover sensor	Remote or return air temperature sensor	Multifunctional inputs	Operating mode changeover contact	Operating mode changeover contact	Touchscreen	Set point knob	Set point button	Fan speed button	Operating mode button (B)	Digital display (LCD)	Background lighting	Additional operation selection/remarks													
RTU, Heat Pump and Ducted Split for Residential	Communicating																																																											
	RDY2000BN	●	●	●	●	●	●								PID	●	●					●	●			●				BACnet	●				●	●	●				AC 24 V	●				●	LCD	●												
	Non-Communicating																																																											
	RDY2000	●	●	●	●	●	●								PID	●	●					●	●			●					●				●	●	●				AC 24 V	●				●	LCD	●												
VAV, Fan Coil and Basic	Communicating																																																											
	RDB160BNU																																				BACnet	●	●	●	●				●	●	●				AC 24 V				●	●	●	LCD	●	
	Non-Communicating																																																											
	RDG110U																																				2P	●	●	●	●	●	●				●	●	●				AC 24 V	●	●	●	LCD	●		
	RDG160TU																																				2P/PI	●	●	●	●	●	●				●	●	●				AC 24 V	●	●	●	LCD	●		
	RDG400	●	●	●	●	●	●								P/PI	●	●	●	●	●													●				●	●	●				AC 24 V	●				●	LCD											
	RAA20	●	●																																	2P				●							AC 23...250 V													
	RAA20U	●	●																																	2P				●							AC 23...250 V													

Siemens offers communicating and non-communicating room thermostats for complete room control to maximize comfort and energy savings for a healthy and productive indoor climate. Our single source solution helps ensure occupant comfort while optimizing building efficiency and indoor air quality.



Versatile Product Portfolio

Thermostats for every HVAC application



Quality

Rigorous testing to meet Siemens high standards



Less Effort

Easy to install and maintenance-free



Indoor Air Quality

Ensure healthy indoor climates



Maximize Comfort

Ensure occupant comfort and productivity



System Performance

Optimize building efficiency

Legal Manufacturer

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