

KNX IoT to BACnet IP gateway

OCT200.KNBA



KNX IoT to BACnet IP gateway

- Bridge between BACnet IP and KNX IoT mesh network
- Wireless communication via KNX IoT over Thread
- Support BACnet IP over Ethernet connection
- Mains-powered by AC 100...240 V (with external power adapter)
- Commissioning and configuration via web UI over WLAN using PC or smartphone
- LED indication of power and network connection state

Use

Wireless communication via KNX IoT over Thread exchanges data with sensors and tools over a wireless Thread network.

Typical application:

- Commercial office building
- Public infrastructure

Functions

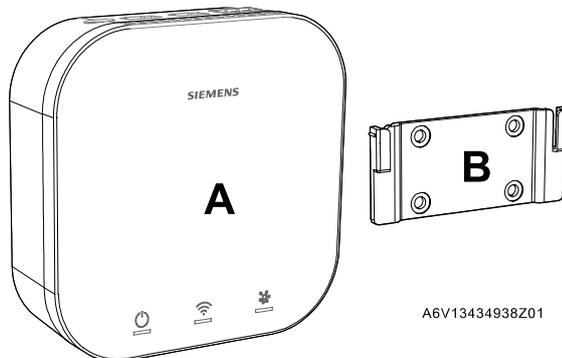
- 2 push buttons reset the device to factory settings, switch on/off WLAN or join Thread network
- The LED indicate:
 - Power status, WLAN connection, Thread connection
 - Device restart
 - Factory reset
 - Operation state
- Commissioning and configuration via web UI using PC or smartphone
- BACnet IP over Ethernet
 - IPv4 and DHCP client
 - Factory assigned MAC address
 - BACnet IP setting and data server
 - Time synchronization from BACnet client

Mechanical design

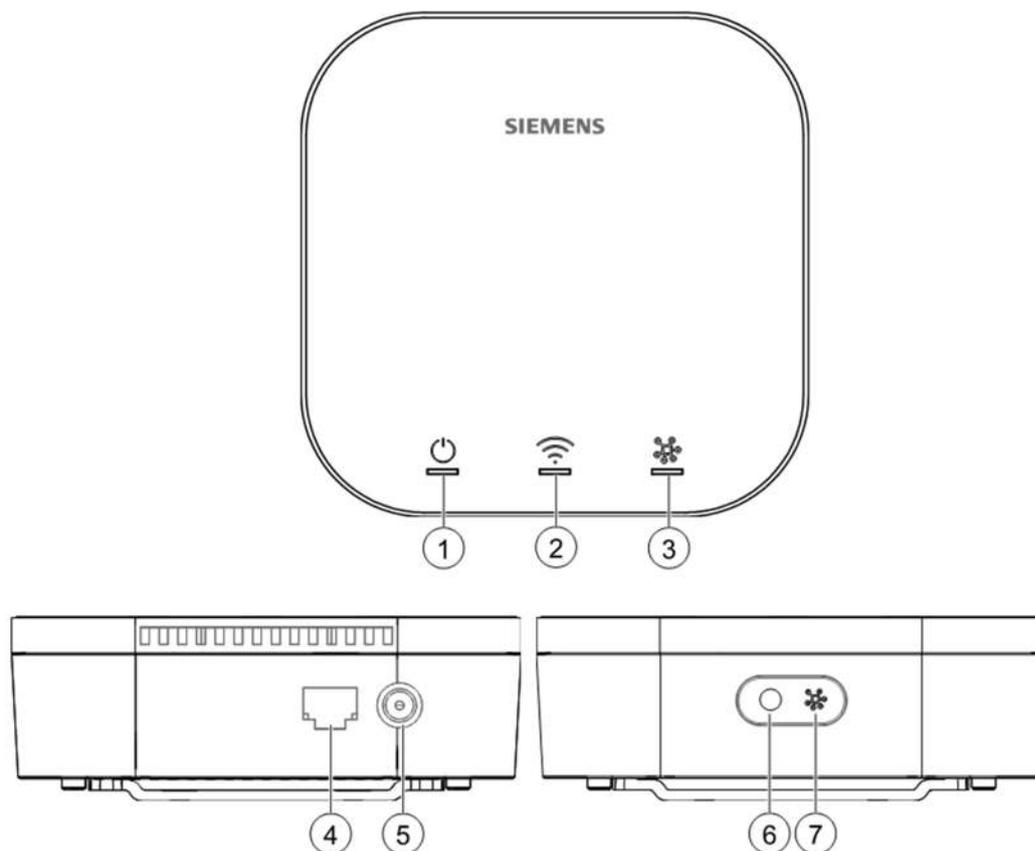
Gateway is designed for wall mounting and ceiling mounting.

The device has 2 parts:

- Plastic housing with electronic components (A)
- Mounting plate (B)



Operation



No.	Product description	No.	Product description
①	⏻ LED A: Device	⑤	Power input terminal
②	📶 LED B: WLAN	⑥	○ Button A for factory reset and WLAN on/off
③	🌐 LED C: Thread	⑦	🌐 Button B for gateway joining Thread network
④	Ethernet terminal		

Type summary

Product number	SSN NO.	Operating voltage	Description
OCT200.KNBA	S55812-Y102	DC 12 V	KNX IoT to BACnet IP gateway

Delivery

When ordering, specify name and product number, e.g.: KNX IoT to BACnet IP gateway OCT200.KNBA.

Inbox items

Name	Quantity
OCT200.KNBA	1
Power adapter	1
Mounting plate	1
Mounting instructions	1
Set of screws and plastic insert	1

Equipment combinations

Type of units	Product number	SSN NO.
Wireless room sensor	QAA2890/WI	S55720-S550
	QFA2890/WI	S55720-S551
	QPA2892/WI	S55720-S552
Thread mesh extender	OCT100.R	S55812-Y101

All documents can be downloaded from <http://siemens.com/bt/download>.

Product documentation

Title	Document ID
Mounting instruction	A6V13434940
Operation manual	A6V12905642
CE declarations	A5W00299442A
RCM	A5W00299447A
UKCA	A5W00299443A
Environmental product declaration	A5W00284134A

Related documents such as the environmental declarations, CE declarations, etc., can be downloaded from the following Internet address:

www.siemens.com/bt/download

Safety

⚠ CAUTION**National safety regulations**

Failure to comply with national safety regulations may result in personal injury and property damage.

- Observe national provisions and comply with the appropriate safety regulations.

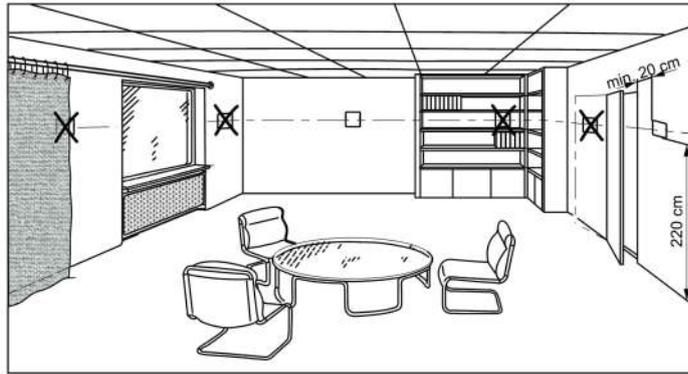
NOTICE**Radio frequency energy**

Interference to radio communications

- Install and use equipment in accordance with installation guide.
- Read all regulatory compliance information.

Mounting

Location



- The device is designed for wall mounting and ceiling mounting.
- Do not install the device on a horizontal surface.
- Install power supply above ceiling tiles.
- Install in indoor environments (device is not suitable for outdoor use); do not install in recesses, behind curtains, above or close to heat sources or shelves and not on walls where a chimney is located. Do not expose the unit to spot lights or direct sunlight.
- Install the gateway in the occupied space about 2.2 m above the floor, at least 20 cm from the next wall.

Mounting instructions

Mounting instructions are enclosed in the package.

Colors and patterns

In the following table:

- Short press (<2 s)
- Medium press (5...20 s)
- Long press (≥ 20 s)

LED A

LED color	Device status	LED pattern	Push button operation
Off	Unpowered device or device is switched off.	Off	N/A
Green	Start up (e.g. device is powered on)	Fast flashing (100 ms on / 100 ms off)	N/A
	Normal (connected)	On	
	Firmware downloading		
	Firmware installation	Fast flashing (100 ms on / 100 ms off)	
Orange	Factory reset	Fast flashing (100 ms on / 100 ms off)	Long press button A  to start factory reset
Red	Hardware error	Fast flashing (100 ms on / 100 ms off)	N/A
Green	Confirm key press	Flashing ($1/4$ s on / $7/4$ s off) until button pressing stops	Middle press button A 

LED B

LED color	Device status	LED pattern	Push button operation
Off	LAN/WLAN is not connected or switched off.	Off	N/A
Green	WLAN access is switched on.	On for 3 s	Middle press button A 
	Device joins Thread network.	Fast flashing (100 ms on / 100 ms off)	N/A
Orange	WLAN access is switched off.	On for 3 s	Middle press button A 

LED C

LED color	Device status	LED pattern	Push button operation
Orange	Thread initial status (Device is not defined or joined a network.)	On	N/A
Green	Commissioning mode	Fast flashing (100 ms on / 100 ms off)	N/A
	In operation	On	
	Joining	Flashing ($1/4$ s on / $7/4$ s off)	
Red	Connection lost	Flashing ($1/4$ s on / $7/4$ s off)	N/A

Maintenance

The device is designed for maintenance-free operation.



This symbol or any other national label indicate that the product, its packaging, and, where applicable, any batteries may not be disposed of as domestic waste. Delete all personal data and dispose of the item(s) at separate collection and recycling facilities in accordance with local and national legislation.

For additional details, refer to [Siemens information on disposal](#).

Regulatory compliance information

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation

FCC Caution: Changes or modifications not expressly approved by Siemens Switzerland Ltd. could void user authority to operate the equipment. United States representative <https://new.siemens.com/us/en/products/buildingtechnologies/home.html>

IC Statement

This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radiofrequency radiation exposure statement

This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Déclaration d'exposition aux rayonnements de radiofréquence

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Ce transmetteur ne doit pas être placé au même endroit ou utilisé simultanément avec un autre transmetteur ou antenne.

United Kingdom conformity assessed

Contact for regulatory topics: (GB) Siemens plc, Sir William Siemens House, Princess Road, Manchester, M20 2UR

Radio equipment directive

Simplified EU Declaration of Conformity

Hereby, Siemens Switzerland Ltd declares that the radio equipment type OCT200.KNBA is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <https://siemens.com/bt/download>.

IMDA standards

The device complies with IMDA standards.

Complies with
IMDA Standards
DA107974

Warranty

Technical data on specific applications are valid only together with Siemens products listed under "Equipment combinations". Siemens rejects any and all warranties in the event that third-party products are used.

Technical data

Power adapter

Input characteristics	
Rated input voltage	AC 100...240 V
Operation range	AC 90...264 V
Rated input frequency	50...60 Hz
Input current	Max. 0.8 A at AC 100/240 V input & load 1 A
Standby power consumption	≤ 0.1 W at AC 240 V input & no load

Output characteristics	
Rated output voltage	DC 12 V
Representative current	1 A
Output voltage range	DC 11.4...12.6 V
Turn on delay time	Max. 3 seconds at AC 100 V & max. load

Cable length	
Length of prefabricated connecting cable	1.5 m

OCT200.KNBA

Power supply	
Operating voltage	DC 12 V
Power consumption	Max. 12 W

Radio communication	
Frequency range	2.4...2.485 GHz
Maximum transmission power	12 dBm (Thread) 20 dBm (WLAN)
Thread range	≤ 100 m, depending on application and building
WLAN range	≤ 100 m, depending on application, mobile device, and building
Thread protocol	IEEE 802.15.4
WLAN protocol	IEEE 802.11.b/g/n

Interface	
Ethernet Type Cable Interface type Bit rates	RJ45 CAT 5 or CAT 5e, non-shielding 100BASE-TX, IEEE 802.3 compatible 10/100 Mbps, auto-sensing

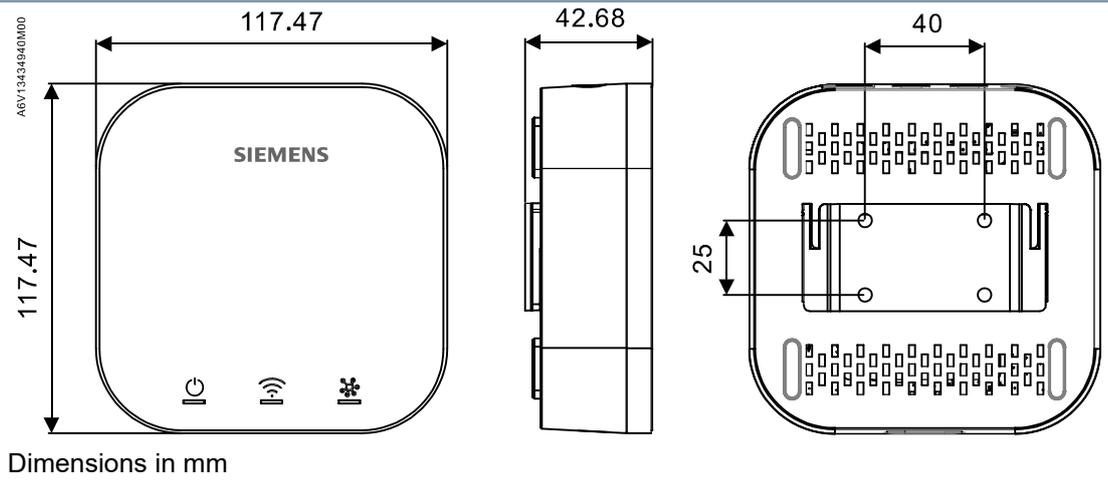
Ambient conditions and protection classification	
Protection degree of housing	IP30 according to EN60529
Protection class Power adapter OCT200.KNBA	II III
Environmental conditions	
Storage	
Climatic conditions	
Temperature	-25...+70 °C
Humidity	5...95 % r. h. (non-condensing)
Transport	
Climatic conditions	
Temperature	-25...+70 °C
Humidity	5...95 % r. h. (non-condensing)
Operation	
Climatic conditions	
Temperature (housing with electronics)	0...50 °C
Humidity	5...95 % r. h. (non-condensing)

Standards, directives and approvals	
Electromagnetic compatibility (Applications)	For use in residential, commerce, light-industrial and industrial environments
EU conformity (CE)	A5W00299442A *)
RCM conformity	A5W00299447A *)
UKCA conformity	A5W00299443A *)
RoHS	Directive 2011/65/EU restriction of the use of certain hazardous substances in electronic equipment
Environmental compatibility	The product environmental declaration (A5W00284134A *) contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal).

General	
Materials and colors	ABS, RAL9003
Packaging	Corrugated cardboard
Weight including package	Approx. 447 g

*) The documents can be downloaded from <http://siemens.com/bt/download>.

Dimensions



Dimensions in mm