SIEMENS OCT200.KNBA KNX IoT to BACnet IP Gateway Instruction Manual

Contents

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SIEMENS OCT200.KNBA KNX IoT to BACnet IP Gateway

Product Information

- **Product Name:** KNX IoT to BACnet IP gateway
- **Model:** OCT200.KNBA
- **Manufacturer:** Siemens Smart Infrastructure
- **Features**
  - Bridge between BACnet IP and KNX IoT mesh network
  - Wireless communication via KNX IoT over Thread
  - Supports BACnet IP over Ethernet connection
  - Mains-powered by AC 100-240V (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:

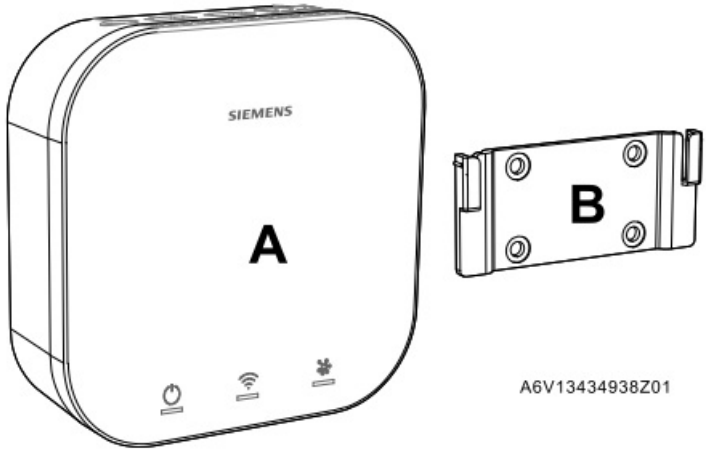
- Commercial office building
- Public infrastructure

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

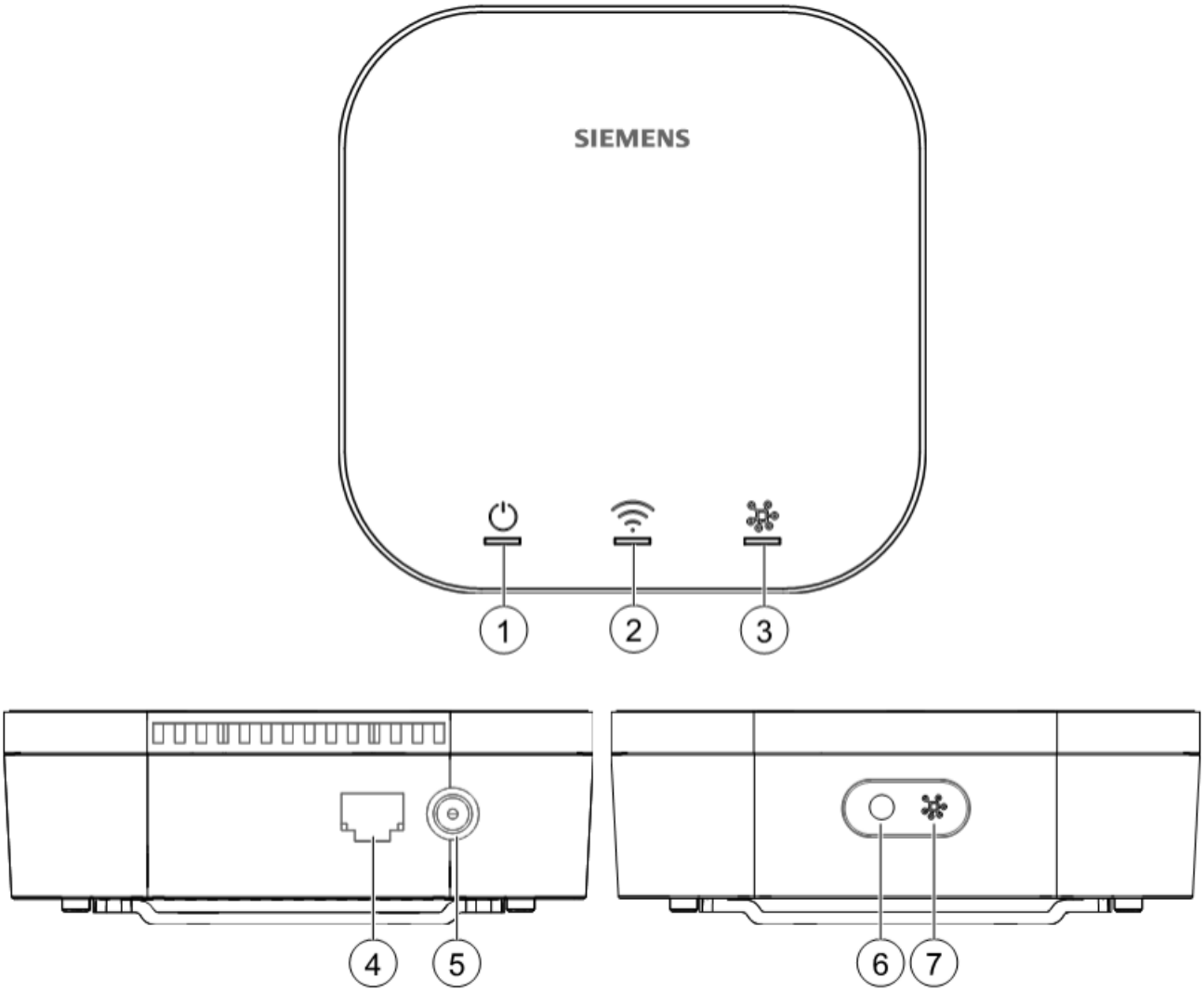
- IPv4 and DHCP client
- Factory-assigned MAC address
- BACnet IP setting and data server
- Time synchronization from BACnet client

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.

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.
Thread room sensor	QAA2890/WI QFA2890/WI QPA2892/WI	S55720-S550 S55720-S551 S55720-S552
Thread mesh extender	OCT100.R	S55812-Y101

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 environmental declarations, CE declarations, etc., can be downloaded from the following Internet address: **www.siemens.com/bt/download**

Safety

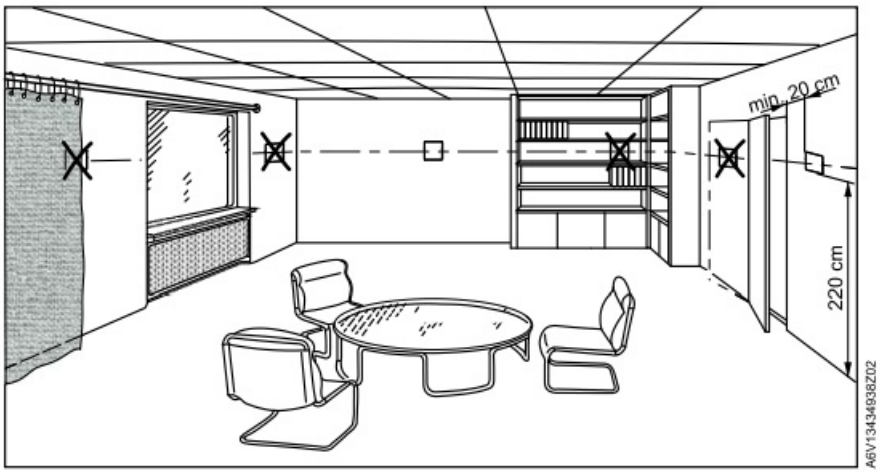
CAUTION National safety regulations
Failure to comply with national safety regulations may result in personal injury and property damage.

- 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



- 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 on inside wall (not an outside wall!) of the room to be air conditioned; not 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 and 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) means short press the push button.
- Middle press (5…20 s) means middle press the push button.
- Long press (≥20 s) means long press the push button.

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 po wered 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 (¼ s on / ¾ s off) until butto n 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 netw ork.	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 (Devi ce 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 (¼ s on / ¾ s off)	Short press button B
Red	Connection lost	Flashing (¼ s on / ¾ 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.

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.

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**.

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…… 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…2.4835 GHz
Maximum transmission power for EU	11.33 dBm (Thread)/19.27 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

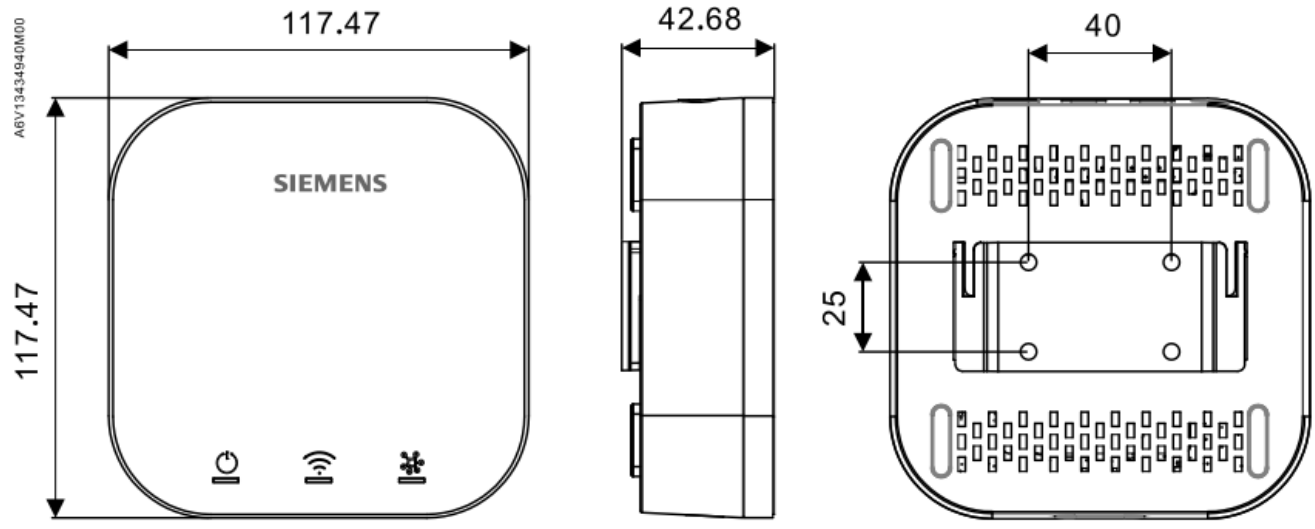
Interface	
Ethernet Type	RJ45
Cable	CAT 5 or CAT 5e, non-shielding
Interface type	100BASE-TX, IEEE 802.3 compatible
Bit rates	10/100 Mbps, auto-sensing

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 Humidity Transport Climatic conditions Temperature Humidity Operation Climatic conditions Temperature (housing with electronics) Humidity	 -25…+70 °C 5…95 % r. h. (non-condensing) -25…+70 °C 5…95 % r. h. (non-condensing) 0…50 °C 5…95 % r. h. (non-condensing)

Standards, directives and approvals	
Product standard	EN 62368-1, EN 301489-1, EN 301489-17 EN 300328 , EN IEC62311
Electromagnetic compatibility (Applications)	For use in residential, commerce and light- industrial e nvironments
EU conformity (CE)	A5W00299442A *)
RCM conformity	A5W00299447A *)
UKCA conformity	A5W00299443A *)
RoHS	Directive 2011/65/EU restriction of the use of certain h azardous substances in electronic equipment
Environmental compatibility	The product environmental declaration (A5W00284134A *) contains data on environmentally compatible product design and assessments (RoHS c ompliance, materials composition, packaging, environ mental benefit, disposal).

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

Dimensions



Dimensions in mm

Issued by Siemens Switzerland Ltd Smart Infrastructure Global Headquarters Theilerstrasse 1a CH-6300 Zug
+41 58 724 2424
www.siemens.com/buildingtechnologies

Documents / Resources

	SIEMENS OCT200.KNBA KNX IoT to BACnet IP Gateway [pdf] Instruction Manual OCT200.KNBA, OCT200.KNBA KNX IoT to BACnet IP Gateway, KNX IoT to BACnet IP Gateway, BACnet IP Gateway, IP Gateway, Gateway

References

- Smart Information Delivery
- Smart Information Delivery
- Building Technologies - Building Technologies - Siemens USA
- Smart Information Delivery
- SIOS