

CA10 Quick Guide

This document is a quick guide for installation of CA10 Cloud Access Point. Detailed instructions for its use are available at jade.vaisala.com/help.

More information and downloadable documents are available at the product page: www.vaisala.com/ca10

CA10 product overview

Cloud Access Point CA10 is a wireless networking hardware device intended for connecting CWL100 data loggers to Vaisala Jade Smart Cloud service. CA10 and CWL100 devices are associated with a specific cloud account when they are purchased, so there is no need for the user to do any device pairing.

CAUTION! CA10 requires an **Internet connection** for operation. If there is no network available at the installation location, you can provide the connection using a suitable mobile router. Note these network requirements:

- The connected network must provide the IP address automatically using DHCP. Many corporate networks require connecting devices to be registered before they can connect. In that case, you must provide the **MAC address** of the access point to your IT administrator. The MAC address is marked on the front of the access point (near the Ethernet connector) and on its type label in the back.
- CA10 must be able to connect to TCP port 443 (for Jade Smart Cloud service) and UDP port 123 (for Network Time Protocol service) through the firewall.

Table 1. Installation safety specifications

Property	Specification
Operating environment	Indoor use
Use in wet locations	No
Operating temperature	-20 ... +60 °C (-4 ... +140 °F)
Storage temperature	-20 ... +60 °C (-4 ... +140 °F)
Operating humidity	0 ... 90 %RH, non-condensing
Operating altitude	Max. 2000 m (6500 ft)
Pollution degree	2
IP rating	IP30
Operating voltage using dedicated power supply connector	10 ... 30 V DC
PoE power class	Class 0
Power consumption	Max. 13 W
Frequency band	See type label on device

Installing CA10

Required tools:

- Mounting kit 245679 (included in CA10 delivery package)
- Hand tools for mounting with screws:
 - Power drill with Ø 6 mm drill bit
 - Crosshead screwdriver



Scan the QR code to watch a video of the installation:

dreambroker.com/channel/sdz96ad5/58r18uad

1. Attach CA10 to its mounting location using the most suitable mounting option. Ensure the unit is securely fixed if you are mounting it higher than 2 m (approx. 6 ft) or in a location where it would pose a hazard if dropped.

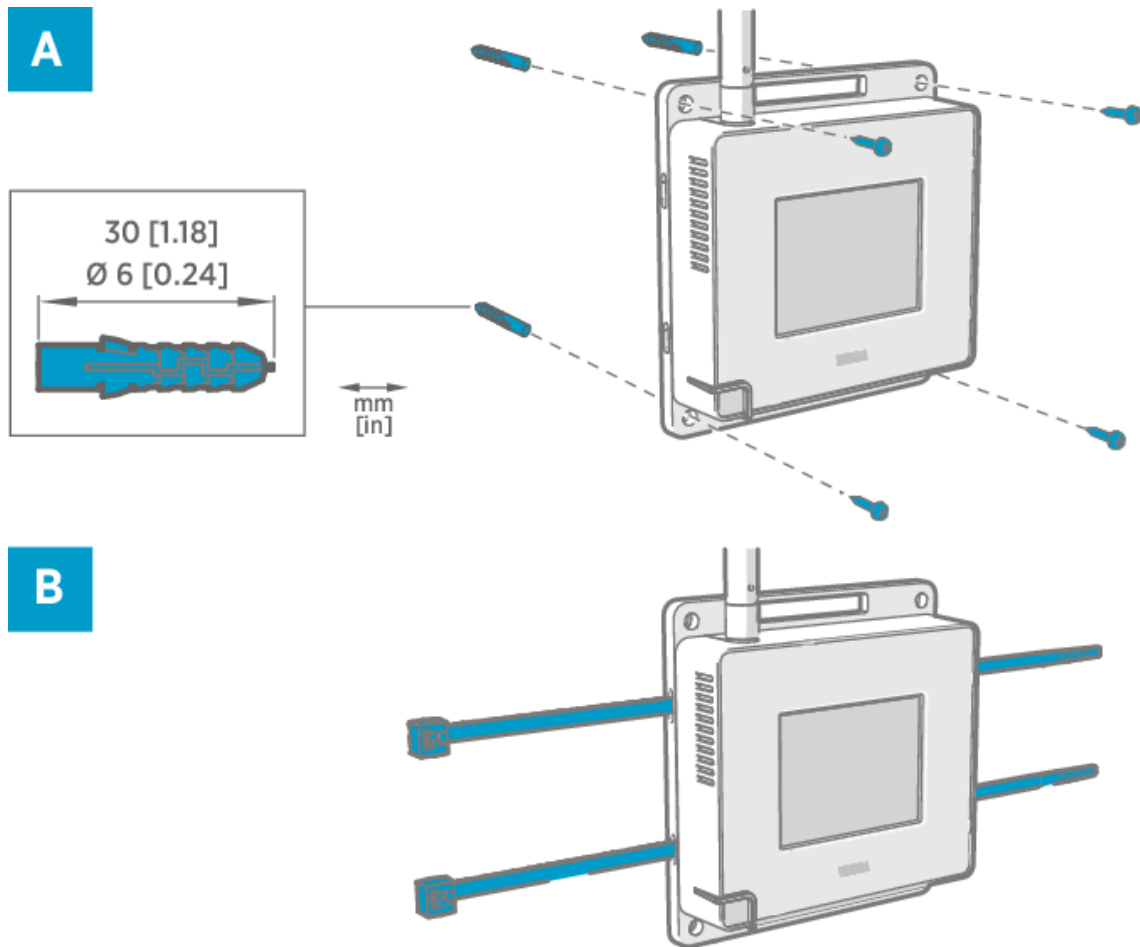
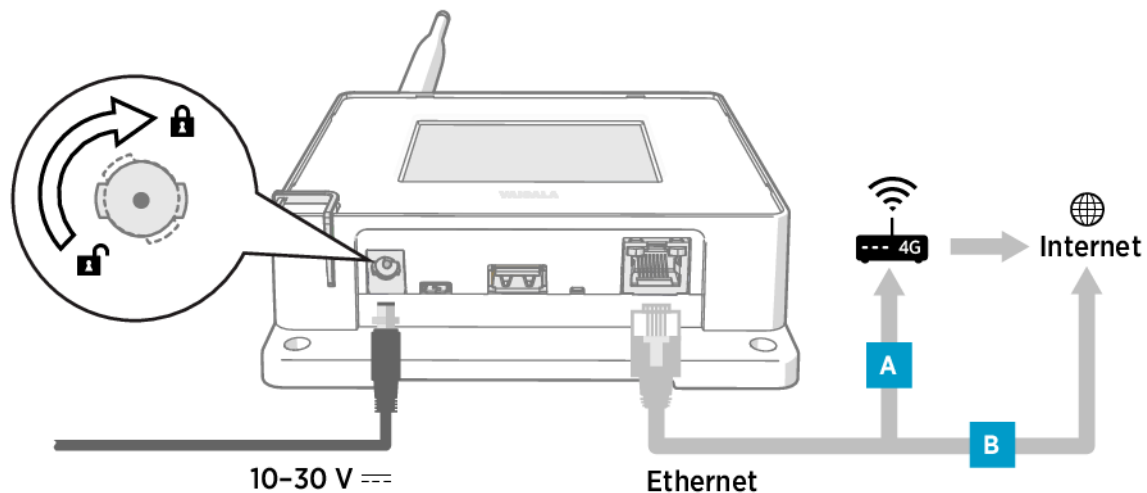


Figure 1. CA10 mounting methods

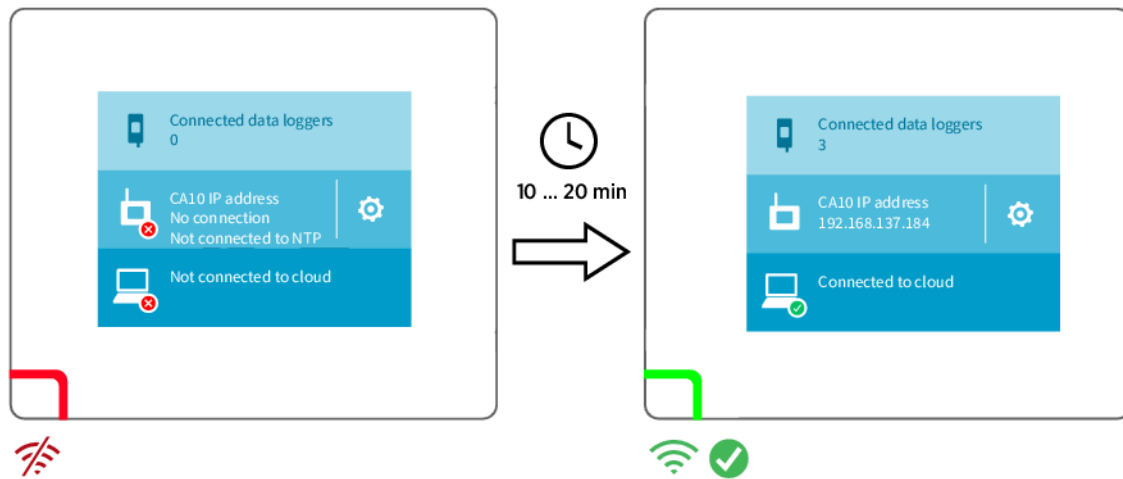
- A Mounting with wall plugs and screws (use at least 2 screws)
- B Mounting with cable ties

2. Point the antenna up or down for best wireless performance.
3. Connect CA10 to the network using an Ethernet cable. If CA10 starts up at this point, the Ethernet cable provides power using Power over Ethernet (PoE) and the separate DC power supply is not needed.
4. To connect the DC power supply:
 - a. Connect the plug to the power supply connector of CA10. Make sure the plug is oriented correctly and goes in all the way. Rotate the plug to lock it in, otherwise it will not stay reliably connected.
 - b. The power supply comes with multiple adapters for wall sockets. Connect the adapter you need, and plug in the power supply to a wall socket.
 - c. If necessary, secure the power supply so it does not fall or hang on its cable.



5. Wait for the access point to start up.
6. Make sure the power LED is green and the lower part of the display shows the text Connected to cloud.

Red LED indicates that CA10 has a connectivity problem and has turned off its radio. No data loggers can be connected until CA10 establishes an Internet connection and the LED is green again.

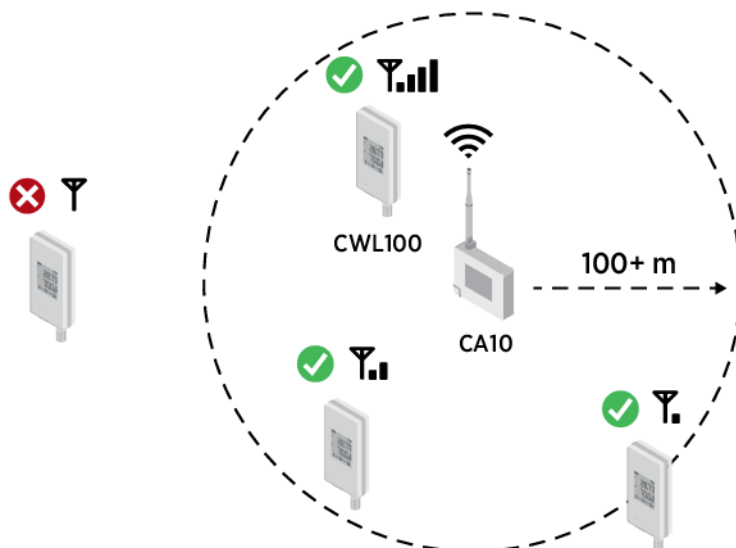


7. CA10 is now ready to connect CWL100 data loggers to Jade Smart Cloud. Data loggers that do not already have a connection will connect to this access point, up to the maximum capacity of 32 data loggers. It will take at least a few minutes for a data logger to be connected. If a data logger is in power save mode, the connection will take up to an hour.

If you have trouble connecting CA10, see the troubleshooting instructions at jade.vaisala.com/help.

Range of the wireless connection

Range of the wireless connection between a CA10 access point and CWL100 data logger is 100 meters (328 ft) in a typical indoor space. In an open space with line-of-sight and no interfering structures, the range can be over 500 m (1640 ft).



To extend the signal coverage, use multiple access points. This will also allow data loggers to automatically switch to an access point with a stronger signal if the connection is unstable. You can have up to 8 access points in the same area (in range of each other) but you must set each of them to their own radio channel. You can change the channel using the Jade service after you have connected the CA10 to the Internet.

Regulatory compliance

CA10 manufacturer and importer information

Made in Finland by:

Vaisala Oyj, Vanha Nurmijärventie 21, FI-01670, Vantaa

Imported to UK by:

Vaisala Ltd, 6230 Bishops Court, Birmingham B37 7YB

CA10E EU declaration of conformity

EN: Hereby, Vaisala Oyj declares that the radio equipment type CA10E is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following Internet address: www.vaisala.com/declarationofconformity

FI: Vaisala Oyj vakuuttaa, että radiolaitetyyppi CA10E on direktiivin 2014/53/EU mukainen. EU-vaatimusten mukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: www.vaisala.com/declarationofconformity

BG: С настоящото Vaisala Oyj декларира, че този тип радиосъоръжение CA10E е в съответствие с Директива 2014/53/ЕС. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: www.vaisala.com/declarationofconformity

CS: Tímto Vaisala Oyj prohlašuje, že typ rádiového zařízení CA10E je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: www.vaisala.com/declarationofconformity

DA: Hermed erklærer Vaisala Oyj, at radioudstyretypen CA10E er i overensstemmelse med direktiv 2014/53/EU. EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: www.vaisala.com/declarationofconformity

DE: Hiermit erklärt Vaisala Oyj, dass der Funkanlagentyp CA10E der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: www.vaisala.com/declarationofconformity

EL: Με την παρούσα ο/η Vaisala Oyj, δηλώνει ότι ο ραδιοεξοπλισμός CA10E πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: www.vaisala.com/declarationofconformity

ES: Por la presente, Vaisala Oyj declara que el tipo de equipo radioeléctrico CA10E es conforme con la Directiva 2014/53/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: www.vaisala.com/declarationofconformity

ET: Käesolevaga deklareerib Vaisala Oyj, et käesolev raadioseadme tüüp CA10E vastab direktiivi 2014/53/EL nõuetele. ELi vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil: www.vaisala.com/declarationofconformity

FR: Le soussigné, Vaisala Oyj, déclare que l'équipement radioélectrique du type CA10E est conforme à la directive 2014/53/UE. Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante: www.vaisala.com/declarationofconformity

HR: Vaisala Oyj ovime izjavljuje da je radijska oprema tipa CA10E u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: www.vaisala.com/declarationofconformity

HU: Vaisala Oyj igazolja, hogy a CA10E típusú rádióberendezés megfelel a 2014/53/EU irányelvnek. Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: www.vaisala.com/declarationofconformity

IT: Il fabbricante, Vaisala Oyj, dichiara che il tipo di apparecchiatura radio CA10E è conforme alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE è disponibile al seguente indirizzo Internet: www.vaisala.com/declarationofconformity

LT: Aš, Vaisala Oyj, patvirtinu, kad radijo įrenginių tipas CA10E atitinka Direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo interneto adresu: www.vaisala.com/declarationofconformity

LV: Ar šo Vaisala Oyj deklarē, ka radioiekārta CA10E atbilst Direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: www.vaisala.com/declarationofconformity

MT: B'dan, Vaisala Oyj, niddikjara li dan it-tip ta' tagħmir tar-radju CA10E huwa konformi mad-Direttiva 2014/53/UE. It-

test kollu tad-dikjarazzjoni ta' konformità tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li ġej: www.vaisala.com/declarationofconformity

NL: Hierbij verklaar ik, Vaisala Oyj, dat het type radioapparatuur CA10E conform is met Richtlijn 2014/53/EU. De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: www.vaisala.com/declarationofconformity

PL: Vaisala Oyj niniejszym oświadcza, że typ urządzenia radiowego CA10E jest zgodny z dyrektywą 2014/53/UE. Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym: www.vaisala.com/declarationofconformity

PT: O(a) abaixo assinado(a) Vaisala Oyj declara que o presente tipo de equipamento de rádio CA10E está em conformidade com a Diretiva 2014/53/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: www.vaisala.com/declarationofconformity

RO: Prin prezenta, Vaisala Oyj declară că tipul de echipamente radio CA10E este în conformitate cu Directiva 2014/53/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: www.vaisala.com/declarationofconformity

SK: Vaisala Oyj týmto vyhlasuje, že rádiové zariadenie typu CA10E je v súlade so smernicou 2014/53/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: www.vaisala.com/declarationofconformity

SL: Vaisala Oyj potrjuje, da je tip radijske opreme CA10E skladen z Direktivo 2014/53/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: www.vaisala.com/declarationofconformity

SV: Härmed försäkrar Vaisala Oyj att denna typ av radioutrustning CA10E överensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: www.vaisala.com/declarationofconformity

CA10E UK declaration of conformity

Hereby, Vaisala Oyj declares that the radio equipment type CA10E is in compliance with Radio Equipment Regulations 2017. The full text of the UK declaration of conformity is available at the following internet address: <http://www.vaisala.com/declarationofconformity>

CA10E Singapore IMDA compliance statement

Complies with
IMDA standards
DB105576

CA10A FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC ID: 2A039-AP10A

WARNING! Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

WARNING! 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.

CA10A Canada ISED Compliance Statement

This device complies with Industry Canada licence-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.

This device has a whip antenna with a gain of 3 dBi.

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.

Le présent appareil dispose d'une antenne fouet avec un gain de 3 dBi.

IC ID: 23830-AP10A

CAUTION! This device requires a separation distance of at least 20 cm. This distance must be maintained between the user and the device when the device is operating.

ATTENTION! Cet appareil nécessite une distance de séparation d'au moins 20 cm. Cette distance doit être maintenue entre l'utilisateur et l'appareil lorsque l'appareil est en fonctionnement.

CA10A Brazil ANATEL compliance statement

Informações Regulatórias Brasil

Este equipamento está certificado e homologado pela ANATEL.

Para maiores informações, consulte o site da ANATEL: www.anatel.gov.br.

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

Anatel ID: 04763-19-12322

