

CWL100 Quick Guide

This document is a quick guide for installation of CWL100 Cloud Wireless Data Logger. 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/cwl100

CWL100 product overview

CWL100 is wireless, battery powered data logger. It is intended as a data collection point in a Vaisala Jade Smart Cloud system. CWL100 supports Vaisala HMP63, HMP110, and HMP115 humidity and temperature measurement probes, and HMP115T and TMP115 temperature measurement probes.

CAUTION! CWL100 requires a connection to a CA10 access point, otherwise it cannot send its measurement data to the Jade service. The connection must be to a CA10 that is associated with the same cloud account as the CWL100. The 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.

Note that measured data can also be downloaded directly from the device. See Jade online help for more information.

Table 1.

Property	Specification
Operating environment	Indoor use
For use in wet locations	No
Operating temperature with alkaline batteries	+2 ... +60 °C (+35.6 ... +140 °F)
Operating temperature with lithium batteries	-20 ... +60 °C (-4 ... +140 °F)
Operating humidity	0 ... 100 %RH, non-condensing
Operating altitude	Max. 2000 m (6500 ft)
Pollution degree	2
IP rating	IP54
Frequency band	See type label on device
Batteries	2 × AA sized, 1.5 V (LR6 or FR6)
Power supply when powered through micro-USB connector	
Supply voltage	5 VDC
Supply current	Min. 100 mA

Mounting CWL100



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

<https://dreambroker.com/channel/sdz96ad5/qcyu83p5>

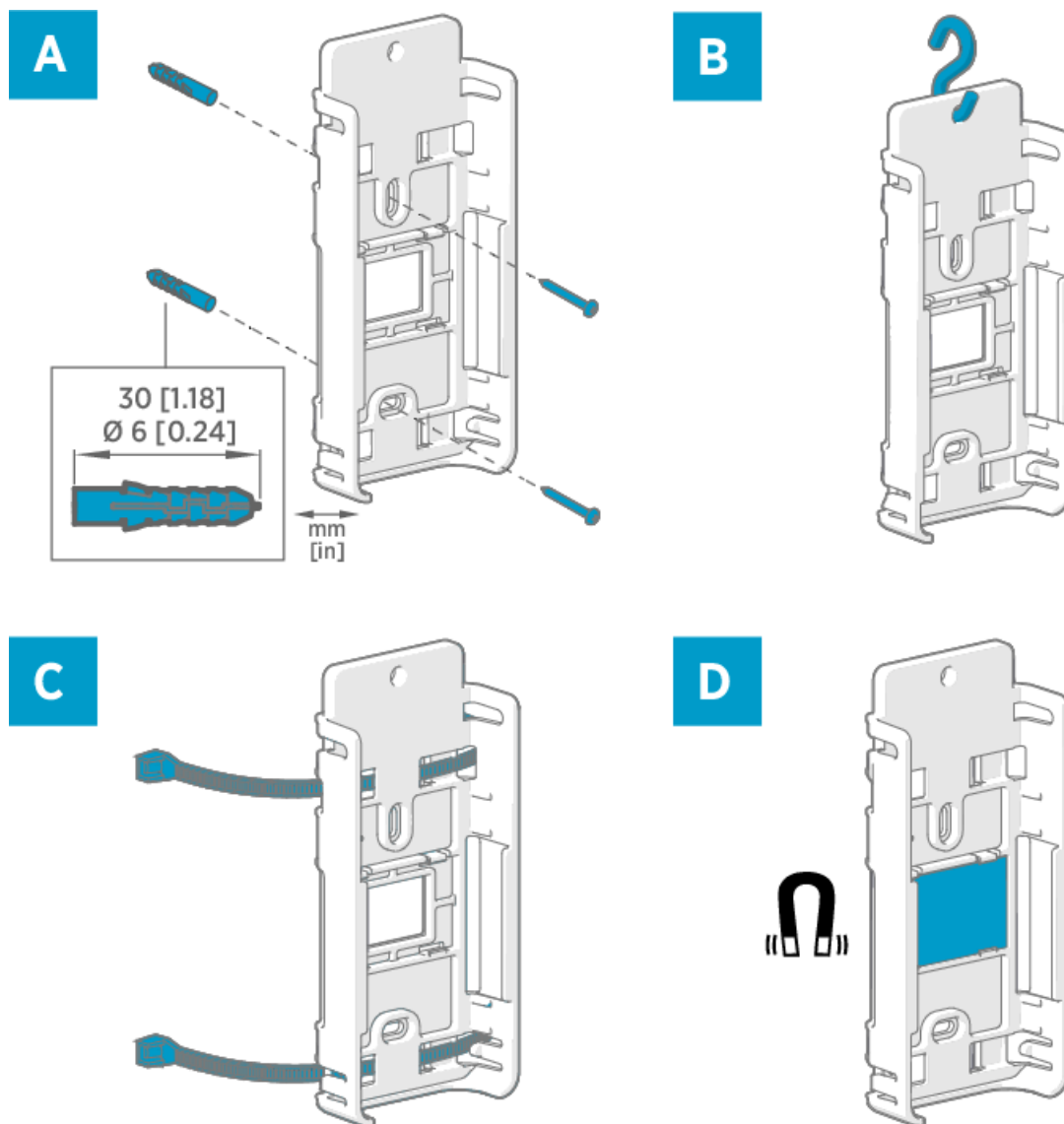
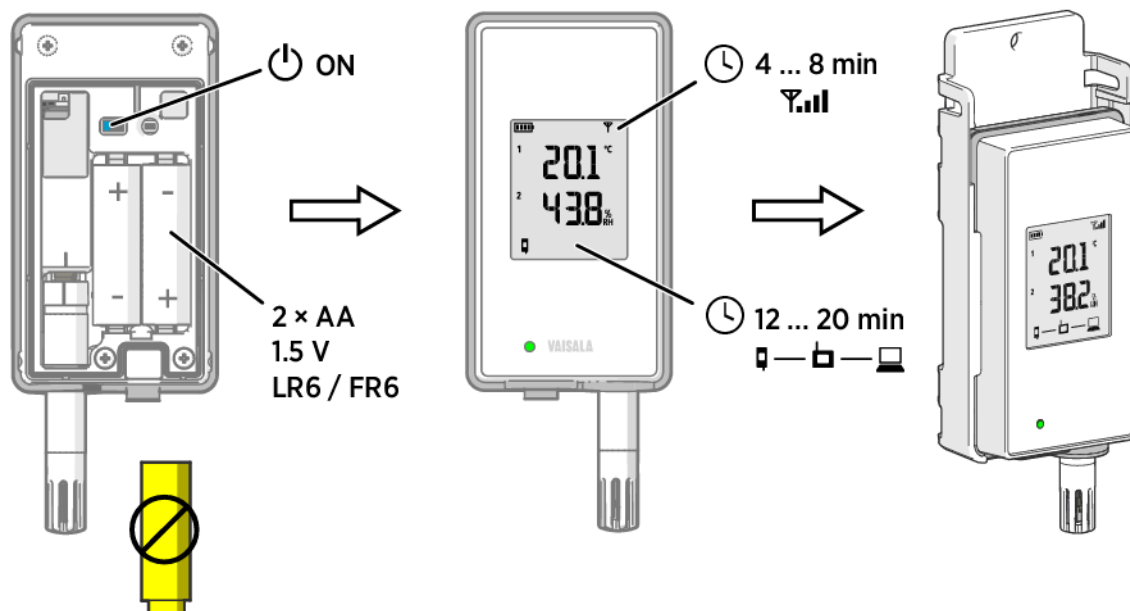


Figure 1. CWL100 mounting methods

- A Mounting with screws. Screws and wall plugs are included with the data logger.
- B Mounting with a hook (hook not included)
- C Mounting with cable ties. Cable ties are included with the data logger.
- D Magnetic mounting (with optional magnetic mounting bracket)

Switching on and connecting

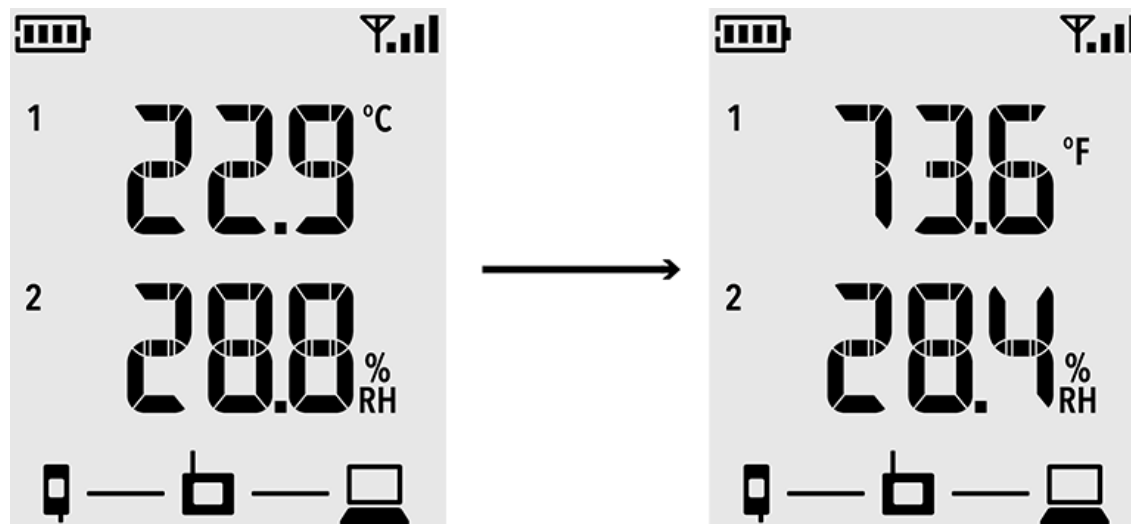


 CWL100 data logger

 CA10 access point

 Jade Smart Cloud service

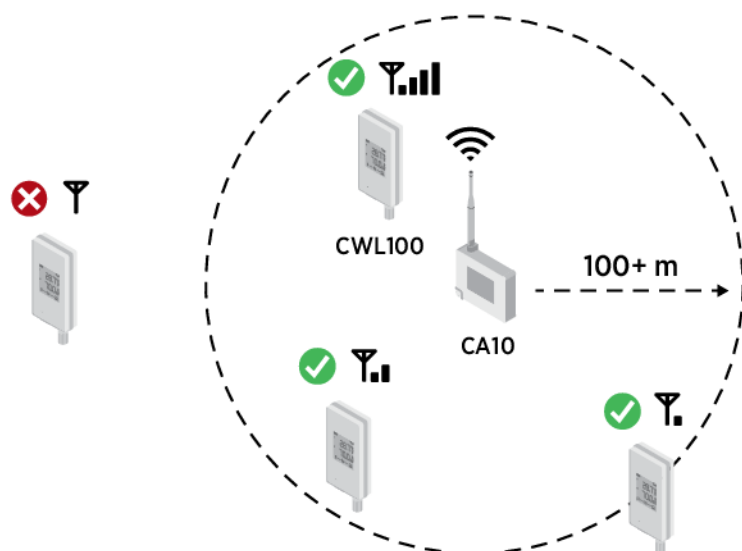
Changing temperature unit on local display



1. Log in to the Jade service at jade.vaisala.com.
2. Select Devices in the navigation menu.
3. In the list of devices, select the CWL100 data logger you want to change.
4. Locate Units on display and check the currently selected units: Metric or Non-metric. On CWL100, this setting only determines the unit used for temperature. Metric selects Celcius (°C), non-metric selects Fahrenheit (°F).
5. To change the setting, select Edit and select the new setting.
It takes several minutes before the units are updated on the local display. If the data logger is offline, the setting change will be sent to the data logger when it is online again.

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.

CWL100 info mode

CWL100 data logger has a small button next to the service port. Pressing this button enables **Info mode** for 1 hour, after which the mode is automatically disabled. Pressing the button again disables the mode immediately.


In the Info mode:

- Data logger starts radio scanning immediately if it has shut down to save power.
- After showing the current measurement results and possible error codes, the data logger shows the text **INFO ON** and the following additional information:
 - If the data logger is connected to an access point:
 - Signal strength indicator  is updated faster, approximately every 30 seconds.
 - The currently connected access point channel is shown, alternating with measurement results and firmware version.
 - Firmware version of the data logger.
 - Serial number of probe detected at startup, shown in 3 separate segments. Letters **SN** are shown before the number.

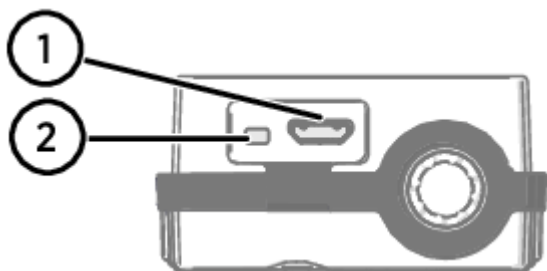
After all information has been shown, the same sequence is repeated until Info mode is disabled or 1 hour has passed.

When to use Info mode

Info mode can be very useful when you can physically access the data logger. The following are the main use cases:

1. Wake up the data logger from radio power save without restarting it.
2. Determine the signal quality of the current access point connection. When the data logger is connected to an access point, you can move the data logger around and monitor the signal strength indicator  that updates every 30 seconds in Info mode. Note that the connection quality is shown only for the current access point connection.
3. Check the access point where the data logger is currently connected. You can determine this from the channel number if you know the channel assignments of the access points.
4. Check the firmware version of the data logger without restarting it.

Turning on info mode



- 1 Service port (micro-USB)
- 2 Info button

1. Open the plug that covers the service port.
2. Push the small button next to the service port using a pen or a small screwdriver.
3. Verify from the display that the text **INFO ON** appears briefly.
4. Close the plug over the service port.

Regulatory compliance

CWL100 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

CWL100 EU declaration of conformity

EN: Hereby, Vaisala Oyj declares that the radio equipment type CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 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 CWL100 överensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: www.vaisala.com/declarationofconformity

CWL100 UK declaration of conformity

Hereby, Vaisala Oyj declares that the radio equipment type CWL100 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>

CWL100 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: 2AO39-RFL100A

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.

CWL100 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 PCB integrated inverted F-antenna with a gain of 1 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 F inversée intégrée à la carte avec un gain de 1 dBi.

IC ID: 23830-RFL100A

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.

CWL100 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: 04761-19-12322



CWL100 Singapore IMDA compliance statement

Complies with
IMDA standards
DB105576