WellCube Connect
User Manual

Product Models

- WC300 - WellCube Connect
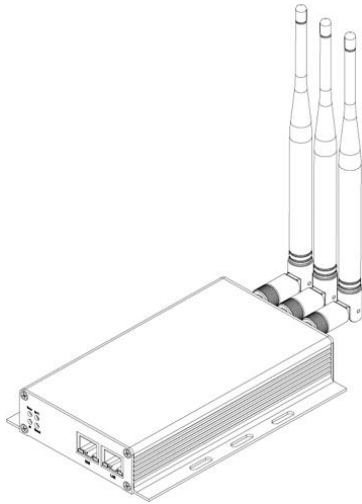
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IMPORTANT SAFETY INSTRUCTIONS

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain this product. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage. Retain instructions for future reference. Please visit www.wellcube.io to view and download the current versions of user manuals and additional product support materials.

Warning! To reduce the risk of fire, electric shock, personal injury and or property damage:
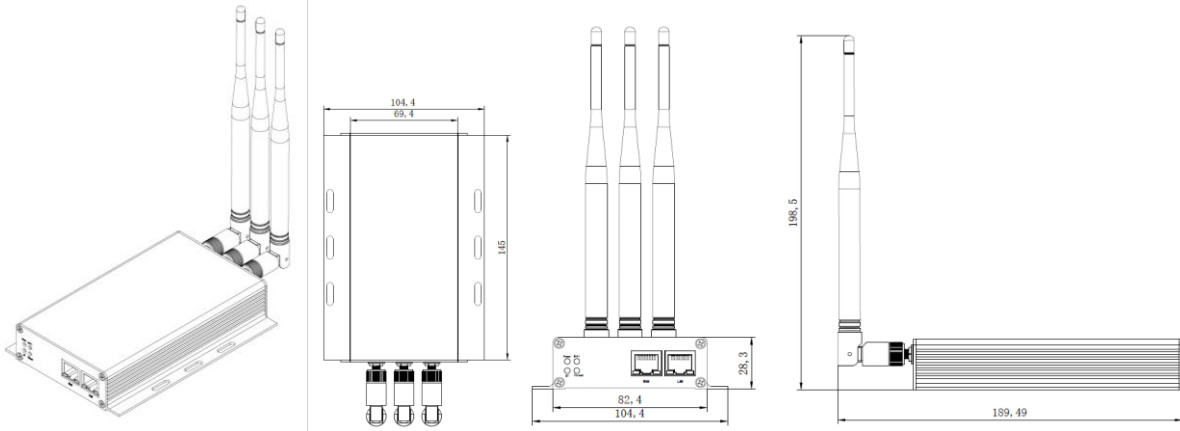
General Safety

- DO NOT operate in wet, damp or outdoor areas

- DO NOT place on unstable surfaces such as chairs.

- DO NOT operate in spaces that contain potentially explosive or toxic fumes or vapors (lighter fluid, gasoline, kerosene, paint, etc.)

- This appliance is not intended for use by anyone (including children) with reduced physical, sensory, or mental capabilities or lack of experience and knowledge unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.

- Do not use if unit is not working as expected, or has been dropped, damaged, left outdoors, or dropped into water

- DO NOT wash device with water or chemicals.

- DO NOT handle plug or device with wet hands.

Power & Cord

- DO NOT operate with a damaged cord or plug.

- DO NOT modify or disable the polarized plug. If the plug does not fit fully in the outlet, contact a qualified electrician.

- DO NOT run the power cord under carpeting, throw rugs, runners, or similar coverings.

- Do not damage the power cord.

- Do not unplug by pulling on the cord. Grasp the plug, not the cord.

- Do no stand the appliance on the power cord, close a door on the cord, pull the cord around sharp corners, or leave the cord near any heated surfaces

- Keep cord away from high traffic areas to prevent tripping.

- Unplug from electrical outlet when not in use and before any maintenance or cleaning.

- WARNING: To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device (such as a dimmer switch).
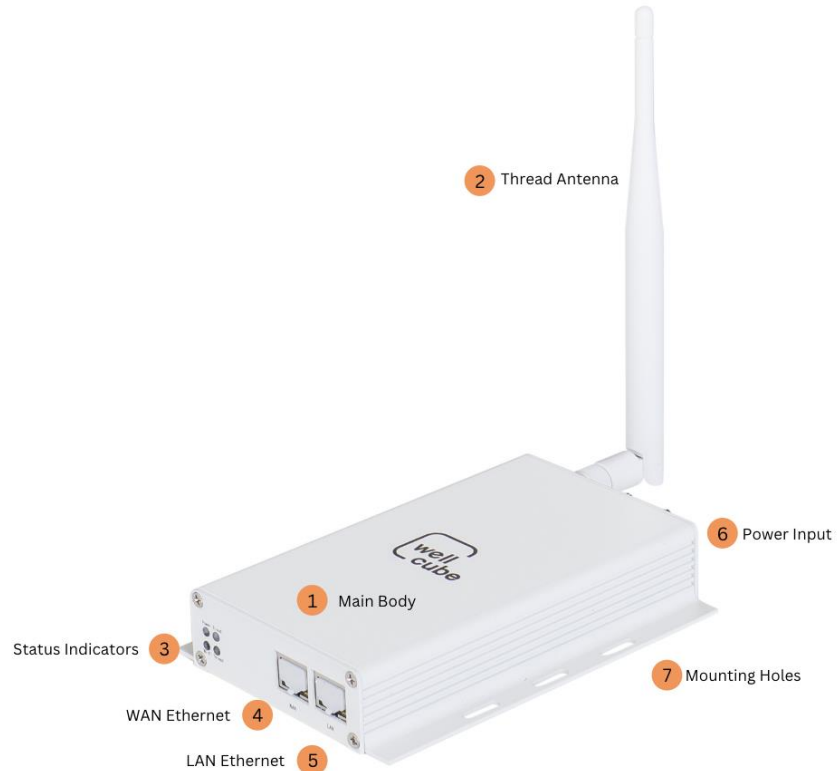
READ AND SAVE THESE INSTRUCTIONS

PRODUCT SPECIFICATIONS

Network Interfaces	1x WAN Port 1x LAN Port 1x Thread Wireless 1x Wi‑Fi 1x Bluetooth (disabled by default) 3x connection status LEDs
Wireless Connectivity	Thread wireless mesh networking (built on IEEE 802.15.4) Range between WellCube devices: • 50 ft max recommended within typical office environments • Up to 100 ft max open air
Power Interface	1x 12VDC power input 1x power status LED
Power Requirements	• 110–240 VAC 50/60 Hz plug-in adapter • 12V DC purifier input (20 W max)
Energy Consumption	24 W (max)
Working Temperature	-20–55 ℃
Storage Temperature	-40–70 ℃
Device Dimensions	• Main body: 1.1" H x 4.1" W x 5.7" D • Antenna length: 7.7" • Weight: 1 lbs
Mounting Method	Wall/ ceiling mounted (via included screws & anchors) DIN 35 mm mounting compatible
Certifications	FCC/ IC CE
Warranty	1 year

1. Main Body

2. Thread Antenna

3. Status Indicators

    - Power (Top Left)

    - Cloud (Top Right)

    - Wi-Fi (Bottom Left)

    - Thread (Bottom Right)

4. WAN Ethernet

5. LAN Ethernet

6. Power Input

7. Mounting Holes

GETTING STARTED

Unbox, Plug In & Power Up	

1. Unbox the WellCube Connect and locate the:
  - WellCube Connect
  - Plug in power supply
  - Thread wireless antenna
 	
	2. Connect one of the supplied 2.4GHz antennas to the Thread antenna connector on the back of on the WellCube Connect main body.
	
	NOTE: WellCube Connect should be placed within 50 ft from the closest WellCube device. Orient the Thread antenna vertically for maximum coverage.

3. Plug in the appropriate Ethernet network cable to the WAN port of WellCube Connect. Ensure the Ethernet cable is connected to a network switch, router, or modem with verified access to the Internet. 	4. Plug the male 12VDC connector of the provided WellCube Connect power adapter into the power input on the back of WellCube Connect. Next, plug the power adapter into a standard power outlet. 	

5. Once supplied power, WellCube Connect will immediately start up and attempt to establish a connection with WellCube Cloud.

The 4 LED status indicators on the front of WellCube connect will display different colors to indicate various connectivity states or errors as shown below. Once commissioned, the Cloud LED will display solid green, indicating that other WellCube devices can now be commissioned to the Thread network.

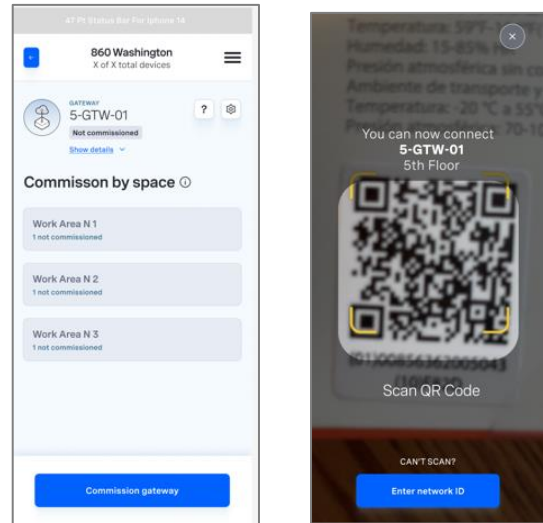| LED1	Status Function	Color	LED Behavior
Power	ON	🟢	Green steady (whenever gateway is supplied power)
Power	OFF	⚪	Off
Cloud	Delos Cloud connected & commissioned to project	🟢	Green steady
Cloud	Delos Cloud commissioned but lost connection	🟠🟢	Orange & Green slow blink (1 sec orange, 1 sec green)
Cloud	Delos Cloud connected but not commissioned	🟠	Orange steady
Cloud	Internet not accessible	🔴	Red steady
Wi-Fi	WiFi client disabled (default)	⚪	Off
Wi-Fi	WiFi client connected to network	🟢	Green steady
Wi-Fi	WiFi client enabled but no WiFi network configured	🟠	Orange steady
Wi-Fi	WiFi client enabled & configured but unable to connect	🔴	Red steady
Thread	Thread network online	🟢	Green steady
Thread	Thread network online - commissioning active	🟢⚪	Green & Off slow blink (1 sec on, 1 sec off)
Thread	Thread network offline / error	🔴	Red steady
Thread	Thread network forming	🟠🟢	Orange & Green slow blink (1 sec orange, 1 sec green)
Thread	Thread network - no network formed	🟠	Orange steady

Connecting to WellCube Cloud

This product is intended to be used with the WellCube Cloud platform. Commissioning WellCube Connect to the cloud is done via the WellCube Integrator App.   To get started, please visit www.wellcube.io
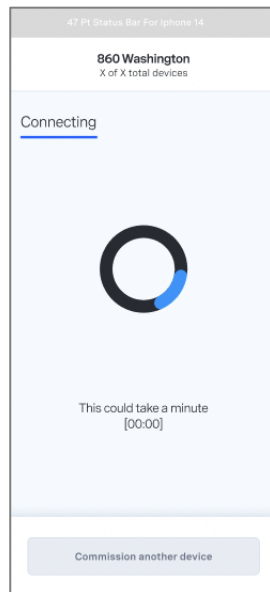
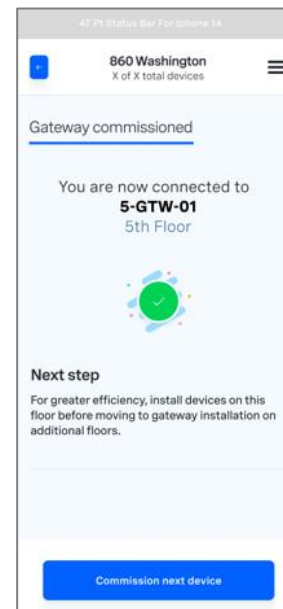|	
Before using the WellCube Integrator mobile app to commission WellCube Connect, the following steps must be completed: • A WellCube installer account has been created & appropriate permissions have been assigned. • A WellCube system design has been completed via WellCube Workspace App with virtual WellCube air devices added to the desired spaces. • WellCube Integrator mobile app has been installed on the installer's iOS or Android mobile device.	Navigate to the target WellCube site within the WellCube Integrator mobile app. Select the desired target WellCube Connect virtual device you intend to commission and begin the commissioning progress by scanning the connect.
As the device is being commissioned, there will be a screen showing the connection status on the mobile app. There is a blinking orange LED light on the device as it connects 	Once the gateway has successfully been commissioned, a success screen will populate on the mobile app and there will be a Green LED indicator on the gateway.

For additional instructions on commissioning WellCube devices using the mobile app and connectivity troubleshooting, visit www.wellcube.io/support

USING WELLCUBE

To establish communication with the WellCube Cloud via the Ethernet (WAN) port and Thread wireless, the following steps outline the process using the provided information:

1. **WAN Port Connection**:
   - The WellCube Connect features a WAN port that must be connected to the internet. This connection allows the connect to communicate with the WellCube Cloud for sensor data collection and system management.
   - The WAN port should be linked to an internet gatway or router. This connection can be through a standard Ethernet cable to the office's internet gateway or through a cellular modem to keep the WellCube system separate from the enterprise network.
2. **Thread Wireless Connectivity**:
   - On-premise devices, such as WellCube Air+/Air sensors and air purifiers, connect to the WellCube Connect wirelessly using Thread technology.
   - These devices form a Thread wireless mesh network, ensuring reliable communication between the end devices and the connect.
3. **Deployment Considerations**:
   - Each floor in a typical deployment will have at least one WellCube Connect to ensure strong Thread connectivity. Depending on the number of devices and their distance from each other, multiple gateways may be necessary to maintain robust communication.
   - Delos, the system designer, will collaborate with customers to determine the optimal location for the gateway to balance connectivity with limited physical access to reduce tampering risks.

By following these steps, the WellCube system can effectively communicate with the WellCube Cloud using the Ethernet (WAN) port and maintain reliable wireless communication with on-premise devices through Thread technology.

Remote Control of WellCube Connect via Web app
The Device section of the Web app with display Gateway information and how the status of the

devices associated with them

TROUBLESHOOTING

Product	
How do I confirm the gateway is connected to the internet?	Once the gateway is successfully connected to the internet via an ethernet cable the top right light will become green.
Why is the gateway not showing an internet connection	Confirm that the ethernet cord is connected to the correct port on the gateway. Gateways must be connected via ethernet to the WAN port.
How do I confirm the gateway is providing a thread network	Once the gateway is successfully broadcasting a Thread network, the bottom right light will become green.
Why is the thread network losing connectivity?	Confirm that both antennas are successfully screwed in and their position is sticking up vertical out of the device.
How to I assign a static IP address for the gateway?	The gateway defaults to DHCP. Reach out to Delos Customer support to manage customized network requirements.
Why are no LEDs on?	Confirm that the Connect is connected to power. Once power is provided, the power LED will light up green and other LEDs will a
Cloud Connectivity	
Why does the dashboard show my device offline?	Check the device connectivity light, if this light is not showing a green "connected light" the device may be out of range of the gateway. Move the purifier closer to either the gateway or another purifier that is showing connected.
Why does the dashboard show my gateway offline?	Confirm that your internet network is still online. Confirm that the ethernet cord is plugged into the WAN cord of the gateway,

For any questions or assistance, please visit www.wellcube.io/support

PRODUCT WARRANTY & CERTIFICATIONS

Warranty

Your WellCube is covered by a 1-year warranty under normal use. This warranty ensures that any defects in materials or workmanship will be repaired or replaced at no cost to you. Please keep your proof of purchase to validate your warranty claim. For more information, visit www.wellcube.io/warranty.

Regulatory Compliance

FCC ID: 2BC2T-HOOMAXH5CA
IC: 31630-HOOMAXH5CA

FCC Statement: Warning Information
NOTE: 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.

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.

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. Privacy of communications may not be ensured when using this device.

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

Professional Installation Warning
This device must be professionally installed, this should be noted on grantee. To maintain compliance, only the antenna types that have been tested shall be used, which listed as below:

This device requires a significant technology engineering expertise towards understanding of the tools and relevant technology, not readily available to the average consumer. Only a person professionally trained in technology is competent. This device is not directly marketed or sold to the general public.

Industry Canada Statement: Warning Information
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.

RF exposure
RF Radiation Exposure Statement Caution: This Transmitter must be installed to provide a separation distance of at least 20 cm from all persons.
— Déclaration d'exposition Attention: Cet émetteur doit être installé pour fournir une distance de séparation d'au moins 20 cm de toute personne.

This radio transmitter [31630-HOOMAXH5EA] has been approved by Innovation, Science and Economic
Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.
— Le présent émetteur radio [31630-HOOMAXH5EA] a été approuvé par Innovation, Sciences et
Développement économique Canada pour fonctionner avec les types d'antenne énumérés ci dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué pour

Antenna info: Glue stick antenna-2.4-SMA, 2400-2500MHz
Part number: ：FS-WZ-JB-298
Antenna type: External with SMA connector
Antenna gain: 5dBi Max

This product is classified as electrical and electronic equipment. Should the time come for you to dispose of this product, please ensure that it is not mixed with general household waste. For proper treatment, recovery, and recycling, please take this product to a designated collection point. Please contact your local authority for further details of your nearest designated collection point.