

## Safety & Use



Disruptive Technologies  
Research AS

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For more information about our  
products visit: [d21s.com](https://d21s.com)

For support and further  
installation guidance visit:  
[d21s.com/support](https://d21s.com/support)

### Sensor



Keep sensors, containing batteries, out of reach of children. Seek medical assistance immediately in case of ingestion.

#### Operating Conditions

Temperature: -40 to 85°C (40 to 185°F)  
Humidity at 25°C: 0 to 100%RH

#### Construction

IP68 and UL50E Type 4X

#### Radio range

25m indoor, up to 300m free-space

#### Capabilities

- ✓ Waterproof (IP68)
- ✓ Can be used outdoors and in direct sunlight

### Sensor Installation

Follow these steps when installing sensors:

- 1 Make sure the surface is clean
  - 2 Peel the protective film from the back
  - 3 Stick the sensor to the surface
- i Use the QR code or the Touch to Identify feature to quickly identify sensors.
  - ! Placing sensors directly on metal surfaces may reduce the wireless range. Use Sensor Range Extenders for optimal radio range.
  - ! If installed using a range extender make sure to align the sensor dot with the dot on the range extender.

Please read this guide before attempting to operate the product.

Failure to follow these instructions may result in an increased risk of personal injury or damage to property, including through fire, electrical shock, burns or suffocation.

Disruptive Technologies Research AS shall not be liable for damage caused where the product owner has failed to follow the instructions set out in this guide.

No changes shall be made to the equipment without the manufacturer's permission as this may void the user's authority to operate the equipment.

### Cloud Connector

#### Operating Conditions

Temperature: 0 to 45°C (32 to 113°F)  
Humidity: 10 to 90%RH, non-condensing

#### Power Supply

IEEE 802.3at Type 1 PoE (36 – 57V)

#### Power Consumption

Average < 5 W (3 W typical)  
Peak < 19 W (< 5 ms)

#### Construction

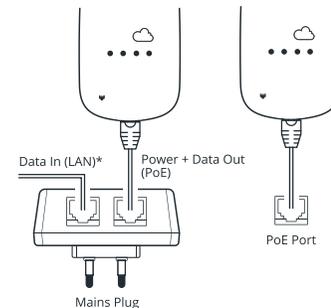
IP20

#### Warnings

- ! Do not use outdoors
- ! Do not plug in damaged device
- ! Do not remove the seal or open device

### Power over Ethernet (PoE)

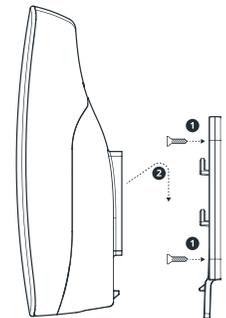
Cloud Connectors are powered by PoE, which means it can receive power and data through a single ethernet cable.



\*Using the data port is optional when using a Cellular enabled Cloud Connector.

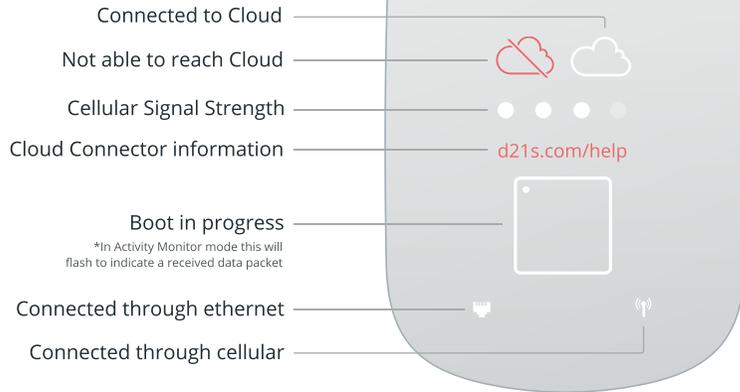
### Wall Mounting

For a secure installation of your Cloud Connector, use screws to attach the mounting bracket.



## Cloud Connector Symbols & Modes

For a complete description of Cloud Connector symbols and modes visit: [d21.com/help](http://d21.com/help)



## Sensor

**Sensor EU, Humidity Sensor EU, Tactile Touch Sensor EU:**  
Frequency Band ISM 868 MHz  
Transmit Power < 1 mW

**CE:** Hereby, Disruptive Technologies Research AS declares that the radio equipment type Sensor EU PN 100111 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.d21s.com/doc](http://www.d21s.com/doc)

**UK:** Hereby, Disruptive Technologies Research AS, declares that the radio equipment types, Sensor EU, Humidity Sensor EU, Tactile Touch Sensor EU is in compliance with UK SI 2017, No 1206: Radio Equipment Regulations. The full text of the UK DoC can be found at the following web address: [www.d21s.com/doc](http://www.d21s.com/doc)

**Sensor US, Humidity Sensor US, Tactile Touch Sensor US:**  
Frequency Band ISM 915 MHz  
Transmit Power < 1 mW

**FCC:** 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.

This device complies with the safety requirements for portable RF exposure in accordance with FCC rule part §2.1093 and KDB 447498 D01.

## Cloud Connector

**Cloud Connector EU 4G:**  
Frequency Band ISM 868 MHz  
Transmit Power < 80 mW

Class E2 (26dBm±3dB) for DCS1800 8-PSK  
Class E2 (27dBm±3dB) for EGSM900 8-PSK  
Class 1 (30dBm±2dB) for DCS1800  
Class 4 (33dBm±2dB) for EGSM900  
Class 3 (24dBm+1/-3dB) for WCDMA bands  
Class 3 (23dBm±2dB) for LTE FDD bands

**CE:** Hereby, Disruptive Technologies Research AS declares that the radio equipment type Cloud Connector EU 4G PN 101505 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.d21s.com/doc](http://www.d21s.com/doc)

**UK:** Hereby, Disruptive Technologies Research AS, declares that the radio equipment type Cloud Connector EU 4G is in compliance with UK SI 2017, No 1206: Radio Equipment Regulations. The full text of the UK DoC can be found at the following web address: [www.d21s.com/doc](http://www.d21s.com/doc)

**Cloud Connector US 4G:**  
Frequency Band ISM 915 MHz  
Transmit Power < 320 mW

Cat M1:  
LTE FDD: B2/B4/B5/B12/B13

Output Power:  
Class 3 (23dBm±2dB) for LTE FDD bands

**ISED:** This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference  
(2) This device must accept any interference, including interference that may cause undesired operation of the device

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes:

(1) Cet appareil ne doit pas causer d'interférences  
(2) Cet appareil doit accepter toutes les interférences, y compris celles susceptibles de provoquer un fonctionnement indésirable de l'appareil

This device complies with the safety requirements for RF exposure in accordance with RSS-102 Issue 5 for portable use conditions.

Le présent appareil est conforme aux limites d'exposition aux RF conformément au norme CNR-102 émission 5 pour conditions d'utilisation portable.

**FCC:** 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.

This device complies with FCC radiation exposure limits for an uncontrolled environment. This device shall be installed and operated with a minimum distance of 20 cm between users or bystanders and the device.

**ISED:** This device contains licence-exempt transmitter(s)/ receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference  
(2) This device must accept any interference, including interference that may cause undesired operation of the device

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes:

(1) Cet appareil ne doit pas causer d'interférences  
(2) Cet appareil doit accepter toutes les interférences, y compris celles susceptibles de provoquer un fonctionnement indésirable de l'appareil

This equipment is exempt from the routine RF exposure evaluation requirements of RSS-102. This equipment should be installed and operated with a minimum distance of 20 cm between the antenna and the user or bystanders.