iotspot product sheet





Fig. 1 Cloud connector

Functional description: 4G Cloud Connector

The 4G Cloud Connector is a versatile connectivity solution designed to facilitate efficient data transmission across various sensors. It acts as a reliable intermediary, linking sensors and the iotspot cloud platform to enable real-time data transfer using the 4G network.

Technical specifications

Mechanics & design

Housing material: Plastics and torx screws
Color: White front with light grey bottom
The Cloud Connector is designed for indoor use only
Operating temperature range: 0°C to 50°C
Operating humidity range: 0% to 95%
Mounting method: Bracket and ring connected with (plugged)
screws.
IP rating: IP20

Data security

Sensor data is encrypted using symmetric AES-128 encryption/decryption.

Cloud Connectors are provisioned with Transport Layer Security (TLS) certificates to establish a secure connection between the Cloud Connector gateway and the cloud platform

Size & weight

153 x 114 x 30 mm 200 gr.

Band and mode / Output power (Sensor <> Gateway)

Radio Protocol: SecureDataShot EU Radio Frequency: 868 MHz SRD band US Radio Frequency: 915 MHz ISM band Transmission Power: < 100 mW

(Gateway <> Platform)

AG Mobile Communication
EU: Cat 1 LTE FDD B1/3/7/8/20/28
US: Cat M1 LTE FDD B2/B4/B5/B12/B13/B25/B26/B66/B85
Communication Standard
EU: Power Class 3 (23dBm±2dB) for LTE FDD bands

US: Power Class 5 (21dBm±1.5dB) for LTE FDD bands





Power

AVG < 3W Power input: 5V/2A Power adapter(main supply): AC 100-240V, US/UK/EU plug Power Consumption: < 3W (average) and Alternatively: Power-over-Ethernet (PoE) - 36-57 V -IEEE802.3at Type 1

Scalability

Communication range of sensor to gateway: Av. 25m. (indoors)

Communication range of sensor + range-extender to gateway: Av. 75m. (indoors)

1 gateway can provision for 10.000 sensors

Package content

Cloud Connector gateway
Mounting ring
Mounting bracket with 2 plugs and 4 screws
Power adapter with 2 m. cable
US/UK/EU plugs
Package size: 150 x 178 x 74 mm.
Package weight: gram

Certification

EU: CE, UKCA, WEEE | IC: 25087-100541 US/Canada: FCC, ISED | FCC ID: 2ATFX-100541

Customs

HS-code: 8517620800 HTS: 8517620800 ECCN: 5A992.c

Installation



1. Preparations

Before using the 4G cloud connector, read the safety, installation and operation instructions to ensure proper use. Please contact support@iotspot.co for any questions.

2. Intended use

The 4G Cloud Connector is a versatile connectivity solution designed to facilitate efficient data transmission across various applications. It acts as a reliable intermediary, linking sensors and the iotspot cloud platform to enable real-time data transfer.

3. 4G Cloud Connector

The product's function is three-fold:

Data Collection: It gathers data from sensors and devices within its coverage area.

Data Transmission: The connector uses 4G connectivity to securely transmit the collected data to the designated iotspot cloud platform via the cellular network.

Cloud Integration: The transmitted data is integrated into the iotspot cloud platform, where it is stored and made accessible for analysis and monitoring.

4. Mounting and commissioning

Optimal placement of the Cloud Connector ensures a stable connection with sensors and can sometimes eliminate the need for additional Cloud Connectors. Placing it in the middle of the installation area provides broad coverage, whereas placing it in a corner restricts sensor coverage. To avoid obstructions, it is typically installed high on a wall or ceiling. (Fig. 4,5)

In a typical office environment, a Cloud Connector can cover sensors within a radius of 25 meters (80 feet). This coverage range can be extended by using range extenders or installing the connectors in open spaces. However, coverage may decrease in areas with thick walls, metal structures, or other obstacles that hinder radio wave transmission. (Fig. 3)

It is essential to place the Cloud Connector in a non-condensing environment with temperatures between 0 to 45°C (32 to 113°F) and relative humidity between 10% and 90%. Avoid placing it inside metal cabinets, as this can negatively impact its range and coverage. If placed outdoors, ensure it is inside a suitable protective casing. Additionally, make sure that the Cloud Connector has either a cellular connection or access to Ethernet infrastructure at the selected location.

To mount the Cloud Connector, attach the mounting bracket to the desired surface. Secure the bracket with screws, ensuring a successful mounting by listening for a "click." For temporary installations, you can use tape on the mounting bracket instead of screws. Ensure the tape is applied to a flat, dry, and clean surface to prevent it from loosening. Alternatively, you can use cable strips to firmly fasten the mounting bracket.

To provide power to the Cloud Connector, please use the provided power supply. The cloud connector will automatically connect to the iotspot cloud. If there is no cellular data available at your location and you prefer to use a wired connector. You can optionally use the Ethernet port. (Fig 2)

5. Activation

Verify that the Cloud Connector is online If a white cloud appears on the Cloud Connector display, it is successfully connected to the Cloud. If the cloud is blinking, it is still trying to connect. (Fig. 2)

There is no need for configuration during installation. The Cloud Connector will transparently relay traffic between all Sensors in range and the Cloud without the need for any user configuration or intervention.

6. Maintenance & Care

The device housing can be wiped for dust or cleaned with a damp cloth if needed. Do not use cleaning agents.

7. Disposal

Electrical and electronic equipment, accessories and packaging must be recycled in an environmentally compatible manner. Do not dispose of electrical and electronic equipment as domestic waste.

Valued customer, iotspot has designed their hardware with an eye to recyclability and is willing to contribute to sustainability. Therefore, feel free to inform with iotspot, how we are willing to support you in disposing of our hardware.

EU countries only: under the current European Directive on Waste Electrical and Electronic Equipment and its implementation in national law, electrical and electronic equipment no longer suitable for use must be collected separately and recycled in an environmentally compatible manner.

Warranty

A warranty period of 12 months applies to the product, commencing on the day of purchase of the product. The warranty solely covers inadequacies caused by material defect or manufacturing defect. The warranty does not cover any unauthorized use or tampering with the product, such as product overloading, use of violence or force, damage as a result of any unauthorized interference or caused by foreign items. Failing to follow the safe conditions or safe installation condition instructions and common wear are also not included in the guarantee. Visit https://www.iotspot.co/terms-and-conditions to view more about the terms, conditions and guarantee of this product.





4G Cloud Connector

Installation



Parts

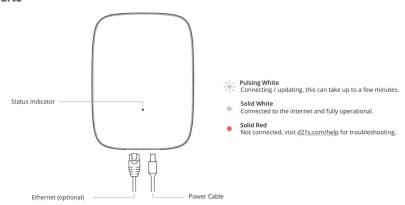
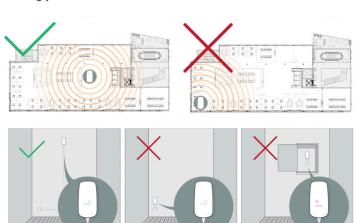


Fig. 2 Parts used for installation

Mounting position



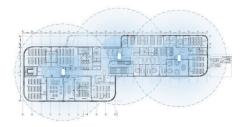






Fig. 3 Mounting Position

Installation

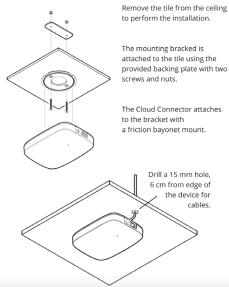


Fig. 4 Ceiling Installation



Secure the mounting bracket to the wall with screws. If mounted below 2 meters, the adhesive can be used alone.



The Cloud Connector attaches to the bracket with a friction bayonet mount.



Align the slots and move the Cloud Connector onto the



Turn the Cloud Connector 45° degrees to secure it in place and connect the power cable.

Fig. 5 Wall Installation





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