



Blecon Environment

Temperature & Humidity Sensor



Overview

The Blecon environmental sensor logs and delivers temperature and humidity data to your application or data lake. With Blecon, you securely receive the data in JSON format over HTTP requests. Enjoy extended operation thanks to a 3+ year battery life.

Take advantage of the reliable physical data flow from Blecon to focus on rapidly developing and delivering innovative products and services. No device management, no firmware updates and no physical gateways are required. Coverage is provided by any smartphone with the Blecon app installed.

Key features

- Logs temperature & humidity
- Data delivered through a webhook
- Integrates with any cloud, any platform, any language
- Connect with service using NFC or QR
- 3+ year battery life
- Optional external probe

Get started quickly

- Free iOS, Android and macOS hotspot apps
- Developer documentation
- Integration examples with AirTable, AWS DynamoDB, AWS Lambda, and more

Requests

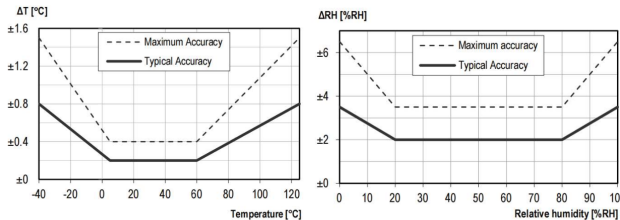


The sensor buffers data, and manages its delivery rate to optimise battery life. Data is sent by Blecon to an HTTP endpoint of your choice. Data points are not erased before being acknowledged. In this way, you will never miss any data.

```
{
  "network_headers": {
    "message_type": "DEVICE_REQUEST",
    "account_id": "95YliRsYzZ7JBnUKDcmT9OzNed5",
    "network_id": "291HjZMKqh8nudnittKHKAgm61q",
    "device_id": "10e0864d-3700-4f84-b5a0-4c59113dbce1",
    "device_location": "52.2087655,0.0907578",
    "device_model_id": "00010002"
  },
  "request_data": {
    "uptime": 637570,
    "records": [
      {
        "id": 662,
        "timestamp": "2022-10-03T18:08:21.158656",
        "temperature": 19503,
        "humidity": 5303
      }
    ],
    "battery_mv": 3527,
    "battery_condition": "NORMAL"
  }
}
```

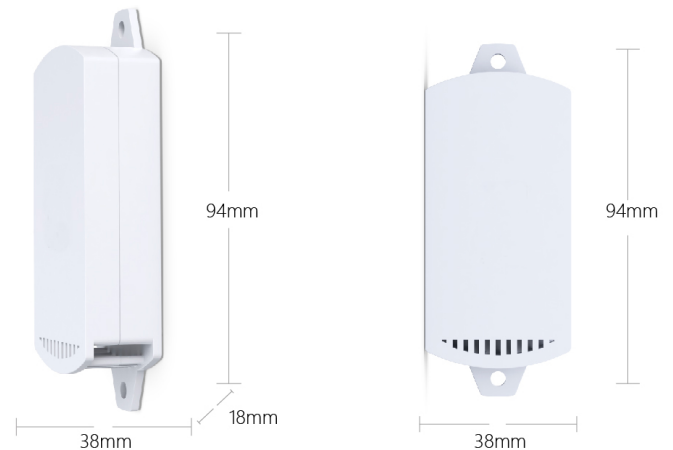
Sensor Accuracy

- Temperature accuracy
 - $\pm 0.4^{\circ}\text{C}$ in $0^{\circ}\text{C}\sim 60^{\circ}\text{C}$ range
 - $\pm 1.0^{\circ}\text{C}$ in $-20^{\circ}\text{C}\sim 70^{\circ}\text{C}$ range
- Humidity accuracy $\pm 5\%\text{RH}$ in $10\%\sim 90\%\text{RH}$ range (25°C)



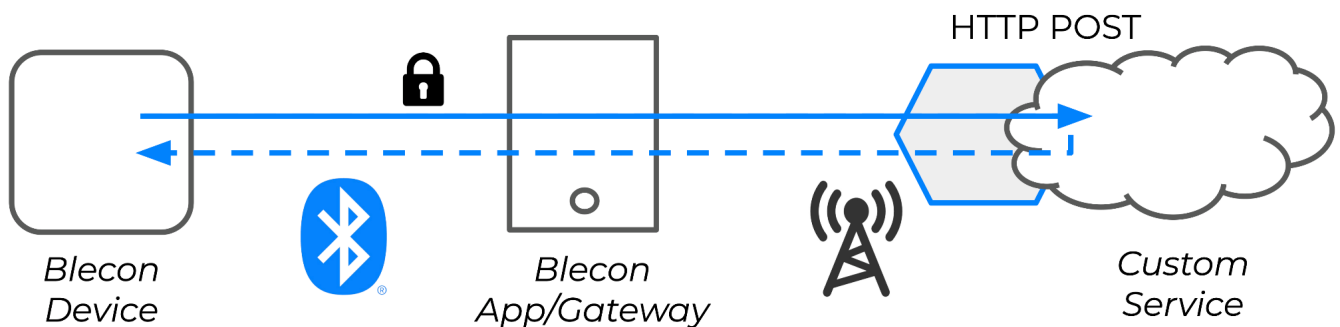
Physical characteristics

- Compact 94 x 38 x 18 mm ABS package
- Wall-mountable
- Waterproof (IP63)



About Blecon

The Blecon Network Infrastructure enables use of Bluetooth Low Energy to provide secure request-response communication from devices to a web service, with smartphones and gateways acting as hotspots.



With Blecon, you can quickly integrate devices into any web service or application using standard web development tools and techniques, without having to build and maintain complex or specialist IoT architectures.