

2JCIE-BL01

Environment Sensor

Sense a variety of environmental information

- Sense your surrounding environment and helps you to assist your comprehensive assessment of indoor comfort
- Battery operable 46 x 39 x 15mm small package including 7 sensors
- Based on BluetoothR low energy, Sensor beacon can simplify the deployment
- Embedded memory for data logging can keep track of surrounding environments



RoHS compliant



Refer to *Safety Precautions* on page 19.

Ordering Information

| Model | Communication Interface | Sensors |
|------------|-------------------------|---|
| 2JCIE-BL01 | Bluetooth low energy | Temperature, Humidity, Light, UVI, Absolute pressure, Noise, Acceleration |

Specifications

| Item | Specification |
|-----------------------|---|
| Power Supply | CR2032 × 1 (3VDC) |
| Sensors | Temperature, Humidity, Light, UVI, Absolute pressure, Noise, Acceleration*1 |
| Interface | Bluetooth low energy *2 : GAP advertisement / Custom GATT profile |
| Communication range | Approx. 10m *3 |
| Operating Temperature | -10 to 60 degC |
| Operating Humidity | 30 to 85 %RH |
| Battery Life | Approx. 6 months (5 min. measurement interval / one time per day connection) *3 |
| Dimensions | Approx. 46 × 39 × 15 mm |
| Weight | Approx. 16 g (incl. battery) |

Note: 1. Acceleration values are only provided in specific operation mode. Please refer to Communication Interface Manual for more details.

Note: 2. The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by OMRON Corporation is under license.

Note: 3. Communication distance and battery life may vary according to obstacles between the communication equipment, radio wave conditions.

Application example

- Environment Sensor will sense your surrounding environment and helps you to assist your comprehensive assessment of indoor comfort.
- You can visualize the environmental information by transferring your sensor data to your smartphone via Bluetooth low energy technology.
- It is possible to notify the environmental changes and uncomfortable conditions to your smartphone via push notifications, and supports a comfortable environment management.
- By transmitting sensor data in broadcaster mode, you can easily build up a system in combination with common gateway devices.

2JCIE-BL01

Absolute maximum ratings

| Item | Ratings |
|-------------------|----------------|
| Power Supply | -0.3 to 3.6 V |
| Temperature range | -20 to 70 degC |

Rating (Recommended operating condition)

| Item | Min. | Typ. | Max. | Unit |
|-------------------|------|------|------|------|
| Power Supply | 2.7 | 3.0 | 3.3 | V |
| Temperature range | 15 | 25 | 45 | degC |

Basic performance

| Item | Measurable range | Accuracy |
|-----------------------|------------------|---------------------|
| Temperature | -10 to 60 degC | ±2 degC |
| Humidity | 0 to 100 %RH | ±5 %RH |
| Light | 10 to 2000 lx | ±100 lx |
| UV Index | 1 to 11 | For reference *1 *2 |
| Barometric pressure | 700 to 1100 hPa | ±4 hPa |
| Sound noise | 37 to 89 dB | For reference *1 |
| Acceleration (3-axis) | -2000 to 2000 mg | For reference *1 *3 |

* Supply voltage: 3.0V, Ambient temperature: 15 to 35 degC, unless otherwise specified.

* These values are specified under standard test condition, and do not guarantee the performance under the complex conditions.

Note: 1. These types of output are provided for referential use only, and these values do not guarantee the normal operation within that range.

Note: 2. Information on UV Index is just for reference. And it does not protect you from danger and various damage from UV light.

Note: 3. Acceleration values are only provided in specific operation mode. Please refer to Communication Interface Manual for more details.

Block diagram

