2JCIE-BL

Environment Sensor

Sense a variety of environmental information

- **Includes six sensors, wireless functionality, and built-in battery**
- **Adopts Bluetooth low energy beacon technology for simple construction of a 1:n sensor network**
- **Embedded memory for data loss prevention**
- **Lineup including PCB models**





RoHS compliant

⚠ Refer to *Safety Precautions* on page 4.

Model Number Structure

2JCIE-□01-□
(1) (2)

(1) Communication interface
BL: BLE

(2) Appearance
None : Bag model
P1 : PCB model

Ordering Information

Appearance	Model	Communication interface	Output data	Minimum packing unit (Unit: pcs)
	2JCIE-BL01	Bluetooth®*1 low energy	Temperature, Humidity, Light, UV index *2, Barometric pressure, Sound noise, Discomfort index *3, Heat stroke warning level *3	1
	2JCIE-BL01-P1	Bluetooth®*1 low energy	Temperature, Humidity, Light, UV index *2, Barometric pressure, Sound noise, Discomfort index *3, Heat stroke warning level *3	1

Specifications

Ratings

Item	Model	2JCIE-BL01	2JCIE-BL01-P1
Power Supply		3 VDC (Lithium battery CR2032 × 1)	3 VDC
Sensors		Temperature, Humidity, Light, UV index *2, Barometric pressure, Sound noise	
Interface		Bluetooth® low energy *1: GAP advertisement/Custom GATT profile	
Communication Range		Approx. 10 m *4	
Operating Temperature		−10 to 60°C	
Operating Humidity		30 to 85%RH	
Dimensions		Approx. 46.0 × 39.0 × 15.0 mm	Approx. 27.2 × 24.0 × 1.0 mm
Weight		Approx. 16 g (incl. battery)	Approx. 2.5 g
Absolute maximum ratings	Power supply	−0.3 to 3.6 V	
Absolute maximum ratings	Output current	±20 mA	
Absolute maximum ratings	Temperature	−20 to 70°C	
Recommended operating condition	Power supply	2.7 to 3.3 V	
Battery Life		Approx. 6 months *4 (5 min. measurement interval/one time per day connection)	-

Characteristics

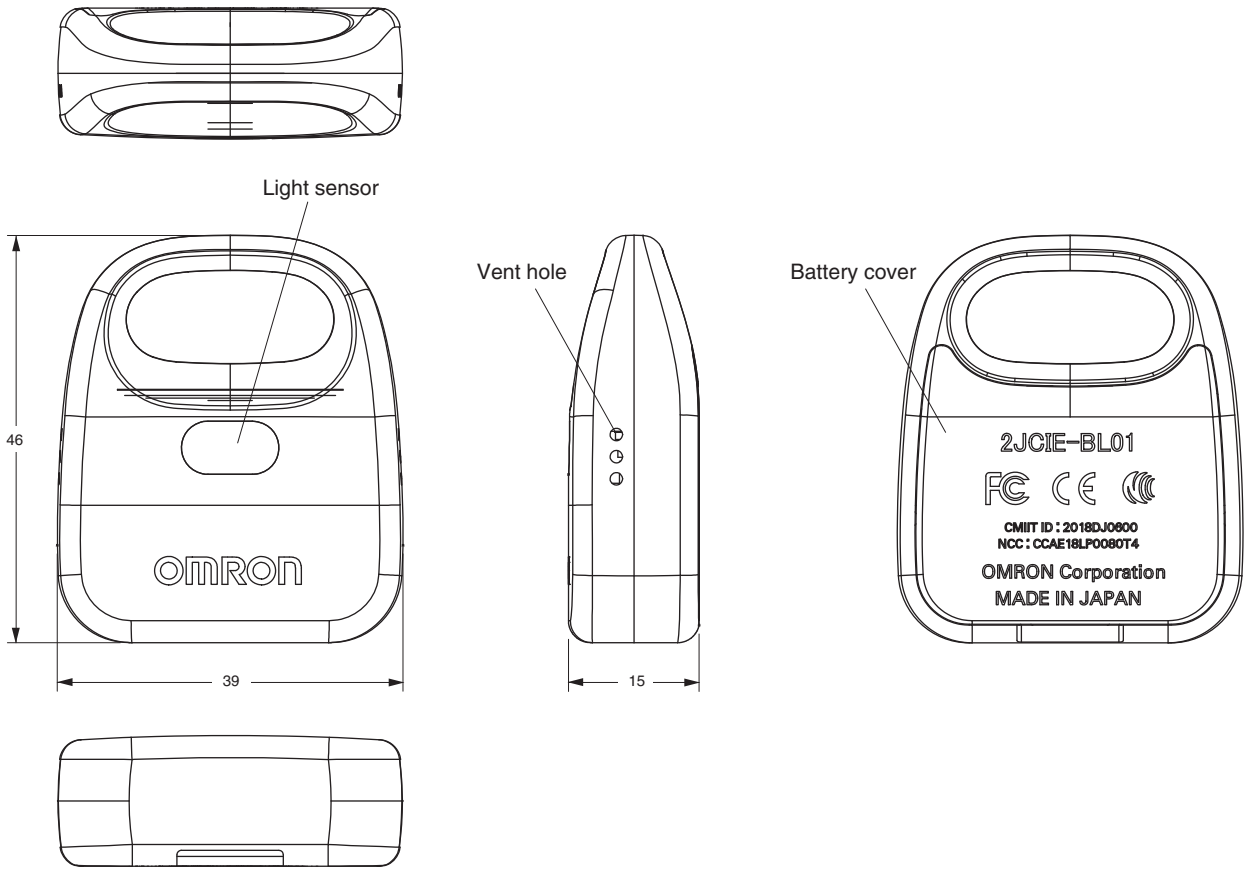
Item	Measurable range	Accuracy (Vcc = 3.0 V, Ta = 15 to 35°C if not specified) *5
Temperature	-10 to 60°C	±2°C
Humidity	0 to 100%RH	±5%RH
Light	10 to 2,000 lx	±100 lx
UV Index	0 to 11	For reference *2 *6
Barometric pressure	700 to 1,100 hPa	±4 hPa
Sound noise	37 to 89 dB	For reference *6

*1. 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.
*2. Information on UV Index is just for reference. And it may not be the same as that issued by public institutions.
*3. Information for heat stroke and discomfort index are only guidelines to be used for air conditioning and physical condition management. An individual difference and physical condition will greatly affect an individual feeling. Sensor output is not to be used for determining the presence of symptoms. Use only as a guideline. Warning levels for heat stroke may not be the same as those issued by public institutions.
*4. Communication distance and battery life may vary according to obstacles between the communication equipment, radio wave conditions.
*5. These values are specified under standard test condition, and do not guarantee the performance under the complex conditions.
*6. These types of output are provided for referential use only, and these values do not guarantee the normal operation within that range.

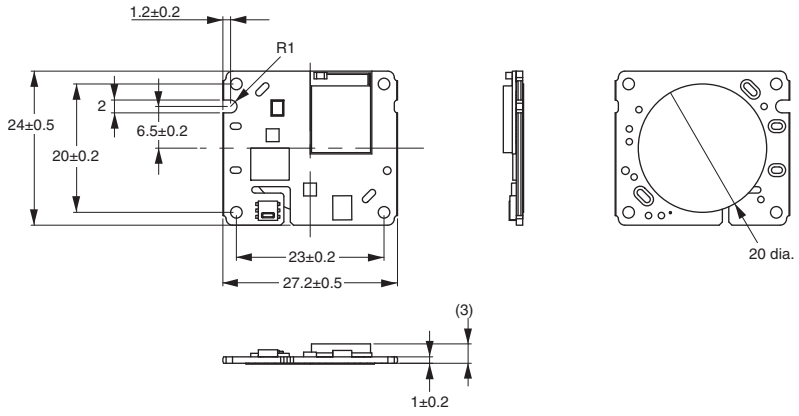
Dimensions

(Unit: mm)

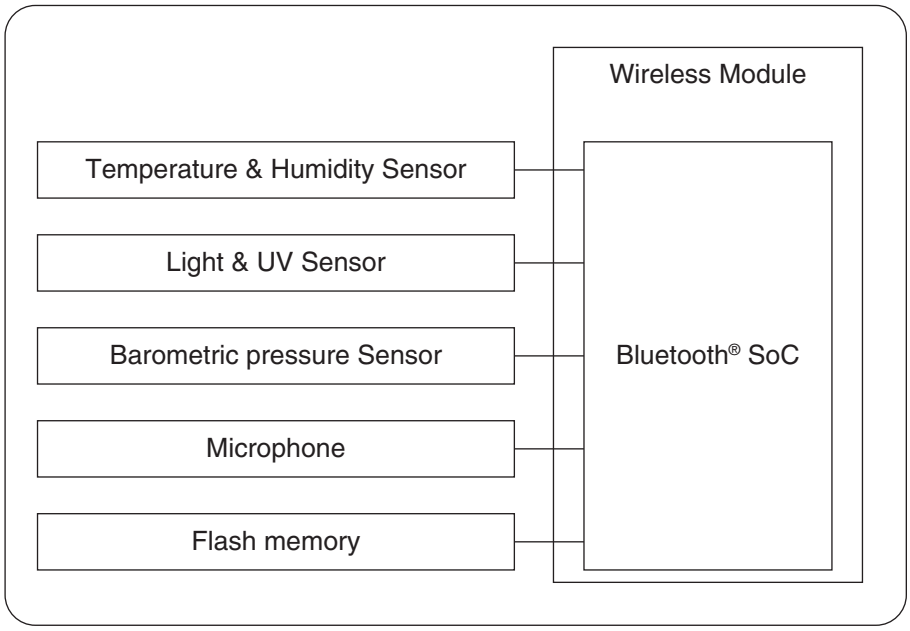
2JCIE-BL01



2JCIE-BL01-P1



Block Diagram



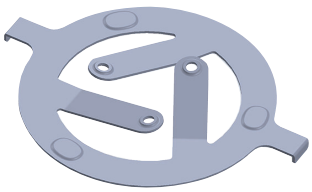
Accessories

For 2JCIE-BL01

- Lithium battery (CR2032 × 1)

For 2JCIE-BL01-P1

- Battery terminal (+)
- Battery terminal (-)



Battery terminal (-)



Battery terminal (+)

Safety Precautions

To assure the correct use of the product basic safety measures should always be followed including the warnings and cautions listed in this document.

⚠ Warning

Warning: Improper use may result in death or serious injury.

<2JCIE-BL01>

- Keep the battery out of the reach of young children.
  If young children swallow the battery, immediately consult a doctor.
- Do not throw the battery into fire.
  The battery may explode.

<Common>

- In places where radio communications are prohibited, remove the battery to turn off the Bluetooth®.
- Do not place the unit closer than 22 cm (9 inches) from implantable medical devices such as pacemakers.
- Keep the unit out of the reach of young children.
  If young children swallow any small piece, immediately consult a doctor.
- Please stop using the unit immediately, if there is strange smell or smoke from the unit.
- Do not subject the unit to extreme temperatures, humidity, moisture, or direct sunlight. Internal condensation due to severe change in temperature may cause malfunction.
- In high temperature or low temperature environment, battery life may be extremely short due to the characteristics of the battery used.
- Please do not leave in the car.
  Prolonged exposure to the high temperature causes explosion, fire or malfunction of the internal battery.

⚠ Caution

Caution: Improper use may result in minor or moderate injury to the user or damage to the equipment.

* Property damage refers to damage related to houses and household belongings, as well as domestic animals and pets.

<2JCIE-BL01>

- Do not insert the battery with the polarities in the wrong direction.
- Always use the type of battery indicated.
- Remove the battery from this unit when you are not going to use it for a long period of time (approximately 3 months or more).
- Please read the instruction manual of your smartphone or tablet for the wireless communication.
- Do not replace the battery during the wireless communication.
- Do not swing the unit by the strap.
  Swinging the unit while holding the strap may cause an injury.

<Common>

- Do not use the unit in the field of strong electromagnetic waves and static electricity.
- This unit is not a measurement instrument.
  The measured values must be treated as a reference, and do not use it for the purpose of verification or diagnosis.

Precautions for Correct Use

<2JCIE-BL01>

- Batteries are not a part of your regular household waste.
  You must return batteries to your municipality's public collection or wherever batteries of the respective type are being sold.
- Dispose of the unit, battery, and components according to applicable local regulations.
  Unlawful disposal may cause environmental pollution.

<Common>

- Do not disassemble or modify the unit.
- Do not subject the unit to strong shocks or vibrations, drop it, step on it.
- Do not apply a strong force, twist, deflection and mechanical stress on the ring portion.
- Do not immerse the unit or any of the components in water.
  The unit is not waterproof. Do not wash it or touch it with wet hands. Be careful that water does not get into the unit.
- Depending on the surrounding environment and the mounting position, the measured characteristic may vary. The measured values must be treated as a reference.
  1. Do not subject the unit to extreme temperatures, humidity, moisture, or direct sunlight.
  2. Do not subject the unit to water, oil or chemical materials.
  3. Do not use the unit where it will be exposed to dew condensation.
  4. Do not use the unit where it will be exposed to flammable gas or corrosive vapors.
  5. Do not use the unit where it will be exposed to dust, saline matter or iron powder.
- This Product operates in the unlicensed ISM band at 2.4 GHz. In case this Product is used around the other wireless devices including microwave and wireless LAN, which operate same frequency band of this Product, there is a possibility that interference occurs between this Product and such other devices.
- If such interference occurs, please stop the operation of other devices or relocate this Product before using this Product or do not use this Product around the other wireless devices.
- Due to the use of radio waves, third parties may intercept transmissions either deliberately or accidentally. Do not use this Product for matters related to vital secrets or human lives.
- Application examples provided in this document are just for reference. In actual applications, confirm its functions, limitations and safety before using this Product.

Acknowledgement
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  (d) Applications in conditions or environments not listed in these specifications
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MEMO

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