

# FUJITSU Component Wireless Modules

## Bluetooth® Version 4.1 Sensor Embedded Beacon

### FWM8BLZ02A-109047

#### Overview

A Bluetooth Version 4.1 sensor embedded beacon with accelerometer and temperature sensors



#### Features

- **Selection of 3 types of sensor data reporting**
  - Via Fujitsu Components Data Communication (FDC)\*  
Beacon outputs sensor data in preset intervals
  - Using Sensor Value Characteristic\*\*  
Data is stored in sensor module and central equipment accesses the module to read data
- **OTA configuration mode**  
In *Over-The-Air* (OTA) config mode the beacon unit settings and data can be re-configured by connecting to the central device wirelessly
- **LED status**  
The Beacon status can be checked by the LED indicator
- **Long operation life with coin cell battery**  
The Beacon is able to operate for more than 2 years with a CR2450 coin cell battery at 1 second advertise interval

RoHS compliant



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#### Applications

- State monitors (logistics, nursing services, etc.)
- Front-end device of IoT platforms

Notes: \*: Fujitsu Component unique data transmission profile, equipped in the beacon as standard

\*\* : Sensor Value Characteristic is a function set in 'Characteristic', GATT specification of Bluetooth Smart, to have central equipment read.

Sensor Value Characteristic is Fujitsu Component unique name

Item	Specifications	
Part number	FWM8BLZ02A-109047	
Antenna	Pattern antenna	
Bluetooth technology	Conforms to Bluetooth Version 4.1 technology	
Transmit power	-16, -12, -8, -4, 0, +4 dBm (changeable by command)	
Power supply	CR family coin type lithium battery CR2450 (not included)	
Operating temperature / humidity	-30°C to +60°C, 20 to 80% RH	
Sensor	Sense interval	Typical 990ms (range 99 to 60,000ms)
	Acceleration sensor	Range of detection: ±16G, accuracy: ±3%
	Temperature sensor	Range of detection: -30°C to +60°C, accuracy : ±0.3°C
Dimensions / Weight	40 x 31 x 12mm / Approx. 10g (without battery)	
Certifications	Bluetooth qualification (QDID), Radio Act (Japan), FCC, IC, CE	

■ Battery specifications

Note: Use of coin type lithium battery CR2450  
 Please use the battery meets Figure 1 (minus electrode height min. 0.9mm, diameter max. 23 mm) to keep enough clearance between beacon holder and battery.

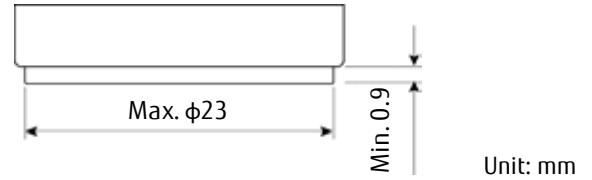
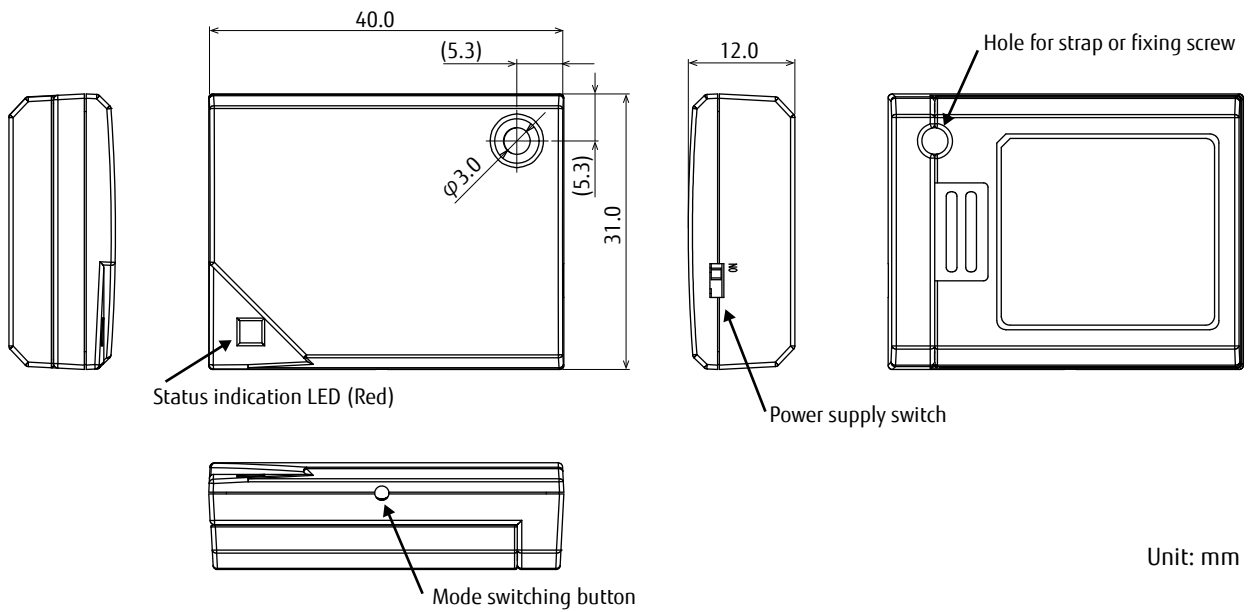


Figure 1

Unit: mm

■ Dimensions

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Unit: mm

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