

# FUJITSU Component Wireless USB Dongle

## FWM8BLZ09P / FWM8BLZ09T / FWM8BLZ08S

### Overview

Endurance line of wireless Mesh USB dongles featuring built-in Wirepas Massive IoT wireless network connectivity.



RoHS compliant

### Features

- Easily add Wirepas Massive wireless mesh connectivity to gateway or equipment via USB port.
- 3 Types of USB dongles:
  - **FWM8BLZ09P:** Make any equipment with an USB port works as a Wirepas Anchor to mesh wirelessly with other Wirepas ready IoT devices. E.g. connect it to an USB port of a printer, it becomes an IoT anchor. You can then manage its location and mesh the printer with other converted IoT devices.
  - **FWM8BLZ09T:** Make any equipment with an USB port works as a Tag to manage its indoor location, through the Wirepas network. E.g. connect it to an USB port of a PC laptop, it works as a tag to manage its indoor location.
  - **FWM8BLZ09S:** By inserting this USB dongle to an existing gateway and incorporating Wirepas Gateway software, you can easily add “Wirepas ready” IoT devices to your Wirepas wireless mesh network.
- Powered via USB type A port
- Small size: 17.5 x 14.2 x 6.6 mm.  
Minimum protrusion from gateway or equipment with USB port
- LED indicator: LED lights turn on when power is turned on, which allows to visually check the state of operation
- Operation settings can be changed easily:
  - Parameters such as NODE\_ROLE (HEAD\_NODE/SUB\_NODE) setting or Bluetooth Low Energy advertise setting
  - FWM8BLZ09P/T: Settings can be changed via command AppCongig or Remote API (wirelessly)
  - FWM8BLZ09S: Settings can be changed via USB (virtual UART) or Remote API (wirelessly)



### Available Software (License agreement is required)

- **WNT: Wirepas Network Tool**  
A highly scalable tool for monitoring and analyzing Mesh operation. It provides visibility of individual node behavior and visualization of the logical topology of Mesh.
- **WPE: Wirepas Positioning Engine**  
It provides calculated end-node location coordination from the fixed Anchor nodes locations. It is capable to provide a geographically tagged view on the map or area layout image (e.g. office or warehouse).
- **Wirepas API**  
Provides host CPU API for controlling the Wirepas Mesh Module.

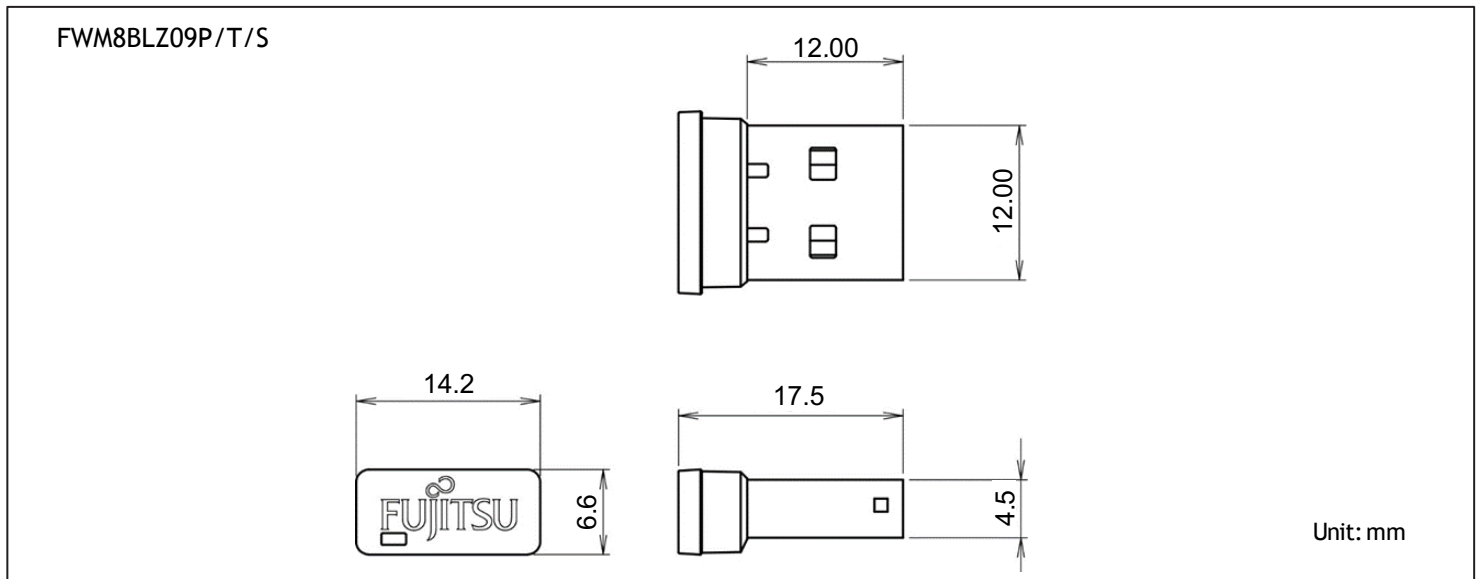
### Applications

Wirepas network repeater, indoor asset tracking, sensor network, etc...

■ Specifications

| Item                            | Specifications                             |                  |                   |
|---------------------------------|--|------------------|-------------------|
| Type                            | USB Dongle (Anchor)                        | USB Dongle (Tag) | USB Dongle (Sink) |
| Part number                     | FWM8BLZ09P                                 | FWM8BLZ09T       | FWM8BLZ09S        |
| Mesh technology                 | Wirepas Massive                            |                  |                   |
| Transmit power                  | +8dBm max.                                 |                  |                   |
| Host interface                  | USB type -A (power supply only)            |                  | USB type-A, v2.0  |
| Antenna                         | Embedded                                   |                  |                   |
| IC                              | Nordic Semiconductor nRF52833-CJAA         |                  |                   |
| Carrier frequency               | 2,400MHz to 2,483.5MHz                     |                  |                   |
| Modulation                      | GFSK                                       |                  |                   |
| Symbol rate                     | 1 Mbps                                     |                  |                   |
| Modulation index                | 0.5  |                  |                   |
| Number of channels              | 27 channels                                |                  |                   |
| Channel spacing                 | 3MHz                                       |                  |                   |
| Operating temperature/ humidity | -30°C to +60°C / +20 to +80% RH (no frost) |                  |                   |
| Dimensions / weight             | 17.5 x 14.2 x 6.6 mm / approx. 2g          |                  |                   |
| Certifications                  | Radio Act Japan, FCC, ISED, CE, RCM, RSM   |                  |                   |

■ Dimensions



Contact

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