

FCL Components Wireless USB Dongle

FWM8BLZ09P / FWM8BLZ09T / FWM8BLZ08S

Overview

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



RoHS compliant

Features

- Easily add Wirepas Mesh 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.

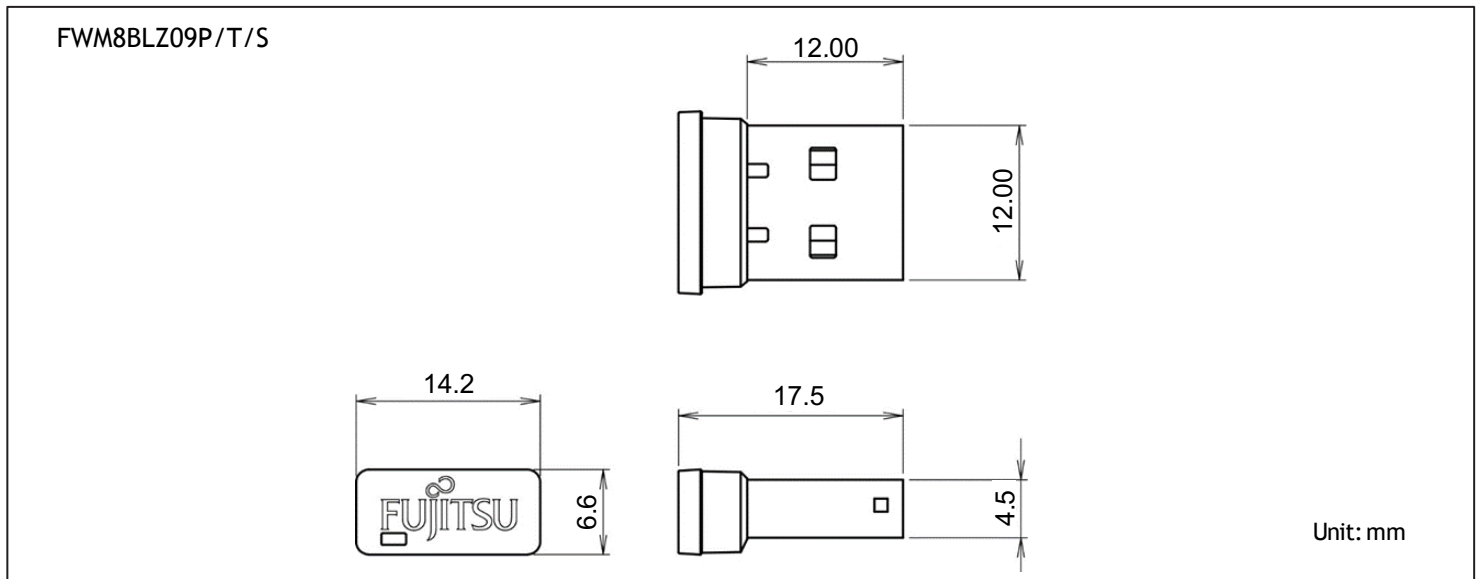
Applications

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



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