

# FCL Components Wireless

## USB Dongle

### FWM8BLZ09P / FWM8BLZ09T / FWM8BLZ09S

#### Overview

Endurance line of wireless Mesh units and Mesh sensor units featuring built-in Wirepas Mesh 2.4GHz network connectivity.

#### Features

- **Easily add Wirepas Mesh 2.4GHz functions to existing gateway or equipment with port:**  
**FWM8BLZ09P/T:** Make equipment with an USB port work as Wirepas Mesh 2.4GHz Anchor or Tag. E.g. connect it to USB port of laptop PC, it works as a tag to manage location of the PC  
**FWM8BLZ09S:** Gateway developers can build Wirepas Mesh 2.4GHz Gateway easily by inserting this product to existing gateways and incorporating Wirepas Mesh 2.4GHz Gateway software
- **Power supply via USB type A**
- **Small size:** 17.5 x 14.2 x 6.6 mm.  
Minimum projection from gateway or equipment with USB port
- **LED indicator:** LED lights turn on when power is turned on, which allows to check state of operation visually
- **Operation settings can be changed:**  
Operational parameters such as NODE\_ROLE (HEAD\_NODE/SUB\_NODE) setting, Bluetooth Low Energy advertise setting, can be changed easily.  
**FWM8BLZ09S:** Setting can be changed via USB (virtual UART) or Remote API function (wireless)  
**FWM8BLZ09P/T:** Setting can be changed via command AppCongig or Remote API functions (wireless)

#### Applications

Wirepas Mesh 2.4GHz network repeater, indoor asset tracking, sensor network, etc.

RoHS compliant

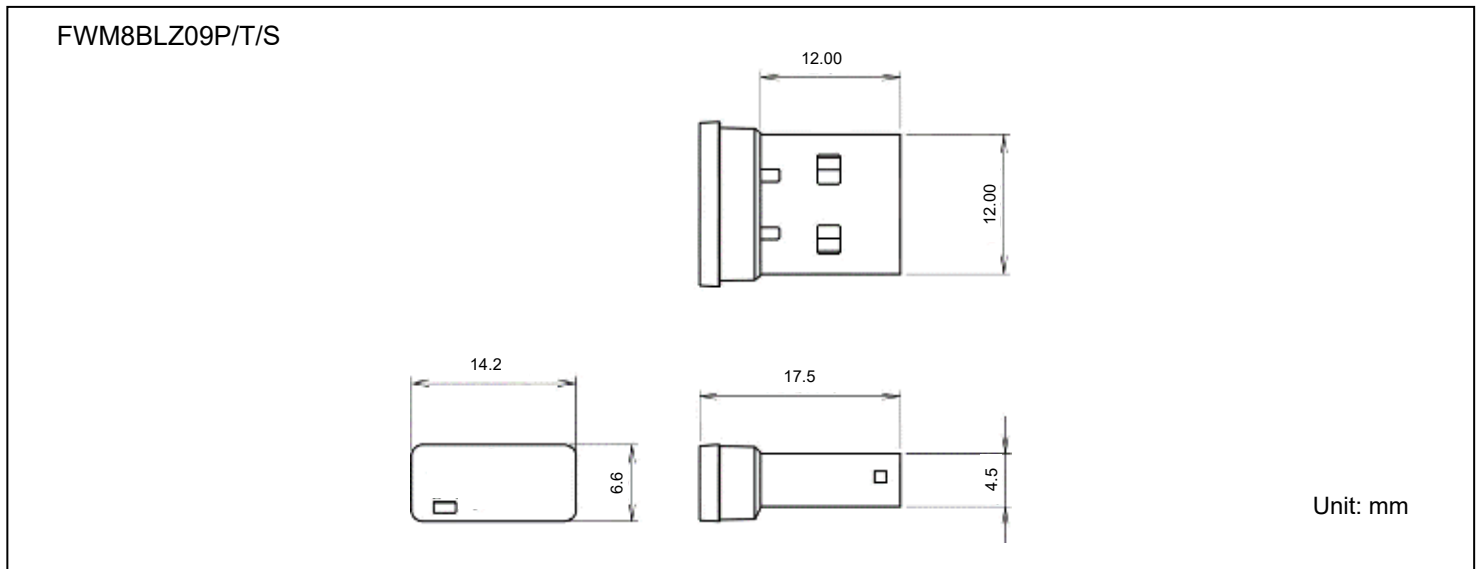


FWM8BLZ09

■ Specifications

Item	Specifications		
Type	USB Dongle (Anchor)	USB Dongle (Tag)	USB Dongle (Sink)
Part number	FWM8BLZ09P	FWM8BLZ09T	FWM8BLZ09S
Mesh technology	Wirepas Mesh 2.4GHz		
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	40 channels		
Channel spacing	2 MHz		
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 (planned)	Radio Act Japan, FCC, ISED, CE, RCM, RSM		

■ Dimensions



Contact

**Japan**  
 FCL COMPONENTS LIMITED  
 Shinagawa Seaside Park Tower  
 12-4, Higashi-shinagawa 4-chome,  
 Tokyo 140 0002, Japan  
 Tel: (81-3) 3450-1682  
 E: fcl-contact@cs.fcl-components.com

**North and South America**  
 FCL COMPONENTS AMERICA, INC.  
 2055 Gateway Place, Suite 480  
 San Jose, CA 95110  
 U.S.A.  
 Tel: (1-408) 745-4900  
 E fcai.components@fcl-components.com

**Europe**  
 FCL COMPONENTS EUROPE B.V.  
 Diamantlaan 25  
 2132 WV Hoofddorp,  
 Netherlands  
 Tel: (31-23) 5560910  
 E info@fcl-components.eu

WEBSITE:  
[www.fcl-components.com/en/](http://www.fcl-components.com/en/)

Copyright

All trademarks or registered trademarks are the property of their respective owners. FCL Components America or its affiliates do not warrant that the content of datasheet is error free. In a continuing effort to improve our products FCL Components America, Inc. or its affiliates reserve the right to change specifications/ datasheets without prior notice.  
 Copyright ©2024 FCL Components America, Inc. All rights reserved. Revised February 1, 2024.