

Preliminary

# FUJITSU Component Wireless Modules

## Wirepas Mesh Tag Unit

### FWM8BLZ14T

#### Overview

Mesh unit (tag) featuring build-in Wirepas Mesh 2.4GHz network connectivity for IoT applications using it together with Fujitsu's IoT connectivity Anchors, Sensors nodes, or USB dongle products.

#### Features

##### ■ Create an autonomous/high-density and secure mesh network

It has ability to construct a large scale, high-density network under autonomous network rerouting, even if the network environment changes or device fails. Security key provides secure operating environment throughout the mesh network.

##### ■ Design for medical facilities and other environments

White color is suitable for hospitals, offices, and schools. The rounded body housing may prevent injury during cleaning the unit.

Thickness is only 5.8mm allowing easy placement between stacked equipment.

##### ■ Ingress Protection

IP67 rating protects the unit from water and particles ingress (e.g. medicines or stains) and allows it to be washed down and the battery can also be replaced by customers. (Patent pending)

##### ■ Flexible mounting style

2 screw holes for mounting. Optional bracket is available to attach the unit. If screws are not used, it is possible to seal the holes with fitted white or colored plug(s) for identification purposes.

#### Applications

Asset tracking in hospitals, offices, warehouses, factories, etc.

#### ■ Specifications

Item	Specification
Type	Mesh unit (Tag)
Part number	FWM8BLZ14T
Mesh technology	Wirepas Mesh 2.4GHz
Transmit power	+4dBm max.
Antenna	Embedded (pattern antenna)
IC	Nordic Semiconductor nRF52832
Carrier frequency / Channel	2,400MHz to 2,483.5MHz / 40 channels (2 MHz spacing)
Modulation / Symbol rate	GFSK / 1 Mbps
Power supply	Coin cell lithium battery CR3032 (not included, factory installation optional)
Operating temperature/ humidity	-30°C to +70°C / 20 to 80% RH
Ingress Protection Rating	IP67
Dimensions / weight	52.8 x 35.9 x 5.8 mm / Approx. 7.5 gr (excluding battery)
Certifications (planned)	Radio Act Japan, FCC, ISED, CE, UKCA

RoHS compliant



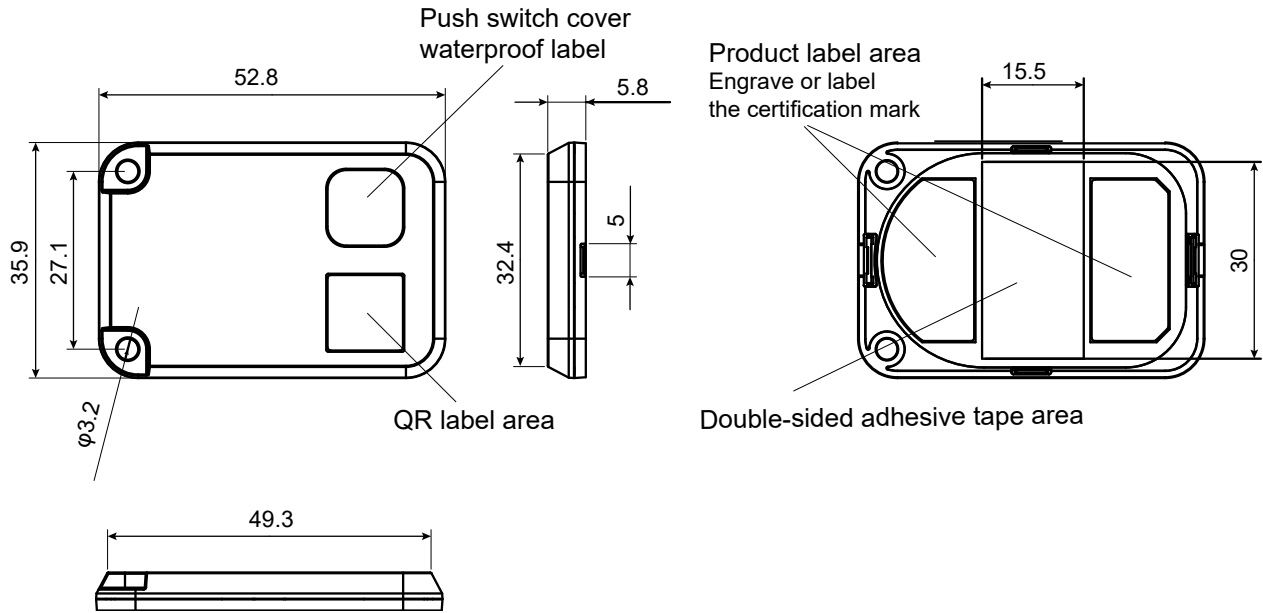
FWM8BLZ14T



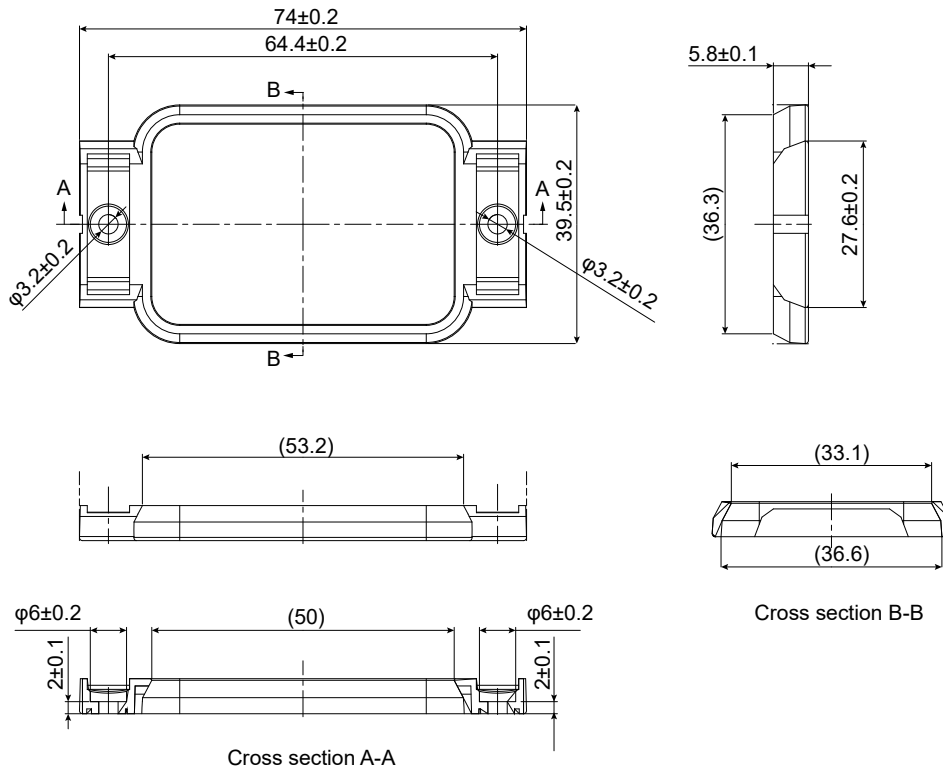
FWM8BLZ14T with bracket

■ Dimensions

FWM8BLZ14T

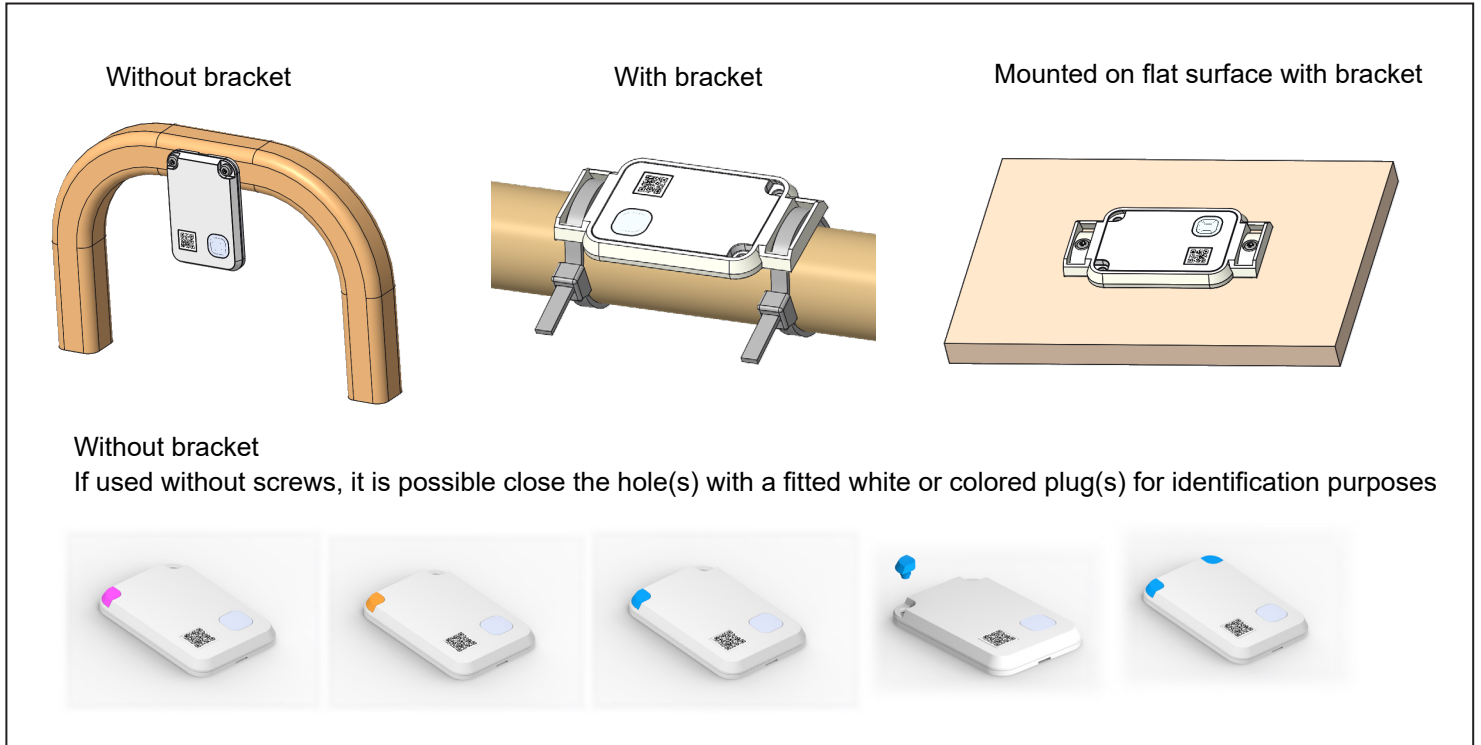


Bracket



Unit: mm

## ■ Mounting options



### Contact

#### Japan

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

#### North and South America

FUJITSU COMPONENTS AMERICA, INC.  
350 Cobalt Way, M/S 160  
Sunnyvale, CA 94085 U.S.A.  
Tel: (1-408) 745-4900  
Email: fcai.components@fcl-components.com

#### Europe

FUJITSU COMPONENTS EUROPE B.V.  
Diamantlaan 25  
2132 WV Hoofddorp  
Netherlands  
Tel: (31-23) 5560910  
Email: info.fceu@cs.fcl-components.com

#### Asia Pacific

FUJITSU COMPONENTS ASIA, Ltd.  
No. 20 Harbour Drive, #07-01B  
Singapore 117612  
Tel: (65) 6375-8560  
Email: fcal@fcl-components.com

#### China

FUJITSU ELECTRONIC COMPONENTS  
(SHANGHAI) CO., LTD.  
Room 4306, BM Intercontinental Business Center,  
100 Yutong Rd, Shanghai 200070, China  
Tel: (86 21) 3253 0998  
Email: fosh@fcl-components.com

#### Hong Kong

FUJITSU COMPONENTS HONG KONG Co., Ltd.  
Room 13, 23/F, Seapower Tower, Concordia Plaza,  
No.1 Science Museum Road,  
Tsim Sha Tsui East, Kowloon, Hong Kong  
Tel: (852) 2881 8495  
Email: fosh@fcl-components.com

#### Korea

FUJITSU COMPONENTS KOREA, LTD.  
Alpha Tower #403,  
645 Sampyeong-dong,  
Bundang-gu, Seongnam-si,  
Gyeonggi-do, 13524 Korea  
Tel: (82 31) 708-7108  
Email: fck@fcl-korea.co.kr

### Copyright

All trademarks or registered trademarks are the property of their respective owners. Fujitsu Components America or its affiliates do not warrant that the content of datasheet is error free. In a continuing effort to improve our products Fujitsu Components America, Inc. or its affiliates reserve the right to change specifications/datasheets without prior notice.  
Copyright ©2022 Fujitsu Components America, Inc. All rights reserved. Revised November 4, 2022.