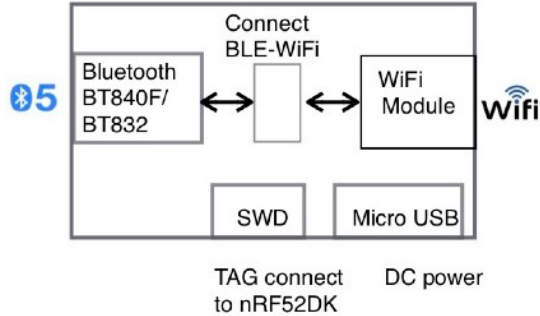


# BWG832F, BWG832X Quick Start Guides

## BWG832F/X Gateway

Gateway BWG832F/X consists of 2 major components.

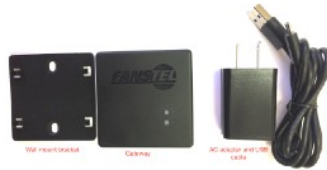
- A WiFi module with ESP8266. ESP8266 establishes and maintain connection with cloud server via a WiFi router.



- A Bluetooth 5 module - Fanstel BT832F with Nordic nRF52832 SoC for BWG832F.

Parts included in the package:

- A gateway
- A wall mount bracket
- An AC adapter, an USB cable

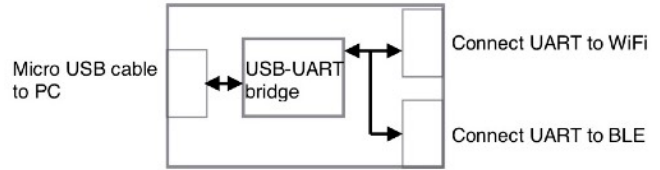
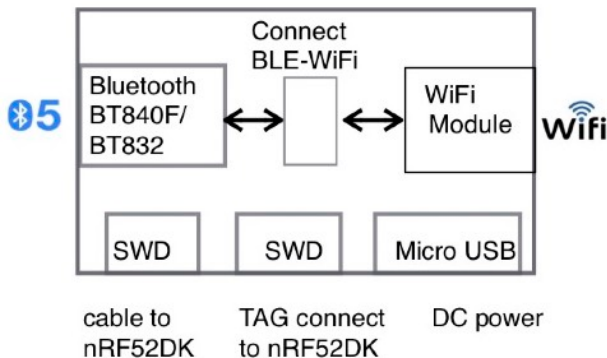
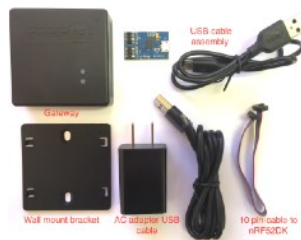


**Your first development gateway must be a DK (Development Kit).** To load firmware into WiFi module for connecting to a cloud server, the USB cable assembly included in DK is required.

## DK-BWG832F/X Development Kit

DK-BWG832F/X consists of:

- A gateway with magnetic mount
- A wall mount bracket
- An AC adapter, an USB cable
- An USB cable assembly for connecting USB port to WiFi or Bluetooth module
- A 10-pin cable for connecting to Nordic nRF52DK.



## WiFi Firmware Development

Mongoose OS is used. To install Mongoose tools in your PC, follow instructions in this link.

<https://mongoose-os.com/docs/quickstart/setup.html>

## Fanstel Document, Hex and Source Codes

Please download schematics, firmware, Android OS apk, app source codes, and data sheets/developer's manual from:

<http://www.fanstel.com/download-opensource/>

## Nordic nRF52 Development

Nordic nRF52 relays messages between cloud server and other nodes in Bluetooth mesh. An **nRF52DK** and a **TAG connect cable TC2050-IDC-NL-050-ALL** are required to change boot-loader. If boot-loader is loaded, **Over-The-Air DFU** can be used to update application software and SoftDevice.

Nordic development tools and download.

[http://infocenter.nordicsemi.com/index.jsp?topic=/com.nordic.infocenter.nrf52/dita/nrf52/development/nrf52\\_dev\\_kit.html&cp=1\\_1](http://infocenter.nordicsemi.com/index.jsp?topic=/com.nordic.infocenter.nrf52/dita/nrf52/development/nrf52_dev_kit.html&cp=1_1)

Nordic SDK with example projects.

[https://developer.nordicsemi.com/nRF5\\_SDK/](https://developer.nordicsemi.com/nRF5_SDK/)

Nordic DevZone, Q&A, Blog.

<https://devzone.nordicsemi.com/tutorials/b/getting-started/posts/development-with-gcc-and-eclipse>

Download and install nRF5x-Command-Line Tools

<https://www.nordicsemi.com/eng/nordic/Products/nRF52840/nRF5x-Command-Line-Tools-Win32/58850>

nRFgo Studio: PC application for configuring and evaluating Nordic SoCs.

<https://www.nordicsemi.com/eng/Products/2.4GHz-RF/nRFgo-Studio/>