

# WE310F5 Evaluation Board Quick Start Guide

This Quick Start Guide will walk you through the basic setup required to run the Serial-to-Wireless application.

The WE310F5 module evaluation board is available in two variants:

- WE310F5-I includes an antenna
- WE310F5-P includes only the RF PAD and requires an external antenna.

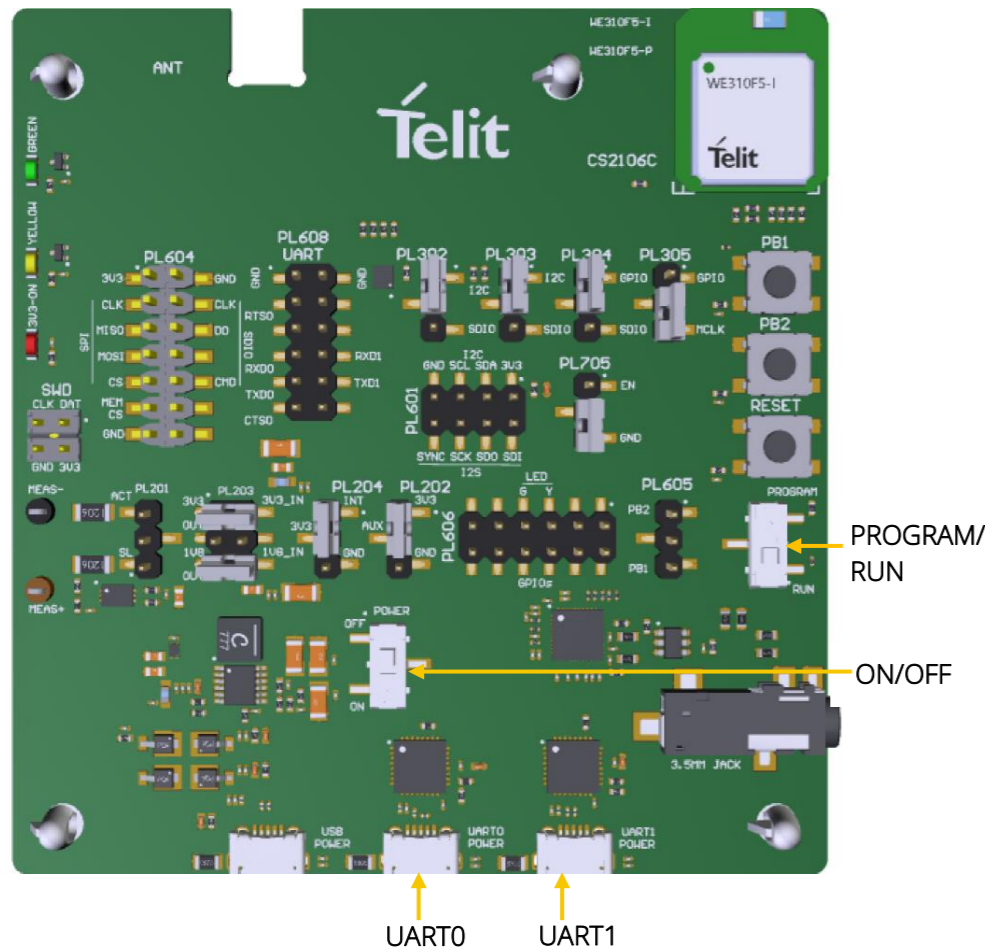


Figure 1: WE310F5-I EVB

The external antenna variant WE310F5-P EVB has the RF connector as shown in the figure below:

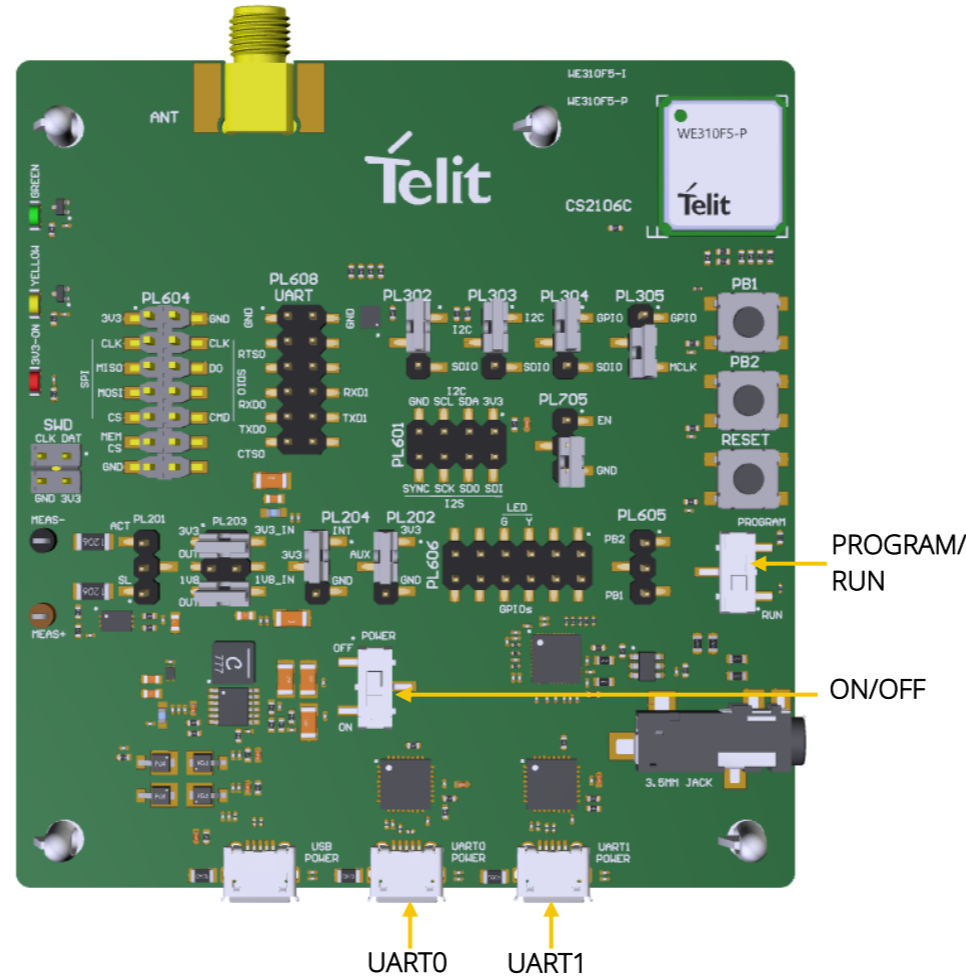


Figure 2: WE310F5-P EVB

## Kit Contents

- WE310F5 EVB Quick Start Guide (this document)
- WE310F5 Evaluation Board
- 1 Micro-USB Cable
- Antenna in case the “WE310F5-P” module

## Prerequisites

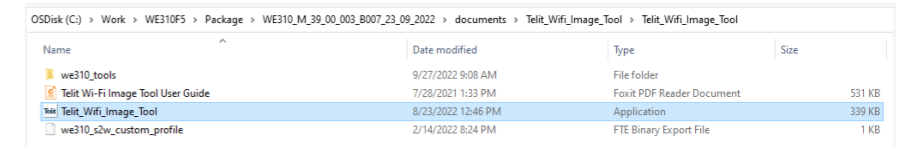
- Install Tera Term

**Note:** The ports required for Program and Run mode:

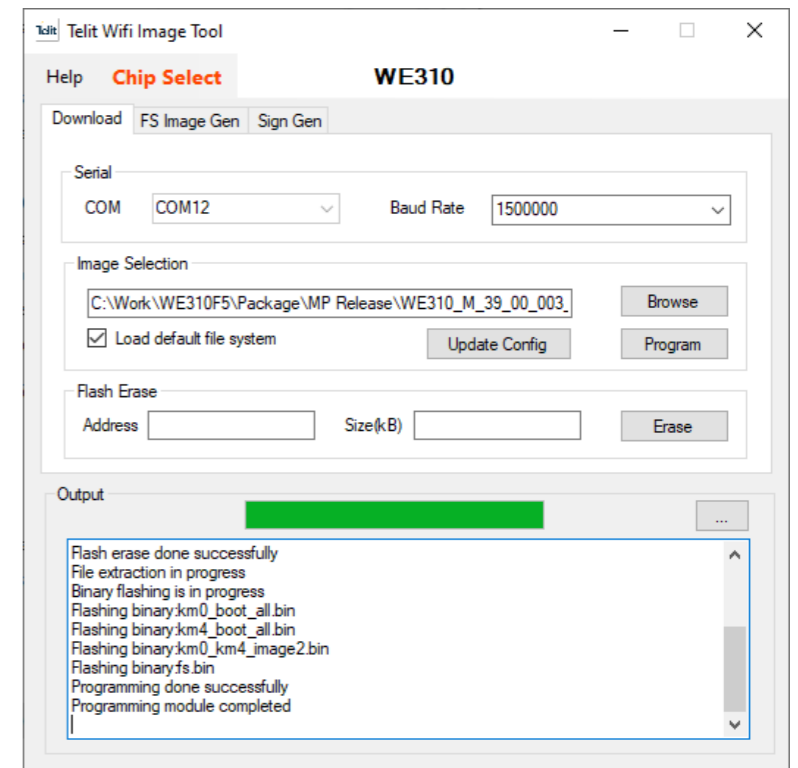
- UART0 Port: Run Mode
- UART1 Port: Programming Mode

# 1 Program the WE310F5 Module

1. Connect a Micro USB cable, one end to your PC/Laptop and the other to the WE310F5 EVB's UART1 Port (Evaluation board).
2. Toggle the PROGRAM/RUN switch to PROGRAM.
3. Download and unzip the latest firmware package from the [Telit Download Zone](#) (WE310>WE310F5>Firmware Release & Release Note).
4. Navigate to the `\Downloads\Telit_WE310_M_39.00.00\documents\Telit_Wifi_Image_Tool.zip` file and launch the `Telit_Wifi_Image_Tool.exe` application.



5. Select the appropriate COM Port and click **Browse** to navigate to the `s2w.bin` file in the downloaded package.



6. To initiate flash, select **Load default file system** and then click **Program**.
7. Once the flash process is complete, click **OK**.

The WE310F5 EVB is now ready to configure.

## 2 Run the WE310F5 Module

1. Disconnect and reconnect the micro-USB cable from **UART1** to the **UART0** port.
2. Change the toggle switch position to **RUN**.
3. To power the board, toggle the **ON/OFF** switch to the **ON** position.
4. Now, launch the **Tera term** application that you have installed on your laptop.
5. Go to **File->New Connection**.
6. Select the **Appropriate COM Port** and click **OK**.
7. Go to **Settings->Serial Port**, set the **Baud Rate** as 115200, and click **OK**.

The WE310F5 EVB is now ready for use.

## 3 WiFi Operations

The following use cases describe the WiFi operations of the WE310F5 module. The WE310F5 module supports two modes of operations:

- Station Mode
- Limited AP Mode

### Station Mode

To configure the module in Station Mode, configure an Access Point with an Open/Secured Network. In this case, the configuration is a secure network.

1. To start the WLAN Interface  

```
AT+WNI=0
```
2. To connect to a network  

```
AT+WNCN=1, "test", "demo@123"
```

```

Serial2Wireless APP
AT+WNI=0
+WNI:1

OK
AT+WNCN=1, "test", "demo@123"
+WNCN:CONNECTED,192.168.112.200,255.255.255.0,192.168.112.193

OK
    
```

### Limited AP Mode

To configure the WE310F5 In LAP Mode:

1. To set the module in AP Mode  

```
AT+WNI=1
```
2. To set the Static IP  

```
AT+WNIPC=0,1,192.168.230.3,255.255.255.0,192.168.230.1
```
3. To set the DHCP server IP  

```
AT+WNAPIPC=0,192.168.230.2,192.168.230.10,8640000
```
4. To create a Network  

```
AT+WNCR=0, "TELIT", 6, "WPA2-PSK", "AES", "1234567890"
```

```

Serial2Wireless APP
AT+WNI=1
+WNI:0

OK
AT+WNIPC=0,1,192.168.230.3,255.255.255.0,192.168.230.1
OK
AT+WNAPIPC=0,192.168.230.2,192.168.230.10,8640000
OK
AT+WNCR=0, "TELIT", 6, "WPA2-PSK", "AES", "1234567890"
+WNCR:CREATED

OK
    
```

## 4 Bluetooth® Operations

WE310F5 module supports the Bluetooth® Low Energy 5.3 version.

### TIO Communication

To initiate the Bluetooth® Low Energy interface via TIO communication, use the following AT commands:

```

AT+BI=1
AT+BIOCAP=0
AT+BTIO=1
AT+BADVE=0
AT+BOAD
    
```

```

Serial2Wireless APP
AT+BI=1
OK
AT+BIOCAP=0
OK
AT+BTIO=1
OK
AT+BADVE=0
OK
AT+BOAD
+BOAD:"00217E39F4FE"

OK
    
```

## GATT Communication

To initiate the Bluetooth® Low Energy interface via GATT Communication, use the following AT commands:

```

AT+BI=1
AT+BATTRIB="pserv", "uuid=12AA"
AT+BATTRIB="char", "prop=0x1A", "uuid=12A1"
AT+BATTRIB="charval", "perm=0011", "len=1", "val=0x59"
AT+BATTRIB="COMPLETE"
AT+BADVE=1
AT+BOAD
    
```

```

Serial2Wireless APP
AT+BI=1
OK
AT+BATTRIB="pserv", "uuid=12AA"
OK
AT+BATTRIB="char", "prop=0x1A", "uuid=12A1"
OK
AT+BATTRIB="charval", "perm=0011", "len=1", "val=0x59"
+BATTRIB:"CHARID:2"

OK
AT+BATTRIB="COMPLETE"
+BATTRIB:"SRVID:2"

OK
AT+BADVE=1
OK
AT+BOAD
+BOAD:"00217E39F4FE"

OK
    
```

## 5 Resource Links

For the latest Firmware Packages and product documentation downloads: <https://www.telit.com/we310f5-download-zone/>

## 6 Contact Information, Support

For technical support and general questions please e-mail:

- [TS-SRD@telit.com](mailto:TS-SRD@telit.com)

Alternatively, use:

<https://www.telit.com/contact-us/>