

# WE310F5

Wi-Fi 802.11 b/g/n Bluetooth® Low Energy 5.0





#### **Product Description**

The WE310F5 is a fully integrated, single-band Wi-Fi (802.11 b/g/n) and Bluetooth® Low Energy (BLE5) combination module that provides a low-cost and high-speed wireless connection to an embedded microcontroller over UART, SPI and SDIO interfaces.

The comprehensive software features exposed through AT commands enable faster time to market, even with limited wireless expertise. IoT devices integrating WE310F5 are secured with WPA3 protocol, the next- generation, cutting-edge Wi-Fi security specification. Out-of-the-box support for Firmware Over-the-Air (FOTA) upgrades significantly reduces integration time. WE310F5 also offers multiple provisioning schemes, helping configure the device securely from a smartphone or a laptop.

### **Key Features**

- Fully integrated, single-band Wi-Fi (11n) and Bluetooth® Low Energy 5.0 combination IoT module
- Low-cost, high-speed, serial-to-wireless connection to an MCU over UART, SPI and SDIO interface
- Comprehensive software features
- Low power consumption
- Advanced security features (including WPA3)
- Industrial-grade temperature range (-40 °C to +85 °C)
- Variants with (WE310F5-I) and without (WE310F5-P) antennas
- AWS IoT Core qualified

## **Target Applications**

#### Industrial/Commercial IoT

- Industrial automation
- Sensor gateways
- Condition-based monitoring
- Security panel
- Energy management
- Inspection camera
- Data logger
- **Building automation**

#### **Smart Home**

- Thermostat
- Air purifier
- Air conditioner
- Security/monitoring camera
- Pet food dispenser

AVAILABLE FOR

North America **EMEA** Japan Australia Taiwan China\* Korea\* Brazil\*











# WE310F5

**Module Wireless Specification** 

Wi-Fi: 802.11 b/g/n (2.4GHz) Bluetooth® Low Energy 5.0

Solution Architecture

Hosted (AT commands) Standalone (host-less)

Host Interface

UART, SPI & SDIO

Wi-Fi Modes

AP (access point) 14 STA (clients) Concurrent Mode (AP + STA) Wi-Fi Direct (P2P)\*

**BLE Modes** 

Central Peripheral Concurrent

**Security Features** 

WPA/WPA2 (personal) WPA3 (personal) WPA3 (enterprise)\* HTTPS server & client TLS-1.2/TLS-1.3\*

Coexistence

Inbuilt Wi-Fi Bluetooth® Low Energy

**Provisioning** (Through web-apps and native apps)

Bluetooth® Low Energyenabled Wi-Fi HTTPS enabled Wi-Fi

**Cloud Agent** 

Amazon AWS IoT\* Microsoft Azure\*

Wi-Fi Throughput

25 Mbps

Firmware Upgrade

FOTA

Dimension

Integrated antenna (WE310F5-I): 18 x 15 mm (LGA package) External antenna (WE310F5-P): 14.3 x 13.1 mm (LGA package)

Wi-Fi Tx output power

18 dBm

**BLE Tx output power** 

8 dBm

**Operating Temperature** 

-40 °C to +85 °C (industrial grade)

**Operating Voltage** 

3.3 V Typ

Compliance

FCC/IC/RED/RCM/JATE-JBL/TELEC-JRL/NCC/ANATEL/SRRC/WPC-ETA/KCC/UKCA Wi-Fi Alliance Bluetooth® Low Energy-SIG

\*Not available in first release

### **QUESTIONS?** VISIT WWW.TELIT.COM/CONTACT-US



