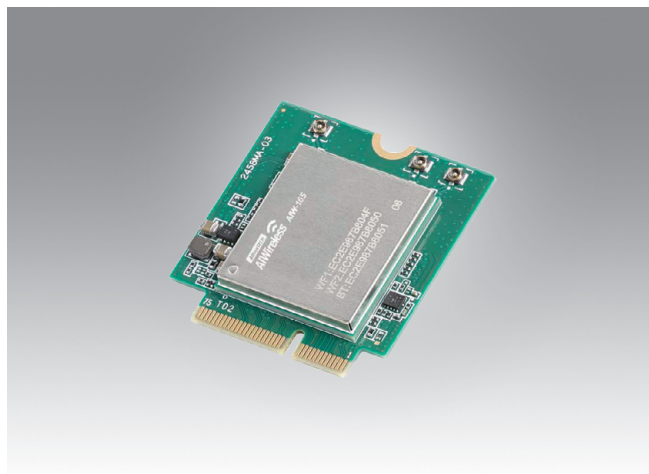


# AIW-165

## IEEE 802.11ax (2.4G/5G) + Bluetooth 5.3 M.2 2830 E key Module



### Features

- IEEE 802.11 ax/ac/a/b/g/n (2.4GHz/5GHz) + Bluetooth 5.3
- 2Tx/2Rx
- Wi-Fi: WPA/WPA2/WPA3
- Operating temperature: -40 ~ 85 °C (-40 ~ 185 °F)
- Supports Linux
- Wi-Fi: Uplink and downlink OFDMA and MU-MIMO
- BT: LTE/MWS coexistence

### Introduction

Advantech's AIW-165BN is an industrial grade wireless module that integrates Wi-Fi, Bluetooth, and low energy technology. It is an excellent solution for applications in medical devices, handheld solutions, industrial environments, embedded boards, and transportation.

### Specifications

Main Chipset	NXP 88W9098
Tx/Rx	2T2R for WiFi, standalone antenna for BT ANT1(Main): WiFi_A -> TX/RX ANT2(Aux): WiFi_B -> TX/RX ANT3(BT): BT
IEEE WLAN Standard	802.11 a/b/g/n/ac/ax (2.4GHz/5GHz)
Bluetooth®	Bluetooth® 5.3
Form Factor	M.2 2830, E Key card
Interface	Wi-Fi: PCIe; Bluetooth: UART
Operation Voltage	3.3V
Security	Wi-Fi: WPA/WPA2/WPA3
Supported OS	Linux*
Operating Temperature	-40 ~ 85 °C (-40 ~ 185 °F)
Dimensions (H x W x D)	28 x 30 x 3.95 mm (1.10 x 1.18 x 0.15 in)

### Ordering Information

Part No.	Product Description
AIW-165BN	NXP 88W9098 802.11ax (2.4GHz/5GHz) + BT 5.3 M.2 2830 E key module

### Materials in Package

Part	Specifications
1750007965-01	Wi-Fi Coaxial Cable, SMA (M) to MHF4, 30 cm (11.8 in)
1750008717-01	Wi-Fi 2.4 GHz and 5 GHz Dipole Antenna
1930006770-01	Screw M2.5*4L F/S D=4.5 H=0.8+ST Ni Nk