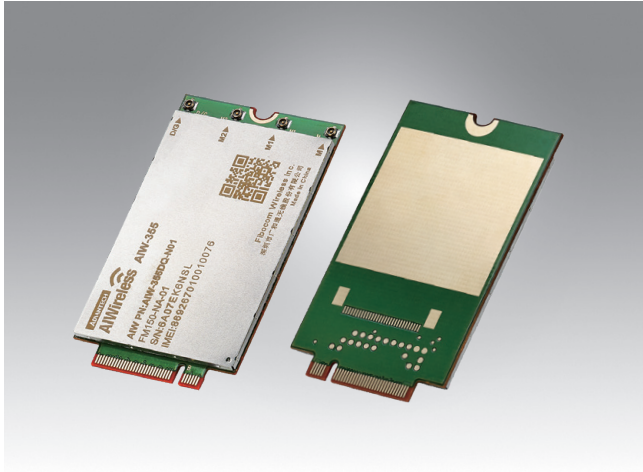


AIW-355

Highly-integrated 5G WWAN module with M.2 3052 Key-B interface



Features

- 5G NR SUB6/LTE FDD/LTE TDD/WCDMA systems
- Max UL peak rate of 525Mbps
- Max DL peak rate 4.1 Gbps DL 4 x 4 NR Sub6 EN-DC
- UL Max support 2 MIMO
- DL Max support 4 MIMO
- Operating temperature:
Normal operating temperature: -30 ~ 75 °C (-22 ~ 167 °F)
- GNSS, GPS/GLONASS/Beidou/Galileo

Introduction

Advantech AIW-355 is a highly integrated 5G WWAN module that uses a M.2 form-factor interface. It supports 5G NR SUB6/LTE FDD/LTE TDD/WCDMA systems and can be applied to most mobile carriers' cellular networks.

Specifications

| | | | |
|------------------------|---|---|--|
| Main Chipset | QUALCOMM SDX55 | | |
| Antenna | 4 x WWAN antenna | | |
| Band | AIW-355DQ-E01 <ul style="list-style-type: none">NR: n1,n3,n5,n8,n20, n28, n38,n41, n77, n78, n79LTE FDD: Band 1,3,5,7,8,19,20,28LTE TDD: Band 38,40,41,42,43WCDMA: B1, 3, 5, 8,19GNSS: support GPS, GLONASS, Galileo, BDS, QZSS | AIW-355DQ-C01 <ul style="list-style-type: none">NR: n1, n28, n41, n77, n78, n79LTE FDD: Band 1,2,3,5,7,8LTE TDD: Band 34,39,40,41WCDMA: B1, 2, 5, 8GNSS: support GPS, GLONASS, Galileo, BDS, QZSS | AIW-355DQ-N01 <ul style="list-style-type: none">NR: n2, n5, n7, n12, n14, n25, n41, n48, n66, n71, n78LTE FDD: Band 2, 4, 5, 7, 12, 13, 14, 17, 25, 26, 29, 30, 66, 71LTE TDD: Band 41, 42, 43, 48] LAA Band 46 Receiver onlyWCDMA: B1, 2, 4, 5, 8GNSS: Support GPS, GLONASS, BDS, Galileo, QZSS |
| Data Throughput | Max DL peak rate 4.1 Gbps DL 4 x 4 NR Sub6 EN-DC Max UL peak rate 525Mbps | | |
| Interface | USB 3.0/3.1 | | |
| Operation Voltage | 3.135 ~ 4.4V, Typical 3.8V | | |
| Power Consumption | Idle mode: <7.3mA (USB sleep); <20.6mA (USB wake up) | | |
| O.S Supported | Windows 10, Linux (Ubuntu 20.04) | | |
| Temperature Ranges | Normal operating temperature: -30 ~ 75 °C (-22 ~ 167 °F) (3GPP compliant, with appropriate thermal design) | | |
| Dimensions (L x W x H) | 30 x 52 x 2.3 mm/1.18 x 2.04 x .09 in (B-key) | | |

Ordering Information

| Part No. | Product Description |
|----------------|---|
| AIW-355 DQ-E01 | 5G(Sub-6G)/LTE/WCDMA module, with GNSS, for EU |
| AIW-355 DQ-N01 | 5G(Sub-6G)/LTE/WCDMA module, with GNSS, for US |
| AIW-355 DQ-C01 | 5G(Sub-6G)/LTE/WCDMA module, with GNSS, for China |

Suggested Antennas and Cables

| Part No. | Specifications |
|---------------|---|
| 1750007991-01 | GPS antenna 1575 MHz, Antenna 3 dBi, (Zenith) L1: 1575.42 MHz, B2: 1561.098 MHz, GNSS: 1602 MHz antenna 4.94 x 3.93 x 1.49 cm/1.94 x 1.54 x 0.58 in, RHCP and SMA male |
| 1750008569-01 | Coaxial Cable, 300 mm/11.8 in, SMA (F) to MFH4 |
| 1750009372-01 | 5G(Sub-6G)/LTE/WCDMA full band dipole antenna, antenna, 167 mm/6.57 in |