Advantech
Industrial Wireless Solutions

Reliable Wireless Turnkey Solutions for Industrial Applications

Wireless Design-In Services

Enabling an Intelligent Planet

www.advantech.com
Advantech Industrial Wireless (AIW) is a leading wireless solution provider empowering edge devices by connecting them via wireless technologies for AIoT. AIW offers diverse module and antenna solutions for different vertical applications and focuses on wireless system integration based on their AIW Design-In service.

Enabling Seamless Wireless Connectivity for AIoT

- Transportation
- Agriculture
- EV Chargers
- Retail

One-Stop RF + Software Total Wireless Solution

Certification
Fast Support and Consultation

AIW 100 Series
- WI-Fi 6E / WI-Fi 7
- AIW-170 M.2 2230 E-Key
- AIW-171 Mini-PCIe
- AIW-173 M.2 2230 E-Key

AIW 200 Series
- GNSS / GPS
- AIW-210 M.2 2242 B-Key
- AIW-211 LCC Stamp Type
- AIW-212 Mini-PCIe

AIW 300 Series
- Cellular Connectivity
- AIW-343 M.2 3 B-Key/SIM slot

AIW 400 Series
- Bluetooth 5.4

AIW 500 Series
- Industrial Antenna Solution

AIW 100 Series
- WI-Fi 6E / WI-Fi 7
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Enabling Seamless Wireless Connectivity for AIoT

Series Connectivity

**AIW 400 Series**
- Bluetooth 5.4
- AIW-346 M.2 2242 B-Key
- AIW-357 M.2 3052 B-Key
- AIW-450 LGA Type

**AIW 500 Series**
- Industrial Antenna Solution
- Antennas for Wi-Fi 6, 6E, 7, GPS/GNSS, 4G LTE, 5G NR, Bluetooth, and RF cables

Vertical Applications
- Transportation
- AGV
- Medical
- Smart Cities

Antennas
- Antenna Assessment, Design, and Testing
AIW Product Series
Designed for Your AIoT Solutions

The AIW product portfolio is composed of Wi-Fi, GNSS, cellular, Bluetooth, and antennas. AIW products are specifically developed for industrial applications to help customers enhance production efficiency, reduce costs, enhance security, and offer more reliable connectivity and better data analysis for real-time decision-making. These products are typically integrated in areas such as factory automation, logistics, infrastructure, and monitoring systems for healthcare. This results in more intelligent, efficient, economical, and safe operation.

**Wi-Fi 6E / Wi-Fi 7**

**AIW-100 Series**
- Well-established standard
- High indoor network coverage
- High-speed connection
- Made for industrial applications

Throughput enhancement
Data rates are up to 5.8Gbps to fulfill most demands of 4K/8K video streaming and advanced medical image transfer via Wi-Fi. This enables multiple connections while also being cost-effective and efficient.

Latency improvement
New technologies are included like preamble puncturing introduced with Wi-Fi 7. Latency of less than 10ms can be achieved with a stable connection via Wi-Fi for factory automation and AGV.

Ready-to-go certificate
Universal certificates save time and effort on design.

**GNSS/GPS**

**AIW-200 Series**
- Outdoor area with good coverage
- Ideal for hostile environments
- Multi-GNSS engine for GPS, GLONASS, Galileo, BeiDou, QZSS, and SBAS

Excellent precision
Exceptional sensitivity and acquisition times for L1 frequency

Dead reckoning function
Enables smooth navigation and tracking in shadowed areas

Industrial-grade wide temperature range
-40~85°C operating temp range
Cellular Connectivity

AIW-300 Series
- Wide spectrum efficiency
- High traffic capacity
- Fastest connection speeds
- Excellent longevity support

AIW-343  AIW-357

Bluetooth 5.4

AIW-400 Series
- Upward compatible with BT 5.4
- PaWR support for ESL applications
- Supports Bluetooth mesh

AIW-450

Industrial Antenna Solution

AIW-500 Series
- Fits perfectly with AIW module solutions
- No MOQ limit
- Design consultancy and testing service
- Waterproof option for critical environments

AIW-512  AIW-532

AIW-520
AIW is revolutionizing IoT development with its Wireless Design-In Services, set to transform wireless connectivity for IoT devices. Through collaborations with strategic partners, testing is sped up and manufacturing is simplified. It comprises four parts: solution assessment, RF and antenna design, system integration, and certification acquisition. AIW is especially impactful in RF design, testing, and certification. There is a dedicated team to mitigate any potential issues, minimizing schedule disruptions and costs for customers in various verticals.

We are excited to collaborate with Advantech in delivering cutting-edge Wi-Fi 7 and 5G solutions that empower the next generation of industrial applications. Our joint commitment to technological advancement fuels our anticipation for continued collaboration, driving innovative and competitive solutions to market.

Advantech and LitePoint are reshaping the IoT development landscape through their cutting-edge Wireless Design-in Service. By joining forces, the collaboration strengthens wireless design and validation capabilities, accelerates testing cycles, and simplifies manufacturing processes. This strategic cooperation represents a significant leap forward in IoT innovation, underscoring the unwavering commitment of both companies to delivering advanced and accessible wireless solutions.
Leading Industrial Wireless Solution Provider

Robust RD Capability for Design-In Service

Strong Partnership for A+ Products & Speed to Market

Antenna Customization Service

• Requirement assessment, antenna placement evaluation
• Throughput optimization, radiation pattern and isolation testing

Global Certification Service

• Cost reduction via early assessment and wireless kit selection
• Pre-test and troubleshooting during the certification process
Empower Electric Charging Stations
AIW 100 Wi-Fi & 500 Antenna Solutions

Application Requirements
EV Chargers require wireless connectivity for timely firmware and status updates. Whether the platform is Linux or Android, OTA firmware upgrades, status reports, and remote control via apps are all essential to EV chargers.

Success Factors
- Multi-OS support including Android, Linux, and Windows
- Universal certification support for the global market
- IP66 waterproof antenna design for outdoor application

Medical Endoscope
AIW 100 Wi-Fi & 500 Antenna Solutions

Application Requirements
The most modern edge medical endoscopes are equipped with wireless functionality like Wi-Fi and BT. Through advanced wireless connectivity, data transmission for endoscopes can be realized without space and environmental limitations. Customers can also provide connectivity to other devices via softAP mode.

Success Factors
- The driver integrates with Android 12 to speed up development time-to-market
- Ultra-high speed and extreme low latency of Wi-Fi 6 technology for real-time video streaming applications
**Smart Rail Monitoring and Dispatching System**

**AIW 300 Cellular & 500 Antenna Solutions**

**Application Requirements**

Smart rails optimize road traffic, enhance safety, and ensure punctual public transportation. AIW-357 is compatible with high-speed, low-latency communication networks for smart rail applications. Utilizing sensors and cameras, it enables video analysis, real-time monitoring, remote control, and predictive warnings, setting a 5G+ benchmark for smart rail transportation.

**Success Factors**

- High speed and low-latency enables real-time monitoring
- Wide operating temperature supports outdoor and harsh environments

**Industrial Drones**

**AIW 200 GNSS & 500 Antenna Solutions**

**Application Requirements**

In sectors such as agriculture, defense, and smart cities, AIW-213 boosts industrial drone performance. With precise altitude accuracy and its dead reckoning feature, it can communicate with multiple satellites to obtain faster location updates. This ensures high efficiency and yield optimization in applications like smart agriculture.

**Success Factors**

- Supports industrial operating temperatures (-40 ~ 85°C)
- Supports dead reckoning function
## Industrial Wireless Solutions
### AIW 100 Series
#### Wi-Fi and Bluetooth Combo

<table>
<thead>
<tr>
<th>Model Name</th>
<th>AIW-162BS</th>
<th>EWM-W165M201E</th>
<th>AIW-170BQ</th>
<th>AIW-171HQ</th>
<th>EWM-W179M201E</th>
<th>EWM-W180H01E</th>
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<tbody>
<tr>
<td><strong>Chipset</strong></td>
<td>BCM43752</td>
<td>Intel AX210</td>
<td>WCN6856</td>
<td>WCN6856</td>
<td>RTL8852BE</td>
<td>RTL8822CU</td>
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<tr>
<td><strong>Wireless Generation</strong></td>
<td>Wi-Fi 6+BT 5.0</td>
<td>Wi-Fi 6E+BT 5.3</td>
<td>Wi-Fi 6E+BT 5.3</td>
<td>Wi-Fi 6+BT 5.2</td>
<td>Wi-Fi 5+ BT 5.0</td>
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</tr>
<tr>
<td><strong>Form Factor</strong></td>
<td>M.2 2230 E-Key</td>
<td>M.2 2230 A+E Key</td>
<td>Half-Size Mini-Pcie</td>
<td>M.2 2230 A+E Key</td>
<td>Half-Size Mini-Pcie</td>
<td></td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td>Wi-Fi: PCIe</td>
<td>Wi-Fi: PCIe</td>
<td>Wi-Fi: PCIe</td>
<td>Wi-Fi: PCIe</td>
<td>Wi-Fi: PCIe</td>
<td>Wi-Fi: PCIe</td>
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<tr>
<td><strong>Antenna Information</strong></td>
<td>2 x MHF4 connectors</td>
<td>2 x MHF4 connectors</td>
<td>2 x MHF4 connectors</td>
<td>2 x MHF4 connectors</td>
<td>2 x MHF4 connectors</td>
<td>2 x MHF4 connectors</td>
</tr>
<tr>
<td><strong>Operating Temperature Range</strong></td>
<td>-40 ~ 85°C</td>
<td>0 ~ 70°C</td>
<td>-40 ~ 85°C</td>
<td>0 ~ 70°C</td>
<td>-20 ~ 70°C</td>
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<tr>
<td><strong>OS Support</strong></td>
<td>Linux/Android</td>
<td>Windows/Linux on X86</td>
<td>Windows/Linux</td>
<td>Windows/Linux</td>
<td>Windows/Linux/Android</td>
<td>Windows/Linux/Android</td>
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<td><strong>Maximum Data Rate</strong></td>
<td>1200Mbps</td>
<td>866Mbps</td>
<td>Multiple certificates authorized by Intel</td>
<td>Multiple certificates authorized by Intel</td>
<td>Multiple certificates authorized by Realtek</td>
<td>Multiple certificates authorized by Realtek</td>
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<tr>
<td><strong>Certification</strong></td>
<td>FCC/CE/IC/TELEC</td>
<td>FCC/CE/IC/TELEC/ NCC/KC</td>
<td>FCC/CE/IC</td>
<td>FCC/CE/IC</td>
<td>FCC/CE/IC/TELEC</td>
<td>FCC/CE/IC/TELEC</td>
</tr>
<tr>
<td><strong>Recommended Antenna</strong></td>
<td>AIW-512</td>
<td>AIW-511</td>
<td>AIW-512</td>
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</table>

* Some features are only supported in Windows 11 and Windows 7 is no longer on the ADV support list. Linux support depends on the kernel version.

**Maximum datarate is based on the theoretical value of Wi-Fi technology.

## AIW 200 Series
### GPS / GNSS

<table>
<thead>
<tr>
<th>Model Name</th>
<th>AIW-210</th>
<th>AIW-212</th>
<th>AIW-213</th>
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<tbody>
<tr>
<td><strong>Part Number</strong></td>
<td>AIW-210XU-001</td>
<td>AIW-212HU-001</td>
<td>AIW-213HU-001</td>
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<tr>
<td><strong>Chipset</strong></td>
<td>NEO-M9N</td>
<td>NEO-M9N</td>
<td>NEO-M9V</td>
</tr>
<tr>
<td><strong>GPS Signal Type</strong></td>
<td>L1</td>
<td>L1</td>
<td>L1</td>
</tr>
<tr>
<td><strong>Form Factor</strong></td>
<td>M.2 2242 B-Key</td>
<td>Half-Size Mini-Pcie</td>
<td>Half-Size Mini-Pcie</td>
</tr>
<tr>
<td><strong>Signal Protocol</strong></td>
<td>USB 2.0</td>
<td>USB 2.0</td>
<td>USB 2.0</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>-40°C ~ 85°C</td>
<td>-40°C ~ 85°C</td>
<td>-40°C ~ 85°C</td>
</tr>
<tr>
<td><strong>RF Receiver Type</strong></td>
<td>GPS module, multi-GNSS (GPS/BeiDou/Galileo/GLONASS/QZSS/SBAS)</td>
<td>GPS module, multi-GNSS (GPS/BeiDou/Galileo/GLONASS/QZSS/SBAS)</td>
<td>GPS module, multi-GNSS (GPS/BeiDou/Galileo/GLONASS/QZSS/SBAS)</td>
</tr>
<tr>
<td><strong>GPS Acquisition</strong></td>
<td>Cold Start: 24s, Hot Start: 2s, Aided Start: 2s</td>
<td>Cold Start: 24s, Hot Start: 2s, Aided Start: 2s</td>
<td>Cold Start: 24s, Hot Start: 2s, Aided Start: 3s</td>
</tr>
<tr>
<td><strong>GPS Accuracy</strong></td>
<td>1.5m CEP with SBAS assistance</td>
<td>1.5m CEP with SBAS assistance</td>
<td>1.5m CEP with SBAS assistance</td>
</tr>
<tr>
<td><strong>Dead Reckoning</strong></td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Antenna Information</strong></td>
<td>1 x MHF1 connectors</td>
<td>1 x MHF1 connectors</td>
<td>1 x MHF1 connectors</td>
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<tr>
<td><strong>Recommended Antenna</strong></td>
<td>AIW-520</td>
<td>AIW-520</td>
<td>AIW-520</td>
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</table>
### Industrial Wireless Solutions

**AIW 300 Series**

**4G LTE CAT6**

<table>
<thead>
<tr>
<th>Model Name</th>
<th>AIW-340</th>
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</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>AIW-340CQ-G1</td>
</tr>
<tr>
<td>Chipset</td>
<td>Qualcomm SDX12</td>
</tr>
<tr>
<td>Radio Technology</td>
<td>LTE Cat.6 + GPS</td>
</tr>
<tr>
<td>Form Factor</td>
<td>M.2 3042 B-Key</td>
</tr>
<tr>
<td>SIM Slot</td>
<td>No</td>
</tr>
<tr>
<td>Signal Protocol</td>
<td>USB 3.1</td>
</tr>
<tr>
<td>Downlink/Uplink</td>
<td>600Mbps/150Mbps</td>
</tr>
<tr>
<td>Frequency Band</td>
<td>LTE FDD: Band 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 18, 19, 20, 25, 26, 28, 29, 32, 36, 71 LTE TDD: Band 38, 39, 40, 41, 42, 43, 48 WCDMA: Band 1, 2, 4, 5, 6, 8, 9, 19</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>Extended: -40°C ~ 85°C</td>
</tr>
<tr>
<td>Support Area</td>
<td>Global</td>
</tr>
<tr>
<td>Antenna Information</td>
<td>2 x MHF4 connectors</td>
</tr>
<tr>
<td>Recommended Antenna</td>
<td>AIW-531</td>
</tr>
</tbody>
</table>

**4G LTE CAT4**

<table>
<thead>
<tr>
<th>Model Name</th>
<th>AIW-343</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>AIW-343FQ-N01, AIW-343FQ-E01, AIW-343FQ-J01</td>
</tr>
<tr>
<td>Chipset</td>
<td>Qualcomm MDM9X07, Qualcomm MDM9X07, Qualcomm MDM9X07</td>
</tr>
<tr>
<td>Radio Technology</td>
<td>LTE Cat.4 + GPS, LTE Cat.4 + GPS, LTE Cat.4 + GPS</td>
</tr>
<tr>
<td>Form Factor</td>
<td>Full-size Mini-PCIe, Full-size Mini-PCIe, Full-size Mini-PCIe</td>
</tr>
<tr>
<td>SIM Slot</td>
<td>Yes, Yes, Yes</td>
</tr>
<tr>
<td>Signal Protocol</td>
<td>USB 2.0, USB 2.0, USB 2.0</td>
</tr>
<tr>
<td>Downlink/Uplink</td>
<td>150Mbps/50Mbps, 150Mbps/50Mbps, 150Mbps/50Mbps</td>
</tr>
<tr>
<td>Frequency Band</td>
<td>4G: Band 2, 4, 5, 12, 13, 14, 26, 66, 71 3G: Band 2, 4, 5 4G: Band 1, 3, 7, 8, 20, 28A 3G: Band 1, 3, 8 2G: Band 3, 8 4G: Band 1, 3, 5, 8, 9, 18, 19, 26, 28 3G: Band 1, 5, 6, 8, 19</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>Extended: -40°C ~ 85°C, Extended: -40°C ~ 85°C, Extended: -40°C ~ 85°C</td>
</tr>
<tr>
<td>Support Area</td>
<td>NA, EU, TW, JP, Australia</td>
</tr>
<tr>
<td>Antenna Information</td>
<td>3 x MHF1 connectors, 3 x MHF1 connectors, 3 x MHF1 connectors</td>
</tr>
<tr>
<td>Recommended Antenna</td>
<td>AIW-531, AIW-531, AIW-531</td>
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</table>
# Industrial Wireless Solutions

## 4G LTE CAT4

<table>
<thead>
<tr>
<th>Model Name</th>
<th>AIW-344</th>
<th>AIW-346</th>
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<tbody>
<tr>
<td>Part Number</td>
<td>AIW-344FQ-N01</td>
<td>AIW-344FQ-E02</td>
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<tr>
<td>Chipset</td>
<td>Qualcomm MDM9X07</td>
<td>Qualcomm MDM9X07</td>
</tr>
<tr>
<td>Radio Technology</td>
<td>LTE Cat.4 + GPS</td>
<td>LTE Cat.4 + GPS</td>
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<tr>
<td>Form Factor</td>
<td>Full-size Mini-PCIe</td>
<td>Full-size Mini-PCIe</td>
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<tr>
<td>SIM Slot</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Signal Protocol</td>
<td>USB 2.0</td>
<td>USB 2.0</td>
</tr>
<tr>
<td>Downlink/Uplink</td>
<td>150Mbps/50Mbps</td>
<td>150Mbps/50Mbps</td>
</tr>
<tr>
<td>Frequency Band</td>
<td>LTE FDD: Band 2,4,5,12,13,17,66,71 WCDMA: Band 2,4,5</td>
<td>FDD-LTE: Band 1,3,5,7,8,20,28 TDD-LTE: Band 38,40,41 HSPA/UMTS: Band 1,5,8 GSM/GPRS/EDGE: 850/900/1800MHz</td>
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<tr>
<td>Operating Temperature</td>
<td>Extended: -40°C ~ 85°C</td>
<td>Extended: -40°C ~ 85°C</td>
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<tr>
<td>Support Area</td>
<td>NA</td>
<td>EU, TW, Australia, Brazil</td>
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<tr>
<td>Antenna Information</td>
<td>3 x MHF1 connectors</td>
<td>3 x MHF1 connectors</td>
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<tr>
<td>Recommended Antenna</td>
<td>AIW-531</td>
<td>AIW-531</td>
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<tr>
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<td>Chipset</td>
<td>Qualcomm MDM9X07</td>
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<tr>
<td>Radio Technology</td>
<td>LTE Cat.4 + GPS</td>
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<tr>
<td>Form Factor</td>
<td>Full-size Mini-PCIe</td>
</tr>
<tr>
<td>SIM Slot</td>
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</tr>
<tr>
<td>Signal Protocol</td>
<td>USB 2.0</td>
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<tr>
<td>Downlink/Uplink</td>
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</tr>
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<td>Operating Temperature</td>
<td>-30 ~ 80°C</td>
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<td>Support Area</td>
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<td>Antenna Information</td>
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## Industrial Wireless Solutions

### 5G NR FR1

<table>
<thead>
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<th>Model Name</th>
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<th>AIW-357</th>
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<tbody>
<tr>
<td><strong>Part Number</strong></td>
<td>AIW-356DQ-N01</td>
<td>AIW-356DQ-E01</td>
</tr>
<tr>
<td><strong>Chipset</strong></td>
<td>Qualcomm SDX62</td>
<td>Qualcomm SDX62</td>
</tr>
<tr>
<td><strong>Radio Technology</strong></td>
<td>5G FR1 + GPS</td>
<td>5G FR1 + GPS</td>
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<tr>
<td><strong>Form Factor</strong></td>
<td>M.2 3052 B-Key</td>
<td>M.2 3052 B-Key</td>
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<td><strong>SIM Slot</strong></td>
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<tr>
<td><strong>Signal Protocol</strong></td>
<td>USB 3.1</td>
<td>USB 3.1</td>
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<td><strong>Downlink/Uplink</strong></td>
<td>Max DL peak rate 3.47 Gbps, Max UL peak rate 555 Mbps</td>
<td>Max DL peak rate 3.2 Gbps, Max UL peak rate 555 Mbps</td>
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<td>Extended: -40°C ~ 85°C</td>
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<td><strong>Support Area</strong></td>
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<td>EU, Brazil</td>
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<td><strong>Antenna Information</strong></td>
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<td><strong>Recommended Antenna</strong></td>
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<th>Model Name</th>
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<td><strong>Part Number</strong></td>
<td>AIW-357DK-G1P</td>
<td>AIW-357DK-G2U</td>
</tr>
<tr>
<td><strong>Chipset</strong></td>
<td>MediaTek T700</td>
<td>MediaTek T700</td>
</tr>
<tr>
<td><strong>Radio Technology</strong></td>
<td>5G FR1 + GPS</td>
<td>5G FR1 + GPS</td>
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<tr>
<td><strong>Form Factor</strong></td>
<td>M.2 3052 B-Key</td>
<td>M.2 3052 B-Key</td>
</tr>
<tr>
<td><strong>SIM Slot</strong></td>
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<td>No</td>
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<tr>
<td><strong>Signal Protocol</strong></td>
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<td>USB 3.1</td>
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<tr>
<td><strong>Downlink/Uplink</strong></td>
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<td>Max DL peak rate 2.97 Gbps, Max UL peak rate 1150 Mbps</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>Extended: -30 ~ 80°C</td>
<td>Extended: -30 ~ 80°C</td>
</tr>
<tr>
<td><strong>Support Area</strong></td>
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<td>US, EU, TW, JP</td>
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<tr>
<td><strong>Antenna Information</strong></td>
<td>4 x MHF4 connectors</td>
<td>4 x MHF4 connectors</td>
</tr>
<tr>
<td><strong>Recommended Antenna</strong></td>
<td>AIW-533</td>
<td>AIW-533</td>
</tr>
</tbody>
</table>
## Industrial Wireless Solutions
### AIW 500 Series
### Antennas

<table>
<thead>
<tr>
<th>Model Name</th>
<th>AIW-512</th>
<th>AIW-513</th>
<th>AIW-520</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antenna Type</strong></td>
<td>Dipole</td>
<td>Dipole</td>
<td>Patch</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>2.4-2.5GHz, 5.15-5.85GHz, 5.925-7.125GHz</td>
<td>2.4-2.5GHz, 5.15-5.85GHz, 5.925-7.125GHz</td>
<td>L1: 1575.42MHz, B2: 1561.098MHz, GNSS: 1602MHz</td>
</tr>
<tr>
<td><strong>Antenna Peak Gain</strong></td>
<td>2.87dBi @2.4GHz, 3.11dBi @5GHz, 3.22dBi @6GHz</td>
<td>2.06dBi @2.4-2.5GHz, 4.16dBi @5.15-5.85GHz, 4.61dBi @6-7.125GHz</td>
<td>Antenna: 3dBicLNA: 28+/- 2db</td>
</tr>
<tr>
<td><strong>Length (cm)</strong></td>
<td>11.1 x 1.0</td>
<td>23 x 2.2</td>
<td>2.5<em>2.5</em>0.4wire length: 500 cm</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>RP-SMA male</td>
<td>RP-SMA male</td>
<td>SMA male</td>
</tr>
<tr>
<td><strong>IP Level</strong></td>
<td>IP55</td>
<td>IP65</td>
<td>-</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>-10 ~ 65°C</td>
<td>-40 ~ 70°C</td>
<td>-40 ~ 85°C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model Name</th>
<th>AIW-532</th>
<th>AIW-533</th>
<th>AIW-535</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antenna Type</strong></td>
<td>Dipole</td>
<td>Dipole</td>
<td>Dipole</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>699-960MHz, 1710-2700MHz, 3300-5000MHz, 5150-5850MHz</td>
<td>699-960MHz, 1710-2700MHz, 3300-5000MHz, 5150-5850MHz</td>
<td>699-960MHz, 1710-2700MHz, 3300-5000MHz, 5150-5850MHz</td>
</tr>
<tr>
<td><strong>Antenna Peak Gain</strong></td>
<td>1.78dBi @699-960MHz, 2.72dBi @1710-2700MHz, 0.18dBi @3300-5000MHz, 4.02dBi @5150-5850MHz</td>
<td>2dBi @617-960MHz, 2.6dBi @1450-2700MHz, 3.5dBi @3300-5000MHz, 3.7dBi @5150-5850MHz</td>
<td>1.49dBi @699-960MHz, 2.62dBi @1710-2700MHz, 3.59dBi @3300-5000MHz, 3.83dBi @5150-5850MHz</td>
</tr>
<tr>
<td><strong>Length (cm)</strong></td>
<td>13 x 2.5</td>
<td>13.4 x 1.9</td>
<td>23 x 2.2</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>SMA male</td>
<td>SMA male</td>
<td>SMA male</td>
</tr>
<tr>
<td><strong>IP Level</strong></td>
<td>-</td>
<td>-</td>
<td>IP65</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>-25 ~ 70°C</td>
<td>-30 ~ 65°C</td>
<td>-40 ~ 70°C</td>
</tr>
</tbody>
</table>
# Regional Service and Customization Centers

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