

# Embedded Wireless IoT Solution

IIoT & AIoT with  
Wireless Implementation



Downloadable  
Marketing Resources

# World's First Industrial-Grade Embedded Wi-Fi USB Adapter

IEW-7811UTC



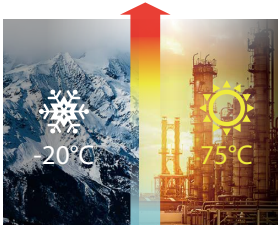
## IoT Ready? Easily Add Wi-Fi to Your Device

Enable your product with wireless connectivity

Introducing the all-new embedded Wi-Fi USB Adapter, IEW-7811UTC. Allowing greater Wi-Fi connection in harsh environments, the IEW-7811UTC comes with dedicated, robust, and outstanding electronic and mechanical designs, making it easy to embed in your devices and operate within a wide temperature range from -20°C to 75°C (-4°F to 167°F). Made for industrial and outdoor Wi-Fi connectivity that ensures excellent performance.

Not only does the adapter offer long-term durability and performance, the IEW-7811UTC comes with security, quality and wide compatibility. Works with Windows and Linux embedded systems, further inter-operates with your existing Wi-Fi routers, AP and extenders without replacements or additional purchases.

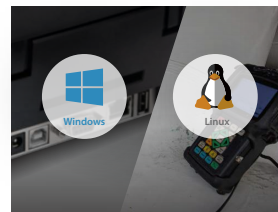
Ideal for using in outdoors with low or high temperature environments, indoor rooms with heat dissipation difficulties and embedding in devices with limited space.



Durable and Reliable Wi-Fi



High Level Security



Smooth Compatibility



Dual Band Selectivity

## Your Industry, Our Solution. IIoT & AIoT Implementation.

Ideas Anywhere, Wi-Fi Everywhere! Let your IIoT/AIoT devices go wireless.

### Manufacturer, Warehouse, Retailer

Industrial IoT Devices, Factory Automation Robot, Portable RFID Reader, Barcode Scanner, People Counter, Receipt Machine, etc.



### Smart Agriculture

Autonomous Robots, Drones or UAVs, Sensors and the IoT from Temperature, Water Level, Water Pressure, Solar Radiation, Leaf Moisture, Stem Diameter, etc.



### Healthcare

Glucometer, Thermometer, Sphygmomanometer, Oximeter, Diagnostic Devices, Microscope, etc.



### Commerce, Entertainment, Sport Tech

Commercial Air Purifier, Drone, Business Printer, Coffee System, Creative Robots, Golf Swing Analyzers, Smart Home Appliances, etc.



# Why EDIMAX?

Get your devices IoT ready with EDIMAX, you will no longer need to spend excessively on R&D resources and time. EDIMAX has more than 30 years experiences for providing networking products and expect the industrial-grade Wi-Fi USB Adapter, EDIMAX offers various wireless USB adapters. With the professional hardware and software design teams, EDIMAX makes integration easily and simplified the process to advance your devices to the next level with wireless connectivity.



**Quality Like No Other**



**Custom Build**



**World Class Certifications**

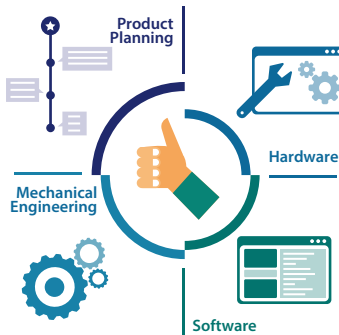


**Short Time-to-Market**

## Quality Like No Other

### Strong R&D

Dedicated R&D team, fully focused on function, performance and quality.



### Reliability

Strict product reliability tests help uncover flaws in system design and functionality.

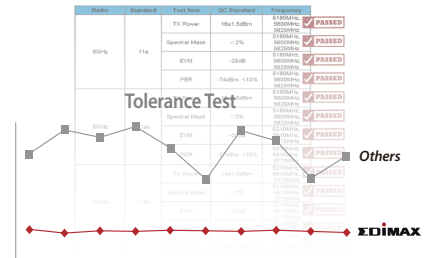
- ◆ >30 Quality Assurance Testing Items
- ◆ 5 Times Testing Items than Others



### Consistency

Consistent high-performance through strict and rigorous testing.

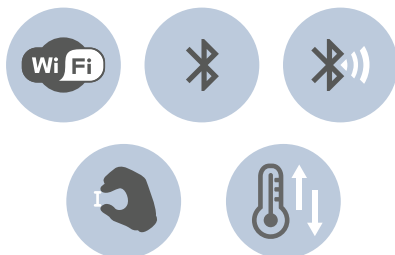
- ◆ Low Tolerance to Meet High Quality Consistency
- ◆ Strict Quality Control During and After Production



## Custom Build for The Right Fit

### Full Range Solution

- Wi-Fi 4/5/6 or Bluetooth
- Wi-Fi & Bluetooth Combo
- Ultra Small or Other Sizes
- Normal or Harsh Environment Use



### Design-in Service

- Up-to-date Driver
- RF Certification
- Optimal Antenna Design
- Wireless System Performance Tuning



### Mass Customization

- Laser Printing Customization
- Flexible Bulk Package for Saving Shipping Cost
- Modulated Design



## World Class Certifications

EDIMAX has approval for more than 30 different countries or regions regulation certification experiences. With this international multi-country certification experiences, EDIMAX can assist to get the certification upon request to shorten the product launch schedule and also save the huge application cost.



## Short Time-To-Market

### Production

- World's Leading Networking Solution Provider / Manufacturer
- ISO 9001 & ISO 14000 Certified
- Mass Production Process with Total Quality Management (TQM)
- Fast and Flexible Service

### QC & RF Certification

- Reliability Test
- Performance Test
- Quality Assurance
- Certified in 25+ Countries and Regions

### System Performance Check

- Owned Labs
- Driver Integration
- Wireless Performance
- Throughput
- Transmission Power
- Receive Sensitivity
- Radiation Pattern
- Functionality

### Inquiry

- Wireless Requirement: Wi-Fi, Bluetooth, Combo
- OS Platform
- OS Version
- Certification Requirement

### Product Selection

- Specification Version
  - Wi-Fi 4/5/6 (802.11 ax/ac/a/b/g/n)
  - Bluetooth or Combo
  - Dual-band
- Throughput
- Form size
- High Gain/Long Range
- High Efficiency
- Operating Temperature



	Industrial Grade		Wi-Fi 5 11ac	
	IEW-7811UTC	EW-7822ULC	EW-7822ULC	EW-7822UTC
Nano & Mini Design				
Performance				
Speed	433Mbps + 200Mbps	867Mbps + 300Mbps	867Mbps + 300Mbps	867Mbps + 300Mbps
Standards & Protocols	Wi-Fi 5: 802.11AC	Wi-Fi 5: 802.11AC	Wi-Fi 5: 802.11AC	Wi-Fi 5: 802.11AC
Antenna	Internal PIFA 2.4GHz: 1.8dBi 5GHz: 2.5dBi	2 Internal Monopole 2.4GHz : 1.81 and 0.36dBi 5GHz : 1.71 and -0.23dBi	2 Internal Monopole 2.4GHz : 1.81 and 0.36dBi 5GHz : 1.71 and -0.23dBi	2 Internal PIFA 2.4GHz : 2.48 and 2.5dBi 5GHz : 2.89 and 3.3dBi
USB Standard	USB 2.0	USB 2.0	USB 2.0	USB 3.2 Gen 1*
Certification	<ul style="list-style-type: none"> <li>• CE (European Union)</li> <li>• FCC (U.S)</li> <li>• IC (Canada)</li> <li>• MIC/VCCI (Japan)</li> <li>• IMDA (Singapore)</li> <li>• NBTC (Thailand)</li> <li>• WPC (India)</li> <li>• NTC (Philippines)</li> <li>• Exemption Letter (Vietnam)</li> <li>• SIRIM (Malaysia)</li> <li>• SRRC (China)</li> <li>• OFCA (Hong Kong)</li> <li>• NCC (Taiwan)</li> <li>• BSMI (Taiwan)</li> <li>• CITC (Saudi Arabia)</li> <li>• RCM (Australia &amp; New Zealand)</li> <li>• Anatel (Brazil)</li> <li>• SUBTEL (Chile)</li> <li>• CRC (Colombia)</li> <li>• ENACOM (Argentina)</li> <li>• TRA (Bahrain)</li> <li>• CITRA (Kuwait)</li> <li>• TRA (Oman)</li> <li>• CRA (Qatar)</li> <li>• ICASA (South Africa)</li> <li>• UA RED DoC (Ukraine)</li> <li>• URSEC (Uruguay)</li> <li>• KC (South Korea)</li> <li>• IFETEL/NOM (Mexico)</li> <li>• SDPPI (Indonesia)</li> <li>• MOC (Israel)</li> <li>• TDRA (United Arab Emirates)</li> <li>• NOM (Mexico)</li> </ul>			
Report List	<ul style="list-style-type: none"> <li>• CE (European Union)</li> <li>• FCC (U.S)</li> <li>• Operating Temperature: -20~75°C (-4~167°F)</li> </ul>	<ul style="list-style-type: none"> <li>• CE (European Union)</li> <li>• FCC (U.S)</li> <li>• IC (Canada)</li> <li>• MIC/VCCI (Japan)</li> <li>• IMDA (Singapore)</li> <li>• NBTC (Thailand)</li> <li>• WPC (India)</li> <li>• NTC (Philippines)</li> <li>• Exemption Letter (Vietnam)</li> <li>• SIRIM (Malaysia)</li> <li>• SRRC (China)</li> <li>• OFCA (Hong Kong)</li> <li>• NCC (Taiwan)</li> <li>• BSMI (Taiwan)</li> <li>• CITC (Saudi Arabia)</li> <li>• RCM (Australia &amp; New Zealand)</li> <li>• Anatel (Brazil)</li> <li>• SUBTEL (Chile)</li> <li>• CRC (Colombia)</li> </ul>	<ul style="list-style-type: none"> <li>• ENACOM (Argentina)</li> <li>• TRA (Bahrain)</li> <li>• CITRA (Kuwait)</li> <li>• TRA (Oman)</li> <li>• CRA (Qatar)</li> <li>• ICASA (South Africa)</li> <li>• UA RED DoC (Ukraine)</li> <li>• URSEC (Uruguay)</li> <li>• KC (South Korea)</li> <li>• IFETEL/NOM (Mexico)</li> <li>• SDPPI (Indonesia)</li> <li>• MOC (Israel)</li> <li>• TDRA (United Arab Emirates)</li> <li>• NOM (Mexico)</li> </ul>	<ul style="list-style-type: none"> <li>• FCC (U.S)</li> <li>• IMDA (Singapore)</li> </ul>
	Wi-Fi 5 11ac		Wi-Fi 4 11n	
	EW-7811ULC	EW-7811UTC	EW-7722UTn V3	EW-7811Un V2
Nano & Mini Design				
Performance				
Speed	433Mbps + 200Mbps	433Mbps + 150Mbps	300Mbps	150Mbps
Standards & Protocols	Wi-Fi 5: 802.11AC	Wi-Fi 5: 802.11AC	Wi-Fi 4: 802.11n	Wi-Fi 4: 802.11n
Antenna	Internal PIFA 2.4GHz: 0.98dBi 5GHz: 3.93dBi	Internal PIFA 2.4GHz : 2dBi 5GHz : 4dBi	2 Internal PIFA 2.4GHz: 1.3dBi	Internal PIFA 2.4GHz: -4dBi
USB Standard	USB 2.0	USB 2.0	USB 2.0	USB 2.0
Certification	<ul style="list-style-type: none"> <li>• CE (European Union)</li> <li>• FCC (U.S)</li> <li>• IC (Canada)</li> <li>• NCC (Taiwan)</li> <li>• BSMI (Taiwan)</li> <li>• CRA (Qatar)</li> <li>• RCM (Australia &amp; New Zealand)</li> <li>• CRC (Colombia)</li> <li>• CE (European Union)</li> <li>• FCC (U.S)</li> <li>• NCC (Taiwan)</li> <li>• BSMI (Taiwan)</li> <li>• CE (European Union)</li> <li>• FCC (U.S)</li> <li>• NCC (Taiwan)</li> <li>• BSMI (Taiwan)</li> <li>• CE (European Union)</li> <li>• FCC (U.S)</li> <li>• IC (Canada)</li> <li>• NCC (Taiwan)</li> <li>• BSMI (Taiwan)</li> </ul>			
Report List	<ul style="list-style-type: none"> <li>• CE (European Union)</li> <li>• FCC (U.S)</li> <li>• NCC (Taiwan)</li> <li>• BSMI (Taiwan)</li> </ul>	<ul style="list-style-type: none"> <li>• CE (European Union)</li> <li>• FCC (U.S)</li> <li>• IC (Canada)</li> <li>• NCC (Taiwan)</li> <li>• BSMI (Taiwan)</li> <li>• CRA (Qatar)</li> <li>• RCM (Australia &amp; New Zealand)</li> <li>• CRC (Colombia)</li> </ul>	<ul style="list-style-type: none"> <li>• CE (European Union)</li> <li>• FCC (U.S)</li> <li>• NCC (Taiwan)</li> <li>• BSMI (Taiwan)</li> </ul>	<ul style="list-style-type: none"> <li>• CE (European Union)</li> <li>• FCC (U.S)</li> <li>• IC (Canada)</li> <li>• NCC (Taiwan)</li> <li>• BSMI (Taiwan)</li> </ul>



	Wi-Fi 6/5/4 & Bluetooth				Bluetooth			
	EW-7611UXB	EW-7611UCB	EW-7611ULB V2	EW-7611ULB	BT-8530	BT-8500		
Nano & Mini Design	 <b>new</b>				 <b>new</b>			
Performance								
Speed	Wi-Fi: 433Mbps+ 150Mbps Compliant with BT5.3	Wi-Fi: 433Mbps+ 150Mbps Compliant with BT4.0	Wi-Fi: 150Mbps Compliant with BT4.2	Wi-Fi: 150Mbps Compliant with BT4.0	Compliant with BT5.3 BT classic (BDR/ EDR) and BLE	Compliant with BT5.0 BT classic (BDR/ EDR) and BLE		
Standards & Protocols	Wi-Fi 6: 802.11AX Bluetooth: BT5.3	Wi-Fi 5: 802.11AC Bluetooth: BT4.0	Bluetooth: BT4.2	Bluetooth: BT4.0	Bluetooth: BT5.3	Bluetooth: BT5.0		
Antenna	Internal  PIFA 2.4GHz : 3dBi 5GHz : 3.4dBi	Internal  PIFA 2.4GHz : 2dBi 5GHz : 3dBi	Internal  PIFA 2.4GHz: 1.6dBi	Internal  PIFA 2.4GHz: 1.6dBi	Internal  PIFA 2.4GHz: 2.3dBi	Internal  PIFA 2.4GHz: -1.2dBi		
USB Standard	USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0		
Certification								
Report List	<ul style="list-style-type: none"> <li>•BQB (Bluetooth)</li> <li>•CE (European Union)</li> <li>•FCC (U.S)</li> </ul>	<ul style="list-style-type: none"> <li>•CE (European Union)</li> <li>•IMDA (Singapore)</li> </ul>	<ul style="list-style-type: none"> <li>•BQB (Bluetooth)</li> <li>•CE (European Union)</li> <li>•FCC (U.S)</li> <li>•IC (Canada)</li> <li>•RCM (AU/NZ)</li> <li>•WPC (India)</li> </ul>	<ul style="list-style-type: none"> <li>•BQB (Bluetooth)</li> <li>•CE (European Union)</li> <li>•FCC (U.S)</li> <li>•IC (Canada)</li> <li>•MIC/VCCI (Japan)</li> <li>•KC (South Korea)</li> <li>•WPC (India)</li> <li>•OFCA (Hong Kong)</li> </ul>	<ul style="list-style-type: none"> <li>•NCC (Taiwan)</li> <li>•BSMI (Taiwan)</li> <li>•ICASA (South Africa)</li> <li>•NTRA (Egypt)</li> <li>•TRA (Bahrain)</li> <li>•TRA (OMAN)</li> <li>•CRA (Qatar)</li> <li>•IFETEL (Mexico)</li> </ul>	<ul style="list-style-type: none"> <li>•CRC (Colombia)</li> <li>•MTC (Peru)</li> <li>•RCM (Australia &amp; New Zealand)</li> <li>•CNC (Argentina)</li> </ul>	<ul style="list-style-type: none"> <li>•BQB (Bluetooth)</li> <li>•CE (European Union)</li> <li>•FCC (U.S)</li> </ul>	<ul style="list-style-type: none"> <li>•BQB (Bluetooth)</li> <li>•CE (European Union)</li> <li>•FCC (U.S)</li> <li>•IC (Canada)</li> <li>•NCC (Taiwan)</li> <li>•BSMI (Taiwan)</li> </ul>
	<b>Wi-Fi 6 11ax</b>			<b>Wi-Fi 5 11ac</b>				
	EW-7822UMX	EW-7833UAC	EW-7822UAC	EW-7822UAD	EW-7811UAC	EW-7811DAC		
Compact, Portable, Specialized Design								
Performance								
Speed	1201Mbps + 573Mbps	1300Mbps + 450Mbps	867Mbps + 300Mbps	867Mbps + 300Mbps	433Mbps + 150Mbps	433Mbps + 150Mbps		
Standards & Protocols	Wi-Fi 6: 802.11AX	Wi-Fi 5: 802.11AC	Wi-Fi 5: 802.11AC	Wi-Fi 5: 802.11AC	Wi-Fi 5: 802.11AC	Wi-Fi 5: 802.11AC		
Antenna	2 Internal  Dipole 2.4GHz : 3.6 and 3.1dBi 5GHz : 4.5 and 5.6dBi	2 Internal + 1 External 180° Adjustable Foldaway Internal PIFA 2.4GHz: 3.04 and 3.78dBi 5GHz: 3.69 and 4.84dBi External 2.4GHz: 3.41dBi 5GHz: 4.74dBi	1 Internal + 1 External 180° Adjustable Foldaway Internal Monopole 2.4GHz: 2dBi 5GHz: 2dBi External 2.4GHz: 2dBi 5GHz: 2dBi	2 External  Dipole 2.4GHz : 1.32 and 2.09dBi 5GHz : 2.8 and 4.37dBi	External  Dipole 2.4GHz : 4dBi 5GHz : 6dBi	External  Directional 2.4GHz : 4.2dBi 5GHz : 7.1dBi		
USB Standard	USB 3.2 Gen 1*	USB 3.2 Gen 1*	USB 3.2 Gen 1*	USB 3.2 Gen 1*	USB 2.0	USB 2.0		
Certification								
Report List	<ul style="list-style-type: none"> <li>•CE (European Union)</li> <li>•FCC (U.S)</li> <li>•IC (Canada)</li> <li>•NCC (Taiwan)</li> <li>•BSMI (Taiwan)</li> </ul>	<ul style="list-style-type: none"> <li>•CE (European Union)</li> <li>•FCC (U.S)</li> <li>•MIC (Japan)</li> <li>•IMDA (Singapore)</li> </ul>	<ul style="list-style-type: none"> <li>•CE (European Union)</li> <li>•FCC (U.S)</li> <li>•IC (Canada)</li> <li>•IMDA (Singapore)</li> <li>•WPC (India)</li> </ul>	<ul style="list-style-type: none"> <li>•CE (European Union)</li> <li>•FCC (U.S)</li> <li>•NCC (Taiwan)</li> <li>•BSMI (Taiwan)</li> </ul>	<ul style="list-style-type: none"> <li>•CE (European Union)</li> <li>•FCC (U.S)</li> <li>•IC (Canada)</li> </ul>	<ul style="list-style-type: none"> <li>•CE (European Union)</li> <li>•FCC (U.S)</li> <li>•IC (Canada)</li> <li>•NCC (Taiwan)</li> <li>•BSMI (Taiwan)</li> </ul>	<ul style="list-style-type: none"> <li>•CE (European Union)</li> <li>•FCC (U.S)</li> <li>•IC (Canada)</li> <li>•NCC (Taiwan)</li> <li>•BSMI (Taiwan)</li> </ul>	

(\*Previous USB 3.0/USB 3.1 Gen 1 is rebranded as USB 3.2 Gen 1 by USB-IF)



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