

IOT Series Page 7-8

| Model No. | Product Category | Description |
|-----------------|---|-------------------------------|
| WSDB-104GNI(BT) | 802.11b/g/n Single-Band Industrial-Grade IOT+Bluetooth Module | Broadcom BCM43438,1T1R |
| WSDQ-103GNI | 802.11b/g/n Single-Band Industrial-Grade IOT Module | Qualcomm Atheros QCA4010,1T1R |
| WSDQ-103GN | 802.11b/g/n Single-Band IOT Module | Qualcomm Atheros QCA4010,1T1R |



LoRa Series Page 9

| Model No. | Product Category | Description |
|--|-----------------------|----------------|
|  WLRS-590 | LoRa Wireless Module | Semtech SX1276 |
|  WLRS-591 | LoRa Evaluation Board | Semtech SX1276 |



Industrial-Grade Series Page 10-12

| Model No. | Product Category | Description |
|-----------------|---|------------------------------------|
| WPEQ-353ACNI | 802.11ac/a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module | Qualcomm Atheros QCA9890-BR4B,3T3R |
| WPEQ-256ACNI | 802.11ac/a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module | Qualcomm Atheros QCA9892-BR4B,2T2R |
| WPEA-252NI | 802.11a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module | Qualcomm Atheros AR9592-AR1B,2T2R |
| WPEA-127NI | 802.11a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module | Qualcomm Atheros AR9390-AL1B,3T3R |
| WSDB-104GNI(BT) | 802.11b/g/n Single-Band Industrial-Grade IOT+Bluetooth Module | Broadcom BCM43438,1T1R |
| WSDQ-103GNI | 802.11b/g/n Single-Band Industrial-Grade IOT Module | Qualcomm Atheros QCA4010,1T1R |
| WUBA-171GN | 802.11b/g/n Single-Band High-Power USB Module | Qualcomm Atheros AR9271,1T1R |

M.2 Series Page 13-14

| Model No. | Product Category | Description |
|---|--|----------------------------------|
|  WNSQ-261ACN(BT) | 802.11ac/a/b/g/n Dual-Band Wi-Fi+Bluetooth M.2 LGA Type1216 Module | Qualcomm Atheros QCA6174A-5,2T2R |
|  WNFQ-258ACN(BT) | 802.11ac/a/b/g/n Dual-Band Wi-Fi+Bluetooth M.2 Type 2230 Module | Qualcomm Atheros QCA6174A-5,2T2R |
| WNFQ-158ACN(BT) | 802.11ac/a/b/g/n Dual-Band Wi-Fi+Bluetooth M.2 Type 1630 Module | Qualcomm Atheros QCA9377A,1T1R |
| WNFQ-255ACN(BT) | 802.11ac/a/b/g/n Dual-Band Wi-Fi+Bluetooth M.2 Type 1630 Module | Qualcomm Atheros QCA6174,2T2R |

Mini PCIe Series Page 15-16

| Model No. | Product Category | Description |
|---|--|------------------------------------|
|  WPEQ-160ACN | 802.11ac/a/b/g/n Dual-Band Half Mini PCIe Module | Qualcomm Atheros QCA9377-7,1T1R |
|  WPEQ-261ACN(BT) | 802.11ac/a/b/g/n Dual-Band Wi-Fi+Bluetooth Half Mini PCIe Module | Qualcomm Atheros QCA6174A-5,2T2R |
| WPEQ-257ACN | 802.11ac/a/b/g/n Dual-Band Half Mini PCIe Module | Qualcomm Atheros QCA9882-BR4A,2T2R |
| WPEQ-353ACNI | 802.11ac/a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module | Qualcomm Atheros QCA9890-BR4B,3T3R |
| WPEQ-256ACNI | 802.11ac/a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module | Qualcomm Atheros QCA9892-BR4B,2T2R |



Mini PCIe Series Page 16-20

| Model No. | Product Category | Description |
|----------------|---|--|
| WPEA-352ACN | 802.11ac/a/b/g/n Dual-Band Mini PCIe Module | Qualcomm Atheros QCA9880-BR4A,3T3R |
| WPET-232ACN | 802.11ac/a/b/g/n Dual-Band Half Mini PCIe Module | Realtek RTL8812AE,2T2R |
| WPEA-127NI | 802.11a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module | Qualcomm Atheros AR9390-AL1B,3T3R |
| WPEA-127N | 802.11a/b/g/n Dual-Band Mini PCIe Module | Qualcomm Atheros AR9380-AL1A,3T3R |
| WPEA-128N | 802.11a/b/g/n Dual-Band Half Mini PCIe Module | Qualcomm Atheros AR9380-AL1A,3T3R |
| WPEA-252NI | 802.11a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module | Qualcomm Atheros AR9592-AR1B,2T2R |
| WPEA-121NI | 802.11a/b/g/n Dual-Band Half Mini PCIe Module | Qualcomm Atheros AR9382,2T2R |
| WPEA-251N(BT) | 802.11a/b/g/n Dual-Band Wi-Fi+Bluetooth Half Mini PCIe Module | Qualcomm Atheros AR9462,2T2R |
| WPEA-152GN(BT) | 802.11b/g/n Single-Band Wi-Fi+Bluetooth Half Mini PCIe Module | Qualcomm Atheros AR9485+AR3012,(Wi-Fi:1T2R; BT:1T1R) |
| WPER-172GN | 802.11b/g/n Single-Band Half Mini PCIe Module | Ralink RTL5390U,1T2R |

Mini PCI Series Page 21

| Model No. | Product Category | Description |
|------------|---|----------------------------|
| WMIR-278GN | 802.11b/g/n Single-Band Mini PCI Module | Ralink RT3062,2T2R |
| WL-850R | 802.11b/g Single-Band Mini PCI Module | Ralink RT2561T+RT2527,1T1R |

USB Series Page 22-24

| Model No. | Product Category | Description |
|---|--|---------------------------------|
|  WPEQ-160ACN | 802.11ac/a/b/g/n Dual-Band Half Mini PCIe Module | Qualcomm Atheros QCA9377-7,1T1R |
|  WUBQ-159ACN(BT) | 802.11ac/a/b/g/n Dual-Band USB Module | Qualcomm Atheros QCA9377-7,1T1R |
| WUBM-273ACN Series | 802.11ac/a/b/g/n Dual-Band USB Module | MediaTek MT7612U,2T2R |
| WUBR-508N Series | 802.11a/b/g/n Dual-Band USB Module | Ralink RT5572,2T2R |
| WUBR-507N Series | 802.11a/b/g/n Dual-Band USB Module | Ralink RT3572,2T2R |
| WUBA-171GN | 802.11b/g/n Single-Band High-Power USB Module | Qualcomm Atheros AR9271,1T1R |
| WPER-172GN | 802.11b/g/n Single-Band Half Mini PCIe Module | Ralink RT5390U,1T2R |

AP Board Page 25-26

| Model No. | Product Category | Description |
|----------------|---------------------------|----------------------------------|
| WRTA-352ACN(P) | 802.11acn+gn Router Board | Qualcomm Atheros QCA9558+QCA9880 |
| WRM-271ACN(P) | 802.11acn+gn Router Board | MediaTek MT7620A+MT7612E |
| WRM-170ACN(P) | 802.11acn+gn Router Board | MediaTek MT7620A+MT7610E |

ABOUT



Founded in 2002, SparkLAN Communication is a company headquartered in Taipei Taiwan. Over 14 years of deeply cultivating in the field of wireless broadband industry, we devote in the wireless and broadband communication field, with quality wideranging products, proven manufacturing capability and professional customer-centric services have become one of the leaders in wireless networking solution provider in IOT application on the global presence.

SparkLAN is strategically partnered with all the top Wireless chipset makers like Qualcomm and Broadcom, enable us to reach the latest technology trend, and develop newest solution ahead to cater customer's infinite innovative applications. This is SparkLAN's objective and commitment to maintain the highest client satisfaction in order to continue our success to provide wireless technology to our customer.

Our Value

Superior R&D and Technology Professionals

With the long-term commitment to R&D investment, it is the foundation of SparkLAN's core competence to innovation. We develop quality products and solutions to address the hottest wireless broadband applications. More importantly, we offer unique and precise customization and consultancy with our experienced R&D expertise to meet the diversified demand from a wide range of markets and cost-effective requirements.

Fast Response to Newest Technology

SparkLAN empowers to adopt the cutting-edge technology on solution development levered on the good relationships with the key chipset providers, such as Atheros, Ra-link and Realtek etc., with our dedication to WiFi industry and the proven track record of steady revenue growth over the years, SparkLAN has been recognized as a pioneer in catching up the newer technology and providing the full line-up of products to re-pond to the latest market's needs.

Focus Marketplace and Product Variety

SparkLAN offers complete products under four fours marketplaces to serve the de-mand of IP surveillance and wireless broadband industry across the world. With the award-winning quality and innovative design, many of our products have been recognized by prestigious industry magazine awards and highly recommended by worldwide media. We have committed ourselves to improve and introduce new products and solution continuously to help customers pursue success.

Proven Manufacturing and Logistics Capability

Subordinating to a worldwide tiger one manufacturers, SparkLAN inherits professional knowledge and capability of manufacturing high quality products. With an excellent reputation of efficient logistics platform, inventory and supply chain management, we have been treated as a reliable and trusted business partner to provide on time delivery and full back-end support with high flexibility and commitments to our customers and business partners.

Uncompromising Support and Services

In addition to the products and solutions, SparkLAN provides a board range of support and services to our clients. We persist in supplying customers the best service by keeping uplifting our competences and improving the after-sales management system and process. Drawing on a unique combination of industry experience, business sharpness and technical knowledge, SparkLAN brings tailored value-added services to benefit customer's business growth without compromise.

2017 New Product

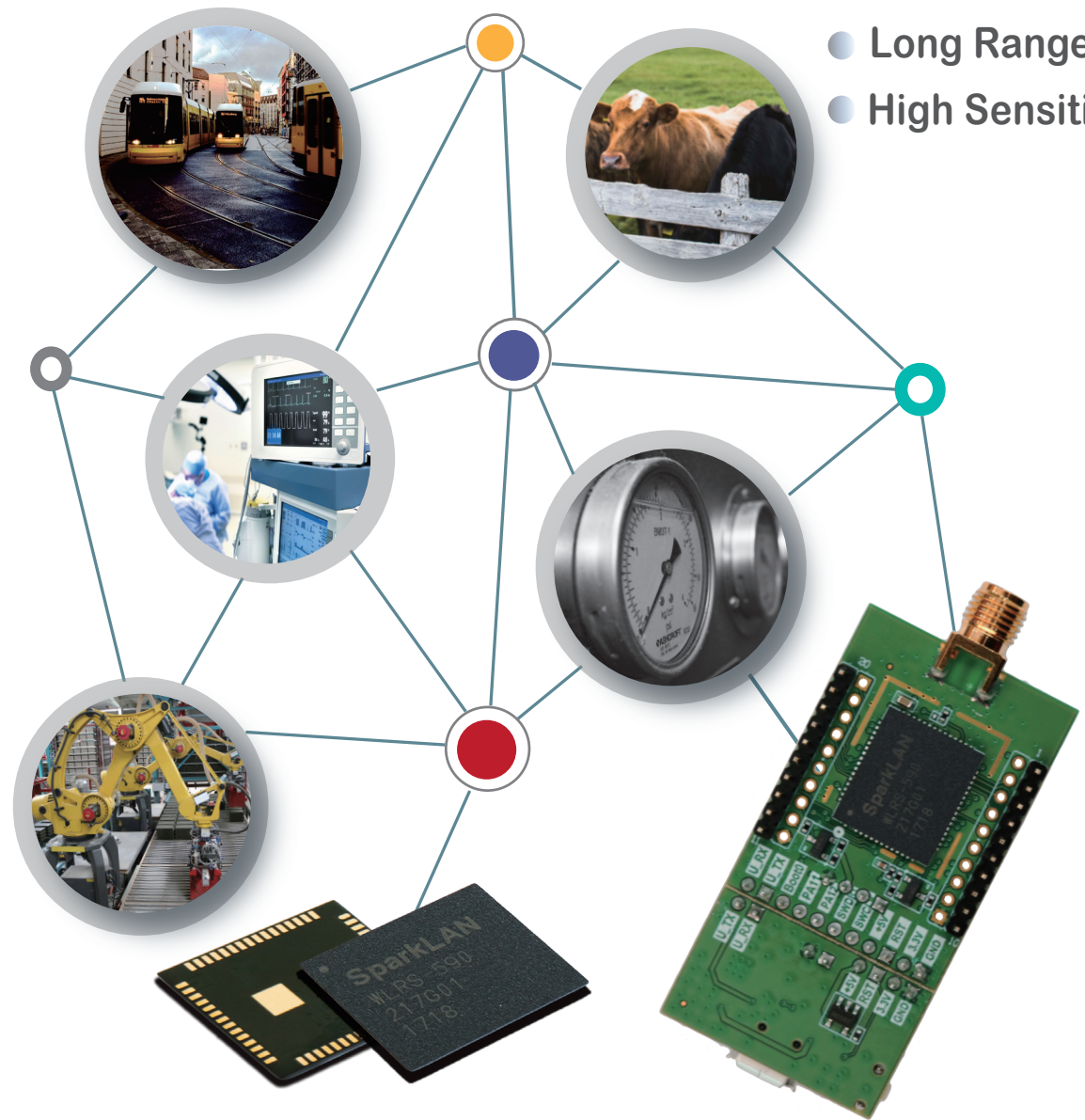
New Intelligent WiFi Solution

- 3D Printer
- Thin Client
- Medical Equipment
- Wi-Fi Live Streaming Device



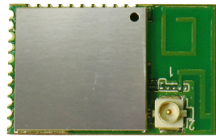
Low Power Wide Area Network Solution

- Low Power
- Long Range
- High Sensitivity



WLRS-590
LoRa Wireless Module

WLRS-591
LoRa Evaluation Board



WSDB-104GNI(BT)

802.11b/g/n Single-Band Industrial-Grade IOT+Bluetooth Module

- ◆ Broadcom BCM43438
- ◆ Antenna: PCB Printed Ant. or 1xU.FL connector, 1T1R
- ◆ Form Factor: Stamp Hole
- ◆ Interface: SDIO: WLAN; UART: Bluetooth
- ◆ Output Power up to 17dBm
- ◆ Industrial-Grade Temperature: -40~85°C



WSDQ-103GNI

802.11b/g/n Single-Band Industrial-Grade IOT Module

- ◆ Qualcomm Atheros QCA4010
- ◆ Antenna: PCB Printed Ant. or 1xU.FL connector, 1T1R
- ◆ Form Factor: Stamp Hole
- ◆ Interface: UART, I2C/I2S, PWM, ADC
- ◆ Output Power up to 17dBm
- ◆ Industrial-Grade Temperature: -40~85°C



WSDQ-103GN

802.11b/g/n Single-Band IOT Module

- ◆ Qualcomm Atheros QCA4010
- ◆ Antenna: PCB Printed Ant. or 1xU.FL connector, 1T1R
- ◆ Form Factor: Stamp Hole
- ◆ Interface: UART, I2C/I2S, PWM, ADC
- ◆ Output Power up to 17 dBm

Comparison

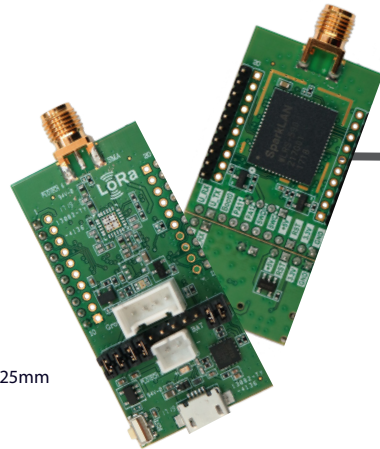
| Model | | WSDB-104GNI(BT) | WSDQ-103GNI | WSDQ-103GN | |
|------------------------------------|-----------|--|--|--|---|
| Standards | 802.11a | | | | |
| | 802.11b/g | v | v | v | |
| | 802.11n | 2.4GHz | v | v | v |
| | | 5GHz | | | |
| Chipset | | Broadcom BCM43438 | Qualcomm Atheros QCA4010 | Qualcomm Atheros QCA4010 | |
| Antenna | | PCB Printed Ant. or 1xU.FL connector, 1T1R | PCB Printed Ant. or 1xU.FL connector, 1T1R | PCB Printed Ant. or 1xU.FL connector, 1T1R | |
| Form Factor | | Stamp Hole | Stamp Hole | Stamp Hole | |
| Interface | | SDIO: WLAN; UART: Bluetooth | UART, I2C/I2S, PWM, ADC | UART, I2C/I2S, PWM, ADC | |
| RF output power (Tolerance ± 2dBm) | 802.11a | | | | |
| | 802.11b | 17dBm | 17dBm | 17dBm | |
| | 802.11g | 15dBm | 13dbm | 13dbm | |
| | 802.11n | 2.4GHz: HT20: 13dBm | 2.4GHz: HT20: 12dBm HT40: 11dBm | 2.4GHz: HT20: 12dBm HT40: 11dBm | |
| Temperature Range | Operating | -40~85°C | -40~85°C | 0~70°C | |
| | Storing | -50~90°C | -40~85°C | -40~85°C | |

LoRa Series

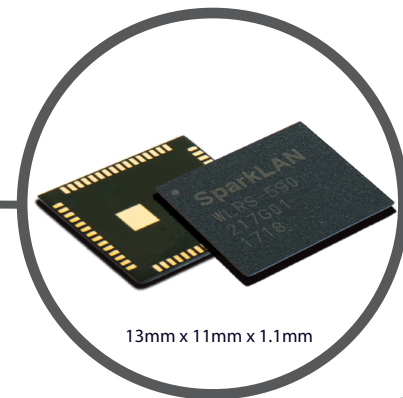
Low Power Wide Area Network Solution

WLRS-591

LoRa Evaluation Board



48mm x 25mm



13mm x 11mm x 1.1mm

WLRS-590

LoRa Wireless Module

Comparison

| Model | WLRS-591 | WLRS-590 |
|---------------------|---|---|
| MCU | STM32L073xZ, ARM Cortex-M0+32bit | STM32L073xZ, ARM Cortex-M0+32bit |
| Chipset | Semtech SX1276 | Semtech SX1276 |
| Frequency | 863~928MHz ISM Band | 863~928MHz ISM Band |
| Flash memory / RAM | 192k bytes / 20k bytes | 192k bytes / 20k bytes |
| Form factor | | SIP |
| Interface | 1xmicro USB, 1xSMA Femal, 1xReset Button | UART, SPI, I2C, USB, ADC |
| Antenna | SMA Female connector | External |
| Transmitter Power | 20dBm | 20dBm |
| Receive Sensitivity | -137dBm | -137dBm |
| Temperature | -40~85°C (Operating) -50~105°C (Storing) | -40~85°C (Operating) -50~105°C (Storing) |
| Humidity | 10~95% (Operating) 5~95% (Storing) | 10~95% (Operating) 5~95% (Storing) |
| Input Voltage | 3.3V | 3.3V |
| Package | | Molding Type with LGA landing |

Industriail-Grade Series

WPEQ-353ACNI

802.11ac/a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module

- ◆ Qualcomm Atheros QCA9890-BR4B
- ◆ Antenna: 3xU.FL connectors, 3T3R
- ◆ Form Factor: Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 18dBm
- ◆ Industrial-Grade Temperature: -40~85°C
- ◆ Support: Linux



WPEQ-256ACNI

802.11ac/a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module

- ◆ Qualcomm Atheros QCA9892-BR4B
- ◆ Antenna: 2xU.FL connectors, 2T2R
- ◆ Form Factor: Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 18dBm
- ◆ Industrial-Grade Temperature: -40~85°C
- ◆ Support: Linux



WPEA-252NI

802.11a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module

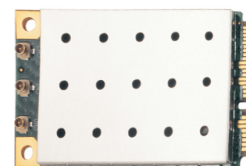
- ◆ Qualcomm Atheros AR9592-AR1B
- ◆ Antenna: 2xU.FL connectors, 2T2R
- ◆ Form Factor: Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 19dBm
- ◆ Industrial-Grade Temperature: -40~85°C
- ◆ Support: Linux



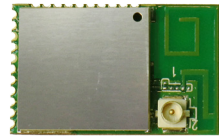
WPEA-127NI

802.11a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module

- ◆ Qualcomm Atheros AR9390-AL1B
- ◆ Antenna: 3xU.FL connectors, 3T3R
- ◆ Form Factor: Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 19dBm
- ◆ Industrial-Grade Temperature: -40~80°C
- ◆ Support : Windows XP/ Vista/7, Linux



Industrial-Grade Series



WSDB-104GNI(BT)

802.11b/g/n Single-Band Industrial-Grade IOT+Bluetooth Module

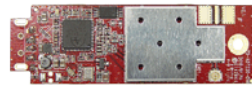
- ◆ Broadcom BCM43438
- ◆ Antenna: PCB Printed Ant. or 1xU.FL connector, 1T1R
- ◆ Form Factor: Stamp Hole
- ◆ Interface: SDIO: WLAN; UART: Bluetooth
- ◆ Output Power up to 17dBm
- ◆ Industrial-Grade Temperature: -40~85°C



WSDQ-103GNI

802.11b/g/n Single-Band Industrial-Grade IOT Module

- ◆ Qualcomm Atheros QCA4010
- ◆ Antenna: PCB Printed Ant. or 1xU.FL connector, 1T1R
- ◆ Form Factor: Stamp Hole
- ◆ Interface: UART, I2C/I2S, PWM, ADC
- ◆ Output Power up to 17dBm
- ◆ Industrial-Grade Temperature: -40~85°C



WUBA-171GN

802.11b/g/n Single-Band High-Power USB Module

- ◆ Qualcomm Atheros AR9271
- ◆ Antenna: 1xU.FL connector, 1T1R
- ◆ Form Factor: USB 2.0 with 5-Pin connector
- ◆ Interface: USB
- ◆ Output Power up to 23dBm
- ◆ Operating Temperature: -30~75°C
- ◆ Support: Windows XP/7, Linux



Industrial-Grade Series

Comparison

| Model | | WPEQ-353ACNI | WPEQ-256ACNI | WPEA-252NI | WPEA-127NI | |
|------------------------------------|--------------|---|---|------------------------------------|------------------------------------|---|
| Standards | 802.11a | v | v | v | v | |
| | 802.11b/g | v | v | v | v | |
| | 802.11n | 2.4GHz | v | v | v | v |
| | | 5GHz | v | v | v | v |
| | 802.11ac | v | v | | | |
| Chipset | | Qualcomm Atheros QCA9890-BR4B | Qualcomm Atheros QCA9892-BR4B | Qualcomm Atheros QCA9592-AR1B | Qualcomm Atheros QCA9390-AL1B | |
| Antenna | | 3xU.FL connectors, 3T3R | 2xU.FL connectors, 2T2R | 2xU.FL connectors, 2T2R | 3xU.FL connectors, 3T3R | |
| Form Factor | | Mini PCIe | Mini PCIe | Mini PCIe | Mini PCIe | |
| Interface | | PCIe | PCIe | PCIe | PCIe | |
| RF output power (Tolerance ± 2dBm) | 802.11a | 15dBm | 15dBm | 14dBm | 11dBm | |
| | 802.11b | 18dBm | 18dBm | 19dBm | 19dBm | |
| | 802.11g | 15dBm | 15dBm | 16dbm | 16dbm | |
| | 802.11n | 2.4GHz: HT20: 13dBm HT40: 13dBm | 2.4GHz: HT20: 13dBm HT40: 13dBm | 2.4GHz: HT20: 15dBm HT40: 14dBm | 2.4GHz: HT20: 15dBm HT40: 15dBm | |
| | | 5GHz: HT20: 13dBm HT40: 12dBm | 5GHz: HT20: 13dBm HT40: 12dBm | 5GHz: HT20: 12dBm HT40: 11dBm | 5GHz: HT20: 11dBm HT40: 11dBm | |
| 80211ac | VHT80: 10dBm | VHT80: 10dBm | | | | |
| Temperature Range | Operating | -40~85°C | -40~85°C | -40~85°C | -40~80°C | |
| | Storing | -50~90°C | -50~95°C | -50~90°C | -50~95°C | |
| Driver | | Linux | Linux | Linux | Window XP/Vista/7 Linux | |
| Model | | WSDB-104GNI(BT) | WSDQ-103GNI | WUBA-171 GN | | |
| Standards | 802.11a | | | | | |
| | 802.11b/g | v | v | v | | |
| | 802.11n | 2.4GHz | v | v | v | |
| | | 5GHz | | | | |
| Chipset | | Broadcom BCM43438 | Qualcomm Atheros QCA4010 | Qualcomm Atheros AR9271 | | |
| Antenna | | PCB Printed Ant. or 1xU.FL connector,1T1R | PCB Printed Ant. or 1xU.FL connector,1T1R | 1xU.FL connectors,1T1R | | |
| Form Factor | | Stamp Hole | Stamp Hole | USB2.0 with 5-Pin connector | | |
| Interface | | SDIO:WLAN; UART: Bluetooth | UART, I2C/I2S, PWM, ADC | USB | | |
| RF output power (Tolerance ± 2dBm) | 802.11a | | | | | |
| | 802.11b | | 17dBm | 17dBm | 23dBm | |
| | 802.11g | | 15dBm | 13dbm | 21dBm | |
| | 802.11n | | 2.4GHz: HT20: 13dBm | 2.4GHz: HT20: 12dBm HT40: 11dBm | 2.4GHz: HT20: 21dBm HT40: 21dBm | |
| Temperature Range | Operating | | -40~85°C | -40~85°C | -30~75°C | |
| | Storing | | -50~90°C | -40~85°C | -40~80°C | |
| Driver | | | | Window XP/7, Linux | | |

M.2 Series



WNSQ-261ACN(BT)

802.11ac/a/b/g/n Dual-Band Wi-Fi+Bluetooth M.2 LGA Type1216 Module

- ◆ Qualcomm Atheros QCA6174A-5
- ◆ Antenna: 2xIPEX MHF4 connectors, 2T2R
- ◆ Form Factor: M.2 LGA Type 1216
- ◆ Interface: PCIe; WLAN; USB: Bluetooth
- ◆ Output Power up to 18dBm
- ◆ Support: Windows 7/8.1/10



WNFQ-258ACN(BT)

802.11ac/a/b/g/n Dual-Band Wi-Fi+Bluetooth M.2 Type 2230 Module

- ◆ Qualcomm Atheros QCA6174A-5
- ◆ Antenna: 2xIPEX MHF4 connectors, 2T2R
- ◆ Form Factor: M.2 Type 2230
- ◆ Interface: PCIe; WLAN; USB: Bluetooth
- ◆ Output Power up to 19dBm
- ◆ Support: Windows 7/8.1/10

WNFQ-158ACN(BT)

802.11ac/a/b/g/n Dual-Band Wi-Fi+Bluetooth M.2 Type 1630 Module

- ◆ Qualcomm Atheros QCA9377A
- ◆ Antenna: 2xIPEX MHF4 connectors, 1T1R
- ◆ Form Factor: M.2 Type 1630
- ◆ Interface: PCIe; WLAN; USB: Bluetooth
- ◆ Output Power up to 19 dBm
- ◆ Support: Windows 7/8.1/10

WNFQ-255ACN(BT)

802.11ac/a/b/g/n Dual-Band Wi-Fi+Bluetooth M.2 Type 1630 Module

- ◆ Qualcomm Atheros QCA6174
- ◆ Antenna: 2xIPEX MHF4 connectors, 2T2R
- ◆ Form Factor: M.2 Type 1630
- ◆ Interface: PCIe; WLAN; USB: Bluetooth
- ◆ Output Power up to 19 dBm
- ◆ Support : Windows 7/8.1/10

M.2 Series

Comparison

| Model | WNSQ-261ACN(BT) | WNFQ-258ACN(BT) | WNFQ-158ACN(BT) | WNFQ-255ACN(BT) | |
|------------------------------------|------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Standards | 802.11a | v | v | v | |
| | 802.11b/g | v | v | v | |
| | 802.11n | 2.4GHz | v | v | v |
| | | 5GHz | v | v | v |
| | 802.11ac | v | v | v | v |
| Chipset | Qualcomm Atheros QCA6174A-5 | Qualcomm Atheros QCA6174A-5 | Qualcomm Atheros QCA9377A | Qualcomm Atheros QCA6174 | |
| Antenna | 2xIPEX MHF4 connectors, 2T2R | 2xIPEX MHF4 connectors, 2T2R | 2xIPEX MHF4 connectors, 1T1R | 2xIPEX MHF4 connectors, 2T2R | |
| Form Factor | M.2 LGA Type 1216 | M.2 Type 2230 | M.2 Type 1630 | M.2 Type 1630 | |
| Interface | PCIe; WLAN; USB: Bluetooth | PCIe; WLAN; USB: Bluetooth | PCIe; WLAN; USB: Bluetooth | PCIe; WLAN; USB: Bluetooth | |
| RF output power (Tolerance ± 2dBm) | 802.11a | 10.5dBm | 11dBm | 12dBm | |
| | 802.11b | 18dBm | 19dBm | 19dBm | 19dBm |
| | 802.11g | 15dBm | 16dBm | 16.5dBm | 16dBm |
| | 802.11n | 2.4GHz: HT20: 15dBm HT40: 15dBm | 2.4GHz: HT20: 16dBm HT40: 15dBm | 2.4GHz: HT20: 16dBm HT40: 15dBm | 2.4GHz: HT20: 16dBm HT40: 16dBm |
| | | 5GHz: HT20: 10dBm HT40: 10dBm | 5GHz: HT20: 9dBm HT40: 9dBm | 5GHz: HT20: 11dBm HT40: 11dBm | 5GHz: HT20: 10dBm HT40: 10dBm |
| 802.11ac | VHT80: 6dBm | VHT80: 7dBm | VHT80: 8dBm | VHT80: 6dBm | |
| Temperature Range | Operating | -10~70°C | -10~70°C | 0~70°C | |
| | Storing | -40~85°C | -40~85°C | -40~80°C | -40~80°C |
| Driver | Windows 7/8.1/10 | Windows 7/8.1/10 | Windows 7/8.1/10 | Windows 7/8.1/10 | |

Mini PCIe Series

NEW

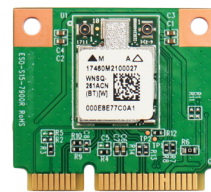


WPEQ-160ACN

802.11ac/a/b/g/n Dual-Band Half Mini PCIe Module

- ◆ Qualcomm Atheros QCA9377-7
- ◆ Antenna: 2xU.FL connectors, 1T1R
- ◆ Form Factor: Half Mini PCIe
- ◆ Interface: USB
- ◆ Output Power up to 19dBm
- ◆ Support: Windows 7/8.1/10

NEW



WPEQ-261ACN(BT)

802.11ac/a/b/g/n Dual-Band Wi-Fi+Bluetooth Half Mini PCIe Module

- ◆ Chipset: Qualcomm Atheros QCA6174A-5
- ◆ Antenna: 2xIPEX MHF4 connectors, 2T2R
- ◆ Form Factor: Half Mini PCIe
- ◆ Interface: PCIe: WLAN; USB: Bluetooth
- ◆ Output Power up to 18dBm
- ◆ Support: Windows 7/8.1/10



WPEQ-257ACN

802.11ac/a/b/g/n Dual-Band Half Mini PCIe Module

- ◆ Qualcomm Atheros QCA9882-BR4A
- ◆ Antenna: 2xU.FL connectors, 2T2R
- ◆ Form Factor: Half Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 15dBm
- ◆ Support: Linux

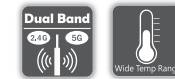


WPEQ-353ACNI

802.11ac/a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module

- ◆ Qualcomm Atheros QCA9890-BR4B
- ◆ Antenna: 3xU.FL connectors, 3T3R
- ◆ Form Factor: Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 18dBm
- ◆ Industrial-Grade Temperature: -40~85°C
- ◆ Support: Linux

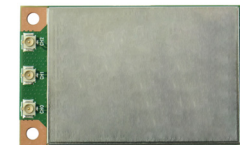
Mini PCIe Series



WPEQ-256ACNI

802.11ac/a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module

- ◆ Qualcomm Atheros QCA9892-BR4B
- ◆ Antenna: 2xU.FL connectors, 2T2R
- ◆ Form Factor: Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 18dBm
- ◆ Industrial-Grade Temperature: -40~85°C
- ◆ Support: Linux



WPEA-352ACN

802.11ac/a/b/g/n Dual-Band Mini PCIe Module

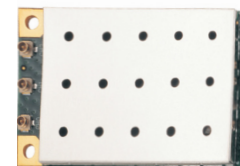
- ◆ Qualcomm Atheros QCA9880-BR4A
- ◆ Antenna: 3xU.FL connectors, 3T3R
- ◆ Form Factor: Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 18dBm
- ◆ Support: Linux



WPET-232ACN

802.11ac/a/b/g/n Dual-Band Half Mini PCIe Module

- ◆ Realtek RTL8812AE
- ◆ Antenna: 2xU.FL connectors, 2T2R
- ◆ Form Factor: Half Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 16dBm
- ◆ Support: Windows, Linux

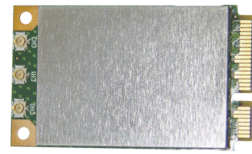


WPEA-127NI

802.11a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module

- ◆ Qualcomm Atheros AR9390-AL1B
- ◆ Antenna: 3xU.FL connectors, 3T3R
- ◆ Form Factor: Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 19dBm
- ◆ Industrial-Grade Temperature: -40~80°C
- ◆ Support: Windows XP/ Vista/7, Linux

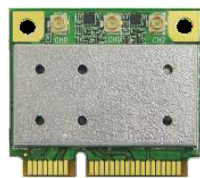
Mini PCIe Series



WPEA-127N

802.11a/b/g/n Dual-Band Mini PCIe Module

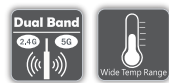
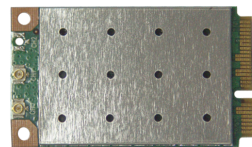
- ◆ Qualcomm Atheros AR9380-AL1A
- ◆ Antenna: 3xU.FL connectors, 3T3R
- ◆ Form Factor: Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 18dBm
- ◆ Support: Windows XP/Vista/7, Linux



WPEA-128N

802.11a/b/g/n Dual-Band Half Mini PCIe Module

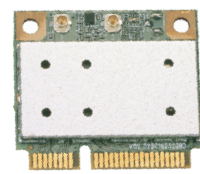
- ◆ Qualcomm Atheros AR9380-AL1A
- ◆ Antenna: 3xU.FL connectors, 3T3R
- ◆ Form Factor: Half Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 17dBm
- ◆ Support: Windows XP/Vista/7, Linux



WPEA-252NI

802.11a/b/g/n Dual-Band Industrial-Grade Mini PCIe Module

- ◆ Qualcomm Atheros AR9592-AR1B
- ◆ Antenna: 2xU.FL connectors, 2T2R
- ◆ Form Factor: Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 19dBm
- ◆ Industrial-Grade Temperature: -40~85°C
- ◆ Support: Linux

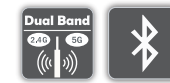
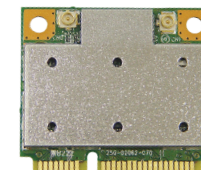


WPEA-121N

802.11a/b/g/n Dual-Band Half Mini PCIe Module

- ◆ Qualcomm Atheros AR9382
- ◆ Antenna: 2xU.FL connectors, 2T2R
- ◆ Form Factor: Half Mini PCIe
- ◆ Interface: PCIe
- ◆ Output Power up to 17dBm
- ◆ Support: Windows XP/7/8.1/10, Linux

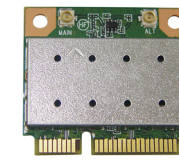
Mini PCIe Series



WPEA-251N(BT)

802.11a/b/g/n Dual-Band Wi-Fi+Bluetooth Half Mini PCIe Module

- ◆ Qualcomm Atheros AR9462
- ◆ Antenna: 2xU.FL connectors, 2T2R
- ◆ Form Factor: Half Mini PCIe
- ◆ Interface: PCIe: WLAN; USB: Bluetooth
- ◆ Output Power up to 17dBm
- ◆ Support: Windows XP/7/8.1/10, Linux



WPEA-152GN(BT)

802.11b/g/n Single-Band Wi-Fi+Bluetooth Half Mini PCIe Module

- ◆ Qualcomm Atheros AR9485+AR3012
- ◆ Antenna: 2xU.FL connectors, (Wi-Fi: 1T2R; Bluetooth: 1T1R)
- ◆ Form Factor: Half Mini PCIe
- ◆ Interface: PCIe: WLAN; USB: Bluetooth
- ◆ Output Power up to 17dBm
- ◆ Support Windows XP/7/8.1/10, Linux



WPER-172GN

802.11b/g/n Single-Band Half Mini PCIe Module

- ◆ Ralink RTL5390U
- ◆ Antenna: 2xU.FL connectors, 1T2R
- ◆ Form Factor: Half Mini PCIe
- ◆ Interface: USB
- ◆ Output Power up to 17dBm
- ◆ Support: Windows XP/7/8.1/10, Linux

Mini PCIe Series

Comparison

| Model | | WPEQ-160ACN | WPEQ-261ACN(BT) | WPEQ-257ACN | WPEQ-353ACNI | |
|---------------------------------------|-----------|--|--|--|--|---|
| Standards | 802.11a | v | v | v | v | |
| | 802.11b/g | v | v | v | v | |
| | 802.11n | 2.4GHz | v | v | v | v |
| | | 5GHz | v | v | v | v |
| | 802.11ac | v | v | v | v | |
| Chipset | | Qualcomm Atheros QCA9377-7 | Qualcomm Atheros QCA6174A-5 | Qualcomm Atheros QCA9882-BR4A | Qualcomm Atheros QCA9890-BR4B | |
| Antenna | | 2xU.FL connectors, 1T1R | 2xIPEX MHF4 connectors, 2T2R | 2xU.FL connectors, 2T2R | 3xU.FL connectors, 3T3R | |
| Form Factor | | Half Mini PCIe | Half Mini PCIe | Half Mini PCIe | Mini PCIe | |
| Interface | | USB | PCIe: WLAN; USB: Bluetooth | PCIe | PCIe | |
| RF output power (Tolerance ± 2dBm) | 802.11a | 13dBm | 10.5dBm | 12dBm | 15dBm | |
| | 802.11b | 19dBm | 18dBm | 15dBm | 18dBm | |
| | 802.11g | 16dBm | 15dBm | 13dBm | 15dBm | |
| | 802.11n | 2.4GHz: HT20: 16dBm HT40: 16dBm 5GHz: HT20: 13dBm HT40: 13dBm | 2.4GHz: HT20: 15dBm HT40: 15dBm 5GHz: HT20: 10dBm HT40: 10dBm | 2.4GHz: HT20: 12dBm HT40: 11dBm 5GHz: HT20: 11dBm HT40: 10dBm | 2.4GHz: HT20: 13dBm HT40: 13dBm 5GHz: HT20: 13dBm HT40: 12dBm | |
| | 802.11ac | VHT80: 10dBm | VHT80: 6dBm | VHT80: 4dBm | VHT80: 10dBm | |
| Temperature Range | Operating | -20~70°C | -10~70°C | -20~60°C | -40~85°C | |
| | Storing | -30~85°C | -40~85°C | -30~75°C | -50~90°C | |
| Driver | | Windows 7/8.1/10 | Windows 7/8.1/10 | Linux | Linux | |
| Model | | WPEQ-256ACNI | WPEA-352ACN | WPET-232ACN | WPEA-127NI | |
| Standards | 802.11a | v | v | v | v | |
| | 802.11b/g | v | v | v | v | |
| | 802.11n | 2.4GHz | v | v | v | v |
| | | 5GHz | v | v | v | v |
| | 802.11ac | v | v | v | v | |
| Chipset | | Qualcomm Atheros QCA9892-BR4B | Qualcomm Atheros QCA9880-BR4A | Realtek RTL8812AE | Qualcomm Atheros AR9390-AL1B | |
| Antenna | | 2xU.FL connectors, 2T2R | 3xU.FL connectors, 3T3R | 2xU.FL connectors, 2T2R | 3xU.FL connectors, 3T3R | |
| Form Factor | | Mini PCIe | Mini PCIe | Half Mini PCIe | Mini PCIe | |
| Interface | | PCIe | PCIe | PCIe | PCIe | |
| RF output power (Tolerance ± 2dBm) | 802.11a | 15dBm | 15dBm | 13dBm | 11dBm | |
| | 802.11b | 18dBm | 18dBm | 16dBm | 19dBm | |
| | 802.11g | 15dBm | 15dBm | 14dBm | 16dBm | |
| | 802.11n | 2.4GHz: HT20: 13dBm HT40: 13dBm 5GHz: HT20: 13dBm HT40: 12dBm | 2.4GHz: HT20: 13dBm HT40: 13dBm 5GHz: HT20: 13dBm HT40: 12dBm | 2.4GHz: HT20: 13dBm HT40: 13dBm 5GHz: HT20: 13dBm HT40: 13dBm | 2.4GHz: HT20: 15dBm HT40: 15dBm 5GHz: HT20: 11dBm HT40: 11dBm | |
| | 802.11ac | VHT80: 10dBm | VHT80: 10dBm | VHT80: 9dBm | | |
| Temperature Range | Operating | -40~85°C | -20~65°C | 0~40°C | -40~80°C | |
| | Storing | -50~90°C | -30~75°C | -20~60°C | -50~95°C | |
| Driver | | Linux | Linux | Windows, Linux | Windows XP/Vista/7, Linux | |

Mini PCIe Series

Comparison

| Model | | WPEA-127N | WPEA-128N | WPEA252NI | WPEA121N | |
|---------------------------------------|-----------|--|--|--|--|---|
| Standards | 802.11a | v | v | v | v | |
| | 802.11b/g | v | v | v | v | |
| | 802.11n | 2.4GHz | v | v | v | v |
| | | 5GHz | v | v | v | v |
| | 802.11ac | | | | | |
| Chipset | | Qualcomm Atheros AR9380-AL1A | Qualcomm Atheros AR9380-AL1A | Qualcomm Atheros AR9592-AR1B | Qualcomm Atheros AR9382 | |
| Antenna | | 3xFL connectors, 3T3R | 3xU.FL connectors, 3T3R | 2xU.FL connectors, 2T2R | 2xU.FL connectors, 2T2R | |
| Form Factor | | Mini PCIe | Half Mini PCIe | Mini PCIe | Half Mini PCIe | |
| Interface | | PCIe | PCIe | PCIe | PCIe | |
| RF output power (Tolerance ± 2dBm) | 802.11a | 12dBm | 12dBm | 14dBm | 12dBm | |
| | 802.11b | 18dBm | 17dBm | 19dBm | 17dBm | |
| | 802.11g | 16dBm | 16dBm | 16dBm | 16dBm | |
| | 802.11n | 2.4GHz: HT20: 15dBm HT40: 15dBm 5GHz: HT20: 12dBm HT40: 12dBm | 2.4GHz: HT20: 15dBm HT40: 14dBm 5GHz: HT20: 12dBm HT40: 11dBm | 2.4GHz: HT20: 15dBm HT40: 14dBm 5GHz: HT20: 12dBm HT40: 11dBm | 2.4GHz: HT20: 15dBm HT40: 14dBm 5GHz: HT20: 12dBm HT40: 11dBm | |
| | 802.11ac | | | | | |
| Temperature Range | Operating | 0~60°C | 0~60°C | -40~85°C | 0~75°C | |
| | Storing | -20~70°C | -20~70°C | -50~90°C | -40~85°C | |
| Driver | | Windows XP/Vista/7, Linux | Windows XP/Vista/7, Linux | Linux | Windows XP/7/8.1/10, Linux | |
| Model | | WPEA-251N(BT) | WPEA-152GN(BT) | WPER-172GN | | |
| Standards | 802.11a | v | | | | |
| | 802.11b/g | v | v | v | | |
| | 802.11n | 2.4GHz | v | v | v | |
| | | 5GHz | v | | | |
| | 802.11ac | | | | | |
| Chipset | | Qualcomm Atheros AR9462 | Qualcomm Atheros AR9485+AR3012 | Ralink RTL5390U | | |
| Antenna | | 2xU.FL connectors, 2T2R | 2xU.FL connectors (Wi-Fi: 1T2R; Bluetooth: 1T1R) | 2xU.FL connectors, 1T2R | | |
| Form Factor | | Half Mini PCIe | Half Mini PCIe | Half Mini PCIe | | |
| Interface | | PCIe: WLAN; USB: Bluetooth | PCIe: WLAN; USB: Bluetooth | USB | | |
| RF output power (Tolerance ± 2dBm) | 802.11a | 11dBm | | | | |
| | 802.11b | 17dBm | 17dBm | 17dBm | | |
| | 802.11g | 15dBm | 13dBm | 15dBm | | |
| | 802.11n | 2.4GHz: HT20: 14dBm HT40: 14dBm 5GHz: HT20: 9dBm HT40: 9dBm | 2.4GHz: HT20: 11dBm HT40: 11dBm | 2.4GHz: HT20: 14dBm HT40: 14dBm | | |
| | 802.11ac | | | | | |
| Temperature Range | Operating | 0~75°C | 0~75°C | 0~70°C | | |
| | Storing | -40~85°C | -40~85°C | -40~85°C | | |
| Driver | | Windows XP/7/8.1/10, Linux | Windows XP/7/8.1/10, Linux | Windows XP/7/8.1/10, Linux | | |

Mini PCI Series



WMIR-278GN

802.11b/g/n Single-Band Mini PCI Module

- ◆ Ralink RT3062
- ◆ Antenna: 2xU.FL connectors, 2T2R
- ◆ Form Factor: Mini PCI Type III A
- ◆ Interface: PCI
- ◆ Output Power up to 15dBm
- ◆ Support: Windows XP/Vista/7, Linux



WL-850R

802.11b/g Single-Band Mini PCI Module

- ◆ Ralink RT2561T+RT2527
- ◆ Antenna: 2xU.FL connectors, 1T1R
- ◆ Form Factor: Mini PCI Type III B
- ◆ Interface: PCI
- ◆ Output Power up to 18dBm
- ◆ Support: Windows XP/Vista/7, Linux

Comparison

| Model | | WMIR-278GN | WL-850R | |
|---------------------------------------|-----------|------------------------------------|------------------------------|--|
| Standards | 802.11a | | | |
| | 802.11b/g | v | v | |
| | 802.11n | 2.4GHz | v | |
| | | 5GHz | | |
| Chipset | | Ralink RT3062 | Ralink 2561T+RT2527 | |
| Antenna | | 2xU.FL connectors, 2T2R | 2xU.FL connectors, 1T1R | |
| Form Factor | | Mini PCI Type III A | Mini PCI Type III B | |
| Interface | | PCI | PCI | |
| RF output power (Tolerance ± 2dBm) | 802.11a | | | |
| | 802.11b | 15dBm | 18dBm | |
| | 802.11g | 14dBm | 14dBm | |
| | 802.11n | 2.4GHz: HT20: 17dBm HT40: 17dBm | | |
| Temperature Range | Operating | 0~55°C | 0~55°C | |
| | Storing | -20~80°C | -20~65°C | |
| Driver | | Windows XP/Vista/7, Linux | Windows XP/Vista/7, Linux | |

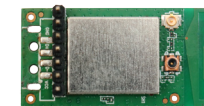
USB Series



WPEQ-160ACN

802.11ac/a/b/g/n Dual-Band Half Mini PCIe Module

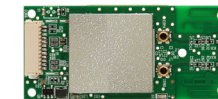
- ◆ Qualcomm Atheros QCA9377-7
- ◆ Antenna: 2xU.FL connectors, 1T1R
- ◆ Form Factor: Half Mini PCIe
- ◆ Interface: USB
- ◆ Output Power up to 19dBm
- ◆ Support: Windows 7/8.1/10



WUBQ-159ACN(BT)

802.11ac/a/b/g/n Dual-Band USB Module

- ◆ Qualcomm Atheros QCA9377-7
- ◆ Antenna: PCB Printed Ant. or 1xU.FL connector, 1T1R
- ◆ Form Factor: USB 2.0 Type A or 7-Pin connector
- ◆ Interface: USB
- ◆ Output Power up to 19dBm
- ◆ Support: Windows 7/8.1/10



WUBM-273ACN Series

802.11ac/a/b/g/n Dual-Band USB Module

- ◆ MediaTek MT7612U
- ◆ Antenna: PCB Printed Ant. or 2xU.FL connectors, 2T2R
- ◆ Form Factor: USB 2.0 Type A or 12-Pin Wafer connector
- ◆ Interface: USB
- ◆ Output Power up to 15dBm
- ◆ Support: Windows XP/Vista/7/8.1, Linux



WUBR-508N Series

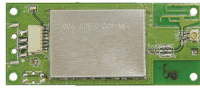
802.11a/b/g/n Dual-Band USB Module

- ◆ Ralink RT5572
- ◆ Antenna: PCB Printed Ant. or 2xU.FL connectors, 2T2R
- ◆ Form Factor: USB 2.0 Type A or 4-Pin Wafer connector or 4-Pin Header connector
- ◆ Interface: USB
- ◆ Output Power up to 17dBm
- ◆ Support: Windows XP/ Vista/7, Linux

USB Series

WUBR-507N Series

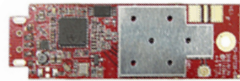
802.11a/b/g/n Dual-Band USB Module



- ◆ Ralink RT3572
- ◆ Antenna: PCB Printed Ant. or 2xU.FL connectors, 2T2R
- ◆ Form Factor: USB 2.0 Type A or 6-Pin connector
- ◆ Interface: USB
- ◆ Output Power up to 16dBm
- ◆ Support: Windows XP/Vista/7, Linux

WUBA-171GN

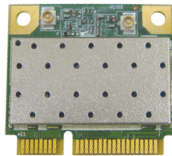
802.11b/g/n Single-Band High-Power USB Module



- ◆ Qualcomm Atheros AR9271
- ◆ Antenna: 1xU.FL connector, 1T1R
- ◆ Form Factor: USB 2.0 with 5-Pin connector
- ◆ Interface: USB
- ◆ Output Power up to 23dBm
- ◆ Operating Temperature: -30~75°C
- ◆ Support: Windows XP/7, Linux

WPER-172GN

802.11b/g/n Single-Band Half Mini PCIe Module



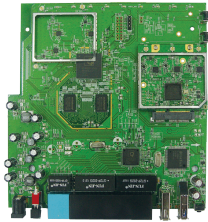
- ◆ Ralink RT5390U
- ◆ Antenna: 2xU.FL connectors, 1T2R
- ◆ Form Factor: Half Mini PCIe
- ◆ Interface: USB
- ◆ Output Power up to 17dBm
- ◆ Support: Windows XP/7/8.1/10, Linux

USB Series

Comparison

| Model | | WPEQ-160ACN ^{NEW} | WUBQ-159ACN(BT) ^{NEW} | WUBM-273ACN Series | WUBR-508N Series | |
|------------------------------------|--------------|---|--|---|---|---|
| Standards | 802.11a | v | v | v | v | |
| | 802.11b/g | v | v | v | v | |
| | 802.11n | 2.4GHz | v | v | v | v |
| | | 5GHz | v | v | v | v |
| | 802.11ac | v | v | v | | |
| Chipset | | Qualcomm Atheros QCA9377-7 | Qualcomm Atheros QCA9377-7 | Mediatek MT7612U | Ralink RT5572 | |
| Antenna | | 2xU.FL connectors, 1T1R | PCB Printed Ant. or 1xU.FL connector, 1T1R | PCB Printed Ant. or 2xU.FL connectors, 2T2R | PCB Printed Ant. or 2xU.FL connectors, 2T2R | |
| Form Factor | | Half Mini PCIe | USB 2.0 Type A or 7-Pin connector | USB 2.0 Type A or 12-Pin Wafer connector | USB 2.0 Type A or 4-Pin Wafer connector or 4-Pin Header connector | |
| Interface | | USB | USB | USB | USB | |
| RF output power (Tolerance ± 2dBm) | 802.11a | 13dBm | 13dBm | 12dBm | 13dBm | |
| | 802.11b | 19dBm | 19dBm | 15dBm | 17dBm | |
| | 802.11g | 16dBm | 16dBm | 13dBm | 15dBm | |
| | 802.11n | 2.4GHz: HT20: 16dBm HT40: 16dBm | 2.4GHz: HT20: 16dBm HT40: 16dBm | 2.4GHz: HT20: 12dBm HT40: 12dBm | 2.4GHz: HT20: 13dBm HT40: 13dBm | |
| | | 5GHz: HT20: 13dBm HT40: 13dBm | 5GHz: HT20: 13dBm HT40: 13dBm | 5GHz: HT20: 11dBm HT40: 11dBm | 5GHz: HT20: 12dBm HT40: 12dBm | |
| 802.11ac | VHT80: 10dBm | VHT80: 10dBm | VHT80: 10dBm | | | |
| Temperature Range | Operating | -20~70°C | -20~70°C | 0~50°C | 0~50°C | |
| | Storing | -30~85°C | -30~85°C | -20~70°C | -10~70°C | |
| Driver | | Windows 7/8.1/10 | Windows 7/8.1/10 | Windows XP/Vista/7/8.1, Linux | Windows XP/Vista/7, Linux | |
| Model | | WUBR-507N Series | WUBA-171GN | WPRE-172GN | | |
| Standards | 802.11a | v | | | | |
| | 802.11b/g | v | v | v | | |
| | 802.11n | 2.4GHz | v | v | v | |
| | | 5GHz | v | | | |
| | 802.11ac | | | | | |
| Chipset | | Ralink RT3572 | Qualcomm Atheros AR9271 | Ralink RT5390U | | |
| Antenna | | PCB Printed Ant. or 2xU.FL connectors, 2T2R | 1xU.FL connector, 1T1R | 2 U.FL connectors, 1T2R | | |
| Form Factor | | USB 2.0 Type A or 6-Pin connector | USB 2.0 with 5-Pin connector | Half Mini PCIe | | |
| Interface | | USB | USB | USB | | |
| RF output power (Tolerance ± 2dBm) | 802.11a | 11dBm | | | | |
| | 802.11b | 16dBm | 23dBm | 17 dBm | | |
| | 802.11g | 13dBm | 21dBm | 15 dBm | | |
| | 802.11n | 2.4GHz: HT20: 12dBm HT40: 12dBm | 2.4GHz: HT20: 21dBm HT40: 21dBm | 2.4GHz: HT20: 14dBm HT40: 14dBm | | |
| | | 5GHz: HT20: 10dBm HT40: 10dBm | | | | |
| 802.11ac | | | | | | |
| Temperature Range | Operating | 0~60°C | -30~75°C | 0~70°C | | |
| | Storing | -20~70°C | -40~80°C | -40~85°C | | |
| Driver | | Windows XP/Vista/7, Linux | Windows XP/7, Linux | Windows XP/7/8.1/10, Linux | | |

AP Board Series



WRTA-352ACN(P)

802.11acn+gn Router Board

- ◆ Qualcomm Atheros QCA9558+QCA9880
- ◆ Ethernet: 1WAN, 4LAN
- ◆ 64MB, SDRAM, 16MB Flash
- ◆ Up to 1.3Gbps
- ◆ Security: 64/128-bits WEP, WPA, WPA2, 802.1x
- ◆ Multi-mode: AP, Router, WDS
- ◆ Support: QoS, DHCP server



WRTM-271ACN(P)

802.11acn+gn Router Board

- ◆ Mediatek MT7620A(2.4GHz)+MT7612E(5GHz)
- ◆ Ethernet: 1WAN, 4LAN
- ◆ 64MB DDR2 RAM, 4MB SPI Flash
- ◆ Security: 64/128-bits WEP, WPA, WPA2, 802.1x
- ◆ Multi-mode: AP, Router, WDS
- ◆ Support: QoS, DHCP server



WRTM-170ACN(P)

802.11acn+gn Router Board

- ◆ Mediatek MT7620A(2.4GHz)+MT7610E(5GHz)
- ◆ Ethernet: 1WAN, 4LAN
- ◆ 64MB DDR2 RAM, 4MB Flash
- ◆ Security: 64/128-bits WEP, WPA, WPA2, 802.1x
- ◆ Multi-mode: AP, Router, WDS
- ◆ Support: QoS, DHCP server

AP Board Series

Comparison

| Model | | WRTA-352ACN(P) | WRTM-271ACN(P) | WRTM-170ACN(P) | |
|-----------------|--------------------|--------------------|----------------|----------------|---|
| Hardware | Interface | 802.3u (100Mbps) | v | v | v |
| | | 802.3ab (1000Mbps) | v | v | v |
| Standard | 802.11a | | v | v | v |
| | 802.11b/g | | v | v | v |
| | 802.11n | 2.4GHz | v | v | v |
| | | 5GHz | v | v | v |
| 802.11ac | | v | v | v | |
| Operation Modes | AP mode | | v | v | v |
| | AP Client mode | | | | |
| | Bridge mode | | | | |
| | WDS mode | | v | v | v |
| | Router | | v | v | v |
| Filter | MAC Filter | | v | v | v |
| | Port Filter | | | | |
| | IP Filter | | v | v | v |
| Security | WEP | | v | v | v |
| | WPA | | v | v | v |
| | WPA2 | | v | v | v |
| Function | Multi-SSID | | | | |
| | VLAN | | | | |
| | Qos(WMM) | | v | v | v |
| | PoE | | | | |
| | DHCP Client/Server | | v | v | v |

For Sales in Europe and Worldwide
please contact by email: martin.hoehne@minipci.biz Website: <https://minipci.biz>



2017 PRODUCT CATALOG

Embedded WiFi Expert
For IoT Solution



SparkLAN Communications, Inc.

8F., No.257, Sec.2, Tiding Blvd. , Neihu District, Taipei City 11493, Taiwan

TEL: 886-2-2659-1880 Fax: 886-2-2659-5538

www.sparklan.com /sales@sparklan.com

