

# Wireless LAN Module



**New**

## WMPCIE-V02-R10

PCIe Mini card wireless LAN module

### Features

- PCIe Mini card form factor
- High speed wireless connection up to 433.3Mbps transmit/receive PHY rate using 80 MHz bandwidth
- Solid design with external antenna diversity
- Low power consumption and high performance
- Enhanced wireless security
- Fully qualified Bluetooth 4.0 and 3.0 + High speed system

### Ordering Information

Part No.	Description
WMPCIE-V02-R10	IEEE802.11a/b/g/n/ac wireless with Bluetooth 4.0/3.0 + HS PCIe Mini module with Realtek RTL8821AE, RoHS
32501-001000-200-RS	RF cable; 300MM; 28AWG; (A) SMA connector (B) MHF20278-11R-13; ROHS
32505-000100-100-RS	2 dBi 109mm antenna
M32000-102500-RS	USB cable, 2x4pin 2.0mm to JST SHR-06V 1.00mm, L: 150mm
M32500-001000-RS	5 dBi 173mm antenna



## WIFI-RT3593-DB-R10

### Features

- Half-size PCIe Mini card
- Dual band 802.11a/b/g/n supports 3Tx/3Rx 3-stream MIMO to enable data rates up to 450Mbps for a 40 MHz channel.
- 20 MHz/40 MHz bandwidth
- Solid design with external antenna diversity
- Low power consumption with advanced power management
- Supports 802.11x authentication, WEP 64/128, WPA, WPA2, WAPI encryption.
- Supported operating systems: Windows® XP, 2000, ME, 98SE, Vista 32/64, Linux, MAC

### Ordering Information

Part No.	Description
WIFI-RT3593-DB-R10	Wi-Fi module with RT3593 single chip, 3T3R, dual band, RoHS
32501-000200-100-RS	Antenna; RF cable; outside diameter: 1.13mm; L=128mm; 0-6 GHz; (A)reverse sma jack, nut *1+washer *2; (B)-I-PEX; RoHS
32505-000900-100-RS	External antenna; WLAN; RG 178; 108mm; TANK-700-QM67-R10; PEAK GAIN 2.0DBI; Exceltek; 2.4-2.5 GHz/5.15-5.85 GHz; reverse SMA plug; RoHS

### Specifications

Model	WMPCIE-V02-R10
Standards	IEEE 802.11a/b/g/n/ac Wi-Fi with Bluetooth 4.0/3.0 + HS (Wi-Fi:PCI-E, BT:USB)
Interface	PCIe Mini card
Connectors	2XU.FL(I-PEX) antenna connectors
Controller Chip	Realtek RTL8821AE
Frequency Range	Wi-Fi: 2.4 GHz, BT: 2402 MHz~2483 MHz
Modulation Type	Wi-Fi: 802.11a/g/n/ac: OFDM 802.11b: CCK, DQPSK, BPSK BT: Header GFSK Payload 2M: 4-DQPSK Payload 3M: 8DPSK
Supported OS	Windows 7/8/10
Receiver Sensitivity	Wi-Fi: 802.11a: less than -65 dBm (54M) 802.11b: less than -76 dBm (11M) 802.11g: less than -65 dBm (54M) 802.11n@2.4GHz: less than -64 dBm (HT20 MCS7) 802.11n@5GHz: less than -64 dBm (HT20 MCS7) 802.11ac@5GHz: less than -51 dBm (VHT80 MCS9) BT: BER < 0.1% (Anritsu 8852B Tx -70 dBm)
Temperature	Operating: 0°C ~ 70°C Storage: -40°C ~ 85°C
Humidity	5% ~ 95%, non-condensing
Dimensions	29.85mm x 26.65mm
Weight	NW: 3.28g
Compliance Certifications	FCC, CE

### Specifications

Model	WIFI-RT3593-DB-R10
Standards	IEEE 802.11a/b/g/n, Wi-Fi compliant
Rate	450 Mbps PHY rate in 3T3R mode
Interface	PCIe Mini card
Controller Chip	Ralink RT3593
Connectors	3 x U.FL (I-PEX) antenna connectors
Security	WEP 64/128, WPA, WPA2, WAPI
Frequency Range	2.4/5GHz
Modulation Type	802.11a (OFDM) 802.11b (DSSS): CCK, DQPSK, DBPSK 802.11g (OFDM): BPSK, QPSK, 16-QAM, 64-QAM 802.11n (OFDM): BPSK, QPSK, 16-QAM, 64-QAM
Supported OS	Windows® XP, CE6.0, XPE, 2000, ME, 98SE, Vista 32/64, Windows® 7 32/64, MAC
Receiver Sensitivity	802.11a: -71dBm (Typical) at 54 Mbps 802.11b: -80dBm (Typical) at 11 Mbps 802.11g: -73dBm (Typical) at 54 Mbps 802.11n: -71dBm (Typical) at 450 Mbps
Power Consumption	430mA@3.3V in continuous Tx 460mA@3.3V in continuous Rx
Temperature	Operating: -10°C ~ 70°C Storage: -40°C ~ 150°C
Humidity	Operating: 5% ~ 95%, non-condensing
Dimensions (W x D x H)	28 mm x 30 mm x 4 mm
Weight	NW: 11g
Safety & EMC	CE/FCC/TELEC