

# Mini-PCI Realtek/ VIA/ Ralink Wireless LAN Module

The IEI Networking wireless Mini-PCI cards are fully compliant with IEEE's security and 802.11b/g or 802.11 a/b/g standards. With data rates between wireless devices of up to 54Mbps, it can deliver the bandwidth necessary for real-time streaming for many applications. Supports Windows®, Linux and CE Operating Systems.



**WMV-01**  
Mini-PCI VIA Wireless LAN Module



**WMR-01**  
Mini-PCI Realtek Wireless LAN Module



**WMRA-01**  
Mini-PCI Ralink Wireless LAN Module

Tri-Band

Model Name	WMV-01	WMR-01	WMRA-01
<b>Standards</b>	IEEE 802.11 b/g	IEEE 802.11 b/g	IEEE 802.11 a/b/g
<b>Interface</b>	Mini-PCI	Mini-PCI interface 1.0	Mini-PCI Interface 1.0
<b>Controller Chip</b>	VIA VT6655	Realtek RTL8185L	Ralink RT2561ST
<b>Connectors</b>	2 x U.FL (I-PEX) Antenna connectors	2 x Diversity U.FL Compatible Coaxial Connector	Diversity Coaxial Connector
<b>Security</b>	Supports WPA and WPA 2.0; Built-in hardware security engine for 802.11i 4.0. WEP (128-bit, 64-bit), TKIP, AES CCMP	Hardware-Based Encryption/Decryption Using 64-, 128-bit Wired-Equivalent Privacy (WEP) Keys, WPA and WPA2 are also supported	Hardware-Based Encryption/Decryption Using WEP 64/128, WPA, WPA2, 802.1 and 802.11i
<b>Frequency Range</b>	2.4 ~ 2.497 GHz (for US, Canada, Europe, Japan)	2.412 GHz ~ 2.484 GHz (for US, Canada, Europe, Japan)	2.412 GHz ~ 2.4835 GHz, 5.15 GHz ~ 5.724 GHz 5.725 GHz ~ 5.825 GHz
<b>Modulation Type</b>	QPSK, BPSK, CCK, OFDM	PBCC, CCK, DQPSK, DBPSK	802.11b: CCK, DQPSK, DBPSK 802.11a/g: QAM64, QAM16, QPSK, BPSK
<b>Supported OS</b>	Windows® 98/NT/2000/XP Windows® CE 4.2/5.0 Linux 2.4.x / 2.6.x	Windows® 98/NT/2000/XP Windows® CE 4.2/5.0 Linux 2.4.x / 2.6.x	Windows® 98/ME/2000/XP Windows® CE 5.0 Linux 2.4.x/2.6.x, MAC OSX
<b>Receiver Sensitivity</b>	802.11b (8% PER) -84 dBm(max.) at 11Mbps 802.11g (8% PER) -71 dBm(max.) at 54Mbps	802.11b (in 8% PER) -80 dBm(max.) at 11Mbps 802.11g (in 10% PER) -70 dBm(max.) at 54Mbps (-65dBm in average)	802.11a: -65 dBm at 54Mbps 802.11b: -80 dBm at 11Mbps 802.11g: -65 dBm at 54Mbps
<b>Power Consumption</b>	802.11b: 250 mA@3.3V 802.11g: 230 mA@3.3V	802.11b: 340 mA@3.3V 802.11g: 330 mA@3.3V	802.11a: 389 mA@3.3V 802.11b: 375 mA@3.3V 802.11g: 325 mA@3.3V
<b>Temperature</b>	Operating: 0 ~ 50°C	Operating: 0 ~ 50°C	Operating: 0 ~ 60°C
<b>Humidity</b>	Operating: 0% ~70% non-condensing	Operating: 0% ~90% non-condensing	Operating: 0% ~90% non-condensing
<b>Dimensions</b>	64.7mm x 44.6mm	59.75 mm x 44.6 mm	59.6mm x 44.6mm
<b>Weight</b>	NW: 10 g	NW: 9.7 g	NW: 12 g
<b>Complaint Certifications</b>	Wi-Fi, FCC	FCC, CE	FCC Part 15.247 in US EN300328 and EN300826 (EN301489-17) in Europe



**WMUSB-V01-R10**

USB embedded module with VIA wireless LAN module

#### Features

1. IEEE 802.11b DSSS / IEEE 802.11g OFDM high rate compatible
2. USB embedded module
3. Supports RF On/Off mechanism
4. Supports an external or internal LED indicator
5. WEA/WAP support



**WMPCIE-V01-R10**

PCIe mini card wireless LAN module

#### Features

1. PCIe mini card form factor
2. High speed wireless connection to 54Mbps
3. Solid design with external antenna diversity
4. Low power consumption and high performance
5. Enhanced wireless security

<b>Standards</b>	IEEE 802.11 b/g	IEEE 802.11 b/g , Wi-Fi compliant
<b>Interface</b>	USB 1.1/2.0 interface	PCIe mini card
<b>Controller Chip</b>	VIA VT6655	Atheros
<b>Connectors</b>	2 x U.FL (I-PEX) Antenna connectors	2 x U.FL (I-PEX) Antenna connectors
<b>Security</b>	Supports WEP, WPA 1.0/2.0	WEP 64-bit and 128-bit encryption, WPA (Wi-Fi Protected Access), WPA2 (Wi-Fi Protected Access)
<b>Frequency Range</b>	2.4 ~ 2.5GHz	2.4GHz ISM Bands 2.412-2.472GHz, 2.484GHz
<b>Modulation Type</b>	802.11b : DQPSK, DBPSK, DSSS and CCK 802.11g : BPSK, QPSK, 16QAM, 64QAM, OFDM	802.11b : CCK, DQPSK, PSK 802.11g : OFDM
<b>Supported OS</b>	Windows® 98SE/ME/2000/XP	Windows® 2003 server/ XP/XP64/Vista 32/Vista 64
<b>Receiver Sensitivity</b>	802.11b (8% PER) -83 dBm(Typical) at 11Mbps 802.11g (10% PER) -68 dBm(Typical) at 54Mbps	802.11b: -76 dBm(Typical) at 11Mbps 802.11g: -68 dBm(Typical) at 54Mbps
<b>Power Consumption</b>	382 mA@ 5V Tx mode/High speed 305 mA@ 5V Rx mode/High speed	802.11b: TX : MAX 710 mA@ 3.3V , MIN 630mA at 3.3V RX : MAX 330 mA@ 3.3V , MIN 310mA at 3.3V 802.11g: TX : MAX 650 mA@ 3.3V , MIN 620mA at 3.3V RX : MAX 340 mA@ 3.3V , MIN 320mA at 3.3V
<b>Temperature</b>	operation: 0°C ~ 60°C	operation: 0 ~ +60°C
<b>Humidity</b>	operation: 10% ~90% non-condensing	operation: 15% ~95% non-condensing
<b>Dimension</b>	60 mm x 25 mm	51 mm x 30 mm
<b>Weight</b>	NW: 8 g	NW: 18 g
<b>Compliance Certifications</b>	FCC, CE	FCC, CE

## Ordering Information

Part No.	Description	Part No.	Description
WMR-01-R10	802.11 b+g Wireless Mini-PCI module with Realtek RTL8185L	32500-000500-RS	2 dBi 109mm Antenna
WMV-01-R10	802.11 b+g Wireless Mini-PCI module with VIA VT6655	32500-001000-RS	5 dBi 173mm Antenna
WMRA-01-R10	802.11 a+b+g Wireless Mini-PCI module with Ralink RT2561ST	32100-143900-RS	RF cable ; 300MM; 28AWG; (A)SMA connector ; (B)MHF20278-11R-13;ROHS
WMPCIE-V01-R10	802.11 b+g PCIe mini card wireless LAN module with Atheros	32000-105000-RS	USB cable, 2x4-pin 2.54mm to JST SHR-06V 1.0mm, L:20cm
WMUSB-V01-R10	802.11 b+g USB embedded module with VIA VT6655	32000-102500-RS	USB cable, 2x4pin 2.0mm to JST SHR-06V 1.0mm, L:150mm