

Mini-PCI Realtek/ VIA/ Ralink Wireless LAN Module



WMR-01

Mini-PCI Realtek Wireless LAN Module



WMV-01

Mini-PCI VIA Wireless LAN Module



WMRA-01

Mini-PCI 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.

Specifications

Model Name	WMV-01	WMR-01	WMRA-01
Standards	IEEE 802.11 b/g	IEEE 802.11 b/g	IEEE 802.11 a/b/g
Interface	Mini-PCI	Mini-PCI interface 1.0	Mini-PCI Interface 1.0
Controller Chip	VIA VT6655	Realtek RTL8165L	Ralink RT2561ST
Connectors	2 x U.FL (I-PEX) Antenna connectors	2 x Diversity U.FL Compaible Coaxial Connector	Diversity Coaxial Connector
Security	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
Frequency Range	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
Modulation Type	QPSK, BPSK, CCK, OFDM	PBCC, CCK, DQPSK, DBPSK	802.11b: CCK, DQPSK, DBPSK 802.11a/g: QAM64, QAM16, QPSK, BPSK
Supported OS	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
Receiver Sensitivity	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
Power Consumption	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
Temperature	operation: 0 ~ 50°C	operation: 0 ~ 50°C	operation: 0 ~ 60°C
Humidity	operation: 0% ~70% non-condensing	operation: 0% ~90% non-condensing	operation: 0% ~90% non-condensing
Dimensions	64.7mm x 44.6mm	59.75 mm x 44.6 mm	59.6mm x 44.6mm
Weight	NW: 10 g	NW: 9.7 g	NW: 12 g
Complaint Certifications	Wi-Fi, FCC	FCC, CE	FCC Part 15.247 in US EN300328 and EN300826 (EN301489-17) in Europe



PPC-5350GS

IEI Mini PCI	Model
Mini-ITX	KINO-9454
	KINO-9453
	KINO-9452
5,25"	NOVA-8522
Other	MPSATA-01



32100-143900-RS

	802.11a	802.11b
Raw Data Rate	Up to 54 Mbps	Up to 54 Mbps
Achievable Throughput	20 Mbps ~ 30 Mbps	4 Mbps ~ 6 Mbps
Associate Rate Steps Down to	54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps	11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps
Range	75 feet @ 36Mbps	100 feet @ 11Mbps
Spectrum Range	U-NII and ISM 5-6 GHz range	ISM 2.4-2.4835 GHz range
Advantages	High data rate Higher spectral efficiency means more data can be transmitted over a smaller amount of bandwidth Resistance to multi-path or reflected signals Relative immunity to interference	Widespread product availability Low Cost
Disadvantage	More expensive components Higher power consumption	Lower data rate Interference with other 2.4GHz devices such as microwave ovens and 2.4GHz cordless phones Fewer available channels for frequency reuse



P/N:32500-000500-RS



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Ordering Information

Part No.	Description	Part No.	Description
WMR-01-R10	802.11 b/g Wireless Mini-PCI module with Realtek RTL8165L	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 ;30MM;28AWG;(A)SMA CONNECTOR ;(B)MHF20278-11R-13;ROHS

1 Single Board Computer

2 VIDEO CARD

3 Xscale Solutions

4 Open HMI

5 VITO Universal Controller

6 DINO BLADE

7 LCD Product Series

8 Embedded System

9 Industrial Computer Chassis

10 Power Supply

11 Peripherals