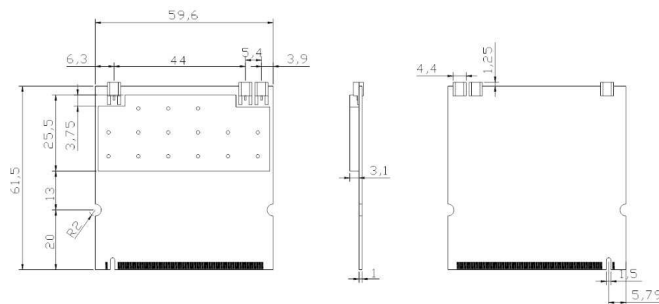


MaxR-953

IEEE 802.11 a/b/g/n, 250 mW, 3x3 High Power Mini PCI Card

This 250 mW High Power IEEE 802.11a/b/g/n 3x3(2 streams) Wireless Mini PCI Card is built with industrial-grade components. It is designed for reliable and demanding outdoor, enterprise, and carrier-class applications. The Mini PCI Card interface integrates easily with embedded platforms to construct access points, wireless bridges, and consumer premises client equipment. MIMO technology provides higher throughput and farther coverage.

Outline Drawing: (in mm)



Product Highlights:

- Atheros, 8th Generation AR9160 and AR9106 Chipset
- 300 Mbps Data Rate Support
- HT40, Short Guard Interval, Weak Signal Detection, MIMO Power Save
- Spatial Multiplexing, Cyclic-Delay Diversity, Maximal Ratio Combining
- Extended tuning range 2.300 GHz to 2.700 GHz and 4.900 GHz to 5.900 GHz Support
- 5/10/20/40 MHz Channel Bandwidth Support
- 250 mW Output Power
- Industry Best Sensitivity
- Industrial Temperature Range (-40°C to +80°C)
- Hardware Encryption (AES-CCMP, TKIP, WEP)
- Wireless Multimedia Quality of Service support (QoS)
- Enhanced Filtering (FCC Class C Mask Compliant)

Technical Specifications

Product Information			
Chipset	Atheros, 8 th Generation AR9106 and AR9160 Chipset		
Radio Operation	IEEE 802.11 a/b/g/n (3x3, 2 Streams)		
Frequency Range	2.300 GHz to 2.700 GHz and 4.9 GHz to 5.9 GHz		
Channel Bandwidth	5MHz / 10MHz / 20MHz / 40MHz		
Enhanced Filtering	FCC Class C Mask Compliant		
Interface	32-bit Mini PCI, type III A		
Dimension	LXW 61 mm x 59 mm		
Operation Voltage	DC 3.3 V +/- 0.1 V		
Antenna Interface	MMCX x 3 (3x3, 2 Streams)		
Temperature Range	-40°C to +80°C		
Security	WPA, WPA2, AES-CCM & TKIP Encryption, 802.1x, 64/128/152bit WEP		
Data Rates	1 Mbps, 2 Mbps, 5.5 Mbps, 11 Mbps (11b) 6Mbps, 9Mbps, 12Mbps, 24Mbps, 36Mbps, 48Mbps, 54Mbps (11 a/g) MCS0 – MCS15 (11n)		
RoHS Compliance	Yes		
Output Power & Sensitivity			
Frequency 2.4 GHz			
	Data Rate	TX (RMS) +/- 3dB	RX +/- 3dB
802.11b/g	6-24(1-11)Mbps	24 dBm 1200mA ± 150 mA	-97 dBm 350mA ± 50 mA
802.11a/g	36Mbps	22 dBm 950mA ± 150 mA	-90 dBm 350mA ± 50 mA
	48Mbps	20 dBm 750mA ± 150 mA	-86 dBm 350mA ± 50 mA
	54Mbps	19 dBm 650mA ± 150 mA	-84 dBm 350mA ± 50 mA
	802.11n	MCS0	23 dBm 1200mA ± 150 mA
	MCS1	23 dBm 1200mA ± 150 mA	-96 dBm 350mA ± 50 mA
	MCS2	21 dBm 750mA ± 150 mA	-93 dBm 350mA ± 50 mA
	MCS3	21 dBm 750mA ± 150 mA	-91 dBm 350mA ± 50 mA
	MCS4	19 dBm 650mA ± 150 mA	-87 dBm 350mA ± 50 mA
	MCS5	18 dBm 650mA ± 150 mA	-84 dBm 350mA ± 50 mA
	MCS6	17 dBm 600mA ± 150 mA	-78 dBm 350mA ± 50 mA
	MCS7	16 dBm 600mA ± 150 mA	-75 dBm 350mA ± 50 mA
	MCS8	23 dBm 1200mA ± 150 mA	-96 dBm 350mA ± 50 mA
	MCS9	23 dBm 1200mA ± 150 mA	-94 dBm 350mA ± 50 mA
	MCS10	21 dBm 750mA ± 150 mA	-91 dBm 350mA ± 50 mA
	MCS11	21 dBm 750mA ± 150 mA	-88 dBm 350mA ± 50 mA
	MCS12	19 dBm 650mA ± 150 mA	-85 dBm 350mA ± 50 mA
	MCS13	18 dBm 650mA ± 150 mA	-80 dBm 350mA ± 50 mA
	MCS14	17 dBm 600mA ± 150 mA	-79 dBm 350mA ± 50 mA
	MCS15	16 dBm 600mA ± 150 mA	-76 dBm 350mA ± 50 mA

Frequency 5 GHz			
	Data Rate(5 GHz)	Tx (RMS) +/- 3dB	Rx +/- 3dB
802.11g	6-24Mbps	24 dBm 1200mA ± 150 mA	-97 dBm 350mA ± 50 mA
802.11a/g	36Mbps	22 dBm 950mA ± 150 mA	-90 dBm 350mA ± 50 mA
	48Mbps	20 dBm 750mA ± 150 mA	-86 dBm 350mA ± 50 mA
	54Mbps	19 dBm 650mA ± 150 mA	-84 dBm 350mA ± 50 mA
802.11n	MCS0	23 dBm 1200mA ± 150 mA	-97 dBm 350mA ± 50 mA
	MCS1	23 dBm 1200mA ± 150 mA	-96 dBm 350mA ± 50 mA
	MCS2	21 dBm 750mA ± 150 mA	-93 dBm 350mA ± 50 mA
	MCS3	21 dBm 750mA ± 150 mA	-91 dBm 350mA ± 50 mA
	MCS4	19 dBm 650mA ± 150 mA	-87 dBm 350mA ± 50 mA
	MCS5	18 dBm 650mA ± 150 mA	-84 dBm 350mA ± 50 mA
	MCS6	17 dBm 600mA ± 150 mA	-78 dBm 350mA ± 50 mA
	MCS7	16 dBm 600mA ± 150 mA	-75 dBm 350mA ± 50 mA
	MCS8	23 dBm 1200mA ± 150 mA	-96 dBm 350mA ± 50 mA
	MCS9	23 dBm 1200mA ± 150 mA	-94 dBm 350mA ± 50 mA
	MCS10	21 dBm 750mA ± 150 mA	-91 dBm 350mA ± 50 mA
	MCS11	21 dBm 750mA ± 150 mA	-88 dBm 350mA ± 50 mA
	MCS12	19 dBm 650mA ± 150 mA	-85 dBm 350mA ± 50 mA
	MCS13	18 dBm 650mA ± 150 mA	-80 dBm 350mA ± 50 mA
	MCS14	17 dBm 600mA ± 150 mA	-79 dBm 350mA ± 50 mA
MCS15	16 dBm 600mA ± 150 mA	-76 dBm 350mA ± 50 mA	