



# WLM MINIPCI SERIES

WLM54G (G) / WLM54G (SUPERG) /  
WLM54AG (AG) / WLM54AG (SUPERAG)

Complex WLM series MiniPCI network adapters are compact, lightweight, has high-performance and low power consumption. Built on Atheros chipset, it can be used for all IEEE802.11b/g or a/b/g compatible WLAN and is ideally suited for integration in a wide range of OEM devices.

WLM series offers a high output power of up to 23dBm on A/B/G band. WLM Mini PCI series also supports a variety of security features such as WEP, AES, receive and transmit filtering, error recovery, quality of service (QoS) as well as IEEE802.1x standard, thus providing security to the wireless network and increase WLAN performance.

It is also available in Super-G/ Super-AG mode which delivers better performance at higher throughput for your network connectivity.

## Features

- 2.4/ 5GHz IEEE 802.11 a/b/g standard
- Up to 108Mbps high-speed data rate
- High Output Power of up to 23dBm @ a/b/g Band
- Dynamic Frequency Selection (DFS)
- Wi-Fi Protected Access Client Support (WPA)
- Transmission Power Control (TPC)
- Multi-country Roaming Support (IEEE802.11d)
- Flexibility: flexible design for embedded system or OEM project
- Available in Wireless-G, Wireless-AG, Super-G and Super-AG modes

## Applications

- Infrastructure Networking
- Embedded system or OEM device

- ◆ **High Performance with Low Power Consumption**
- ◆ **Output Power of up to 23dBm at a/b/g band**
- ◆ **Available in many different modes**
- ◆ **Affordable and ideal for a variety of applications**

## WLM MINI PCI TECHNICAL SPECIFICATIONS

MODEL	WLM54G (G)	WLM54G (SuperG)	WLM54G (High Power)	WLM54AG (AG)	WLM54AG (SuperAG)	WLM54AG (High Power)
CHIPSET	AR2413	AR2414	AR2413/AR2414	AR5413	AR5414	AR5413/AR5414
SPEED (max)	54Mbps	108Mbps	54/108Mbps	54Mbps	108Mbps	54/108Mbps
<b>OUTPUT POWER</b>						
802.11a	6-24Mbps			20dBm	20dBm	23dBm
	36Mbps	-	-	17dBm	17dBm	22dBm
	48Mbps			16dBm	16dBm	19dBm
	54Mbps			13dBm	13dBm	17dBm
802.11b	1-11Mbps	20dBm	20dBm	23dBm	20dBm	23dBm
802.11g	6-24Mbps	20dBm	20dBm	23dBm	20dBm	23dBm
	36Mbps	19dBm	19dBm	22dBm	18dBm	22dBm
	48Mbps	17dBm	17dBm	19dBm	17dBm	19dBm
	54Mbps	16dBm	16dBm	17dBm	15dBm	17dBm
<b>POWER CONSUMPTION</b>						
	1.8W	1.8W	2.5W	1.8W	1.8W	2.5W
<b>STANDARDS</b>						
IEEE 802.11a:	54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 9Mbps, 6Mbps					
IEEE 802.11b:	11Mbps, 5.5Mbps, 2Mbps, 1Mbps					
IEEE 802.11g:	54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 9Mbps, 6Mbps, automatically fallback to 5.5Mbps, 2Mbps, 1Mbps					
Super-G:	108Mbps, 96Mbps, 72Mbps, 54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 6Mbps					
Super-AG:	108Mbps, 96Mbps, 72Mbps, 54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 6Mbps					
<b>FREQUENCY RANGE</b>						
IEEE 802.11b/g	2.412GHz ~ 2.462GHz (US & Canada)					
	2.412GHz ~ 2.472GHz (Europe)					
	2.412GHz ~ 2.484GHz (Japan)					
IEEE 802.11a	5.15~5.35GHz, 5.725~5.850GHz (US & Canada)					
	5.15~5.35GHz, 5.47~5.725GHz (Europe)					
	4.90~5.00GHz, 5.03~5.091GHz, 5.15~5.25GHz (Japan)					
<b>NETWORK INTERFACE</b>						
PCI interface v2.3 (Type III-B Mini PCI form factor)						
<b>MODULATION TECHNIQUES</b>						
OFDM and DSSS						
OFDM: BPSK, QPSK, 16 QAM, 64QAM						
DSSS: DBPSK, DQPSK, CCK						
<b>RECEIVER SENSITIVITY</b>						
802.11a	-90 dBm @ 6Mbps, -70 dBm @ 54Mbps					
802.11b	-92 dBm @ 1Mbps, -87 dBm @ 11Mbps					
802.11g	-90 dBm @ 6Mbps, -70 dBm @ 54Mbps					
<b>OPERATING CHANNELS</b>						
US and Canada	11 Channels					
Europe	13 Channels					
Japan	14 Channels					
<b>SECURITY</b>						
64/128 Bit WEP, WPA/WPA2, IEEE802.1X Authentication						
<b>ENVIRONMENTAL SPECIFICATIONS</b>						
Temperature	Operating -20°C to 70°C Storage -65°C to 100°C					
Humidity	Operating 5% to 95% (non-condensing)					
<b>DIMENSIONS &amp; WEIGHT</b>						
Dimensions	6.0cm x 4.5cm (L x B)					
Weight	20 grams					

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