

AWPCI085H

802.11a/b/g High power mini PCI Module



802.11a/b/g Mini-PCI is complied with IEEE 802.11a standard/IEEE 802.11b/g standard and can be used to provide a variety of high-power wireless network interface card.

FEATURES

- Fully IEEE 802.11a/b/g standards compliant to provide wireless speed of 108Mbps data rate
- Allows auto fallback data rate for optimized reliability, throughput and transmission range: 54/ 48/ 36/ 24/ 18/ 12/11/ 9/ 6/ 5.5/ 2 / 1 Mbps. Super A/G mode support **up to 108 Mbps for 802.11a/g**
- Strong network security with 802.1x, Wi-Fi Protected Access, and WEP encryption.

EVM & Power

802.11a 6Mbps

EVM & Power			
Measurement	Single	Avg. 1	
EVM all	-21.08	-21.08	dB
	8.83	8.83	%
EVM data	-21.08	-21.08	dB
	8.83	8.83	%
EVM pilots	-21.07	-21.07	dB
	8.84	8.84	%
Peak Power	25.86	25.86	dBm
RMS Pow (no gap)	20.94	20.94	dBm
Max Avg Pow, red ln	22.87	22.87	dBm

802.11a 54Mbps

EVM & Power			
Measurement	Single	Avg. 1	
EVM all	-29.45	-29.45	dB
	3.37	3.37	%
EVM data	-29.39	-29.39	dB
	3.39	3.39	%
EVM pilots	-30.34	-30.34	dB
	3.04	3.04	%
Peak Power	24.82	24.82	dBm
RMS Pow (no gap)	16.44	16.44	dBm
Max Avg Pow, red ln	19.23	19.23	dBm

802.11g 6Mbps

EVM & Power			
Measurement	Single	Avg. 1	
EVM all	-24.85	-24.85	dB
	5.72	5.72	%
EVM data	-24.84	-24.84	dB
	5.73	5.73	%
EVM pilots	-24.94	-24.94	dB
	5.66	5.66	%
Peak Power	31.97	31.97	dBm
RMS Pow (no gap)	25.29	25.29	dBm
Max Avg Pow, red ln	27.18	27.18	dBm

802.11g 54Mbps

EVM & Power			
Measurement	Single	Avg. 1	
EVM all	-30.35	-30.35	dB
	3.04	3.04	%
EVM data	-30.20	-30.20	dB
	3.09	3.09	%
EVM pilots	-32.71	-32.71	dB
	2.32	2.32	%
Peak Power	30.43	30.43	dBm
RMS Pow (no gap)	21.54	21.54	dBm
Max Avg Pow, red ln	24.12	24.12	dBm

SPECIFICATON

Chip Set	Atheros(AR5006X AR5414)
Interface Type	Mini PCI Type III B
Frequency Band:	IEEE802.11a: 5150 MHz – 5250 MHz (Japan) 5150 MHz – 5350 MHz / 5470 MHz – 5725 MHz (Europe) 5150 MHz – 5350 MHz / 5725 MHz – 5850 MHz (USA) IEEE802.11g/b: 2400 MHz – 2483.5 MHz (for USA, Canada & Europe)
Channel	IEEE802.11a 4 Channels (Japan) 19 Channels (Europe) 13 Channels (USA) IEEE802.11g/b 14 channels (Japan) 13 channels (Europe) 11 channels (USA)
Emission Type	OFDM; DSSS
Output power	IEEE 802.11a 22dBm \pm 1 @ 6Mbps (Avg) IEEE 802.11a 25dBm \pm 1 @ 6Mbps (Peak) IEEE 802.11g: 27dBm \pm 1 @ 6Mbps(Avg) IEEE 802.11g: 31dBm \pm 1 @ 6Mbps(Peak)
Frequency Stability	Within \pm 20 ppm
Data Modulation Type	BPSK (6 / 9Mbps) / QPSK (12 / 18Mbps) / CCK (5.5 / 11 Mbps) 16QAM (24 / 36Mbps) / 64QAM (48 / 54 Mbps)
Power	3.3 Volt \pm 5%
Power Consumption	IEEE 802.11b/g TX: < 1200 mA RX: < 450 mA IEEE 802.11a TX: < 900 mA RX: < 300 mA
Antenna connector	1* diveristy MMCX connector

Antenna port impedance	50 ohm
Sensitivity	IEEE 802.11a/g Sensitivity @ Packet Error Rate: 10% 54 Mbps : ~ -74dBm 48 Mbps : ~ -77dBm 36 Mbps : ~ -83dBm 24 Mbps : ~ -86dBm 18 Mbps : ~ -90dBm 12 Mbps : ~ -91dBm 9 Mbps : ~ -93dBm 6 Mbps : ~ -94dBm
Bus Interface	Mini PCI 1.0 compliant
Security	Hardware 64/128-bit WEP/TKIP/AES-CCM/ 802.1x, WPA
Data Rate	802.11a Up to 54Mbps(108Mbps@Turbo Mode) 802.11g Up to 54Mbps , 802.11b Up to 11Mbps
Operating Temperature	-20°C to +65°C. Ambient
Storage Temperature	-20 ~ 75 °C ambient
Humidity	5 ~ 95% and must be non-condensing