

PRODUCT DATASHEET

Atheros 4thG Cardbus Adapter

NL-5354CB PLUS Aries2(F)

2.4 / 5.0 GHz

802.11a/ b/g

108 Mbps (Super a/g)

The High-Speed Wireless Cardbus Adapter is the most convenient way to let you put a notebook computer almost anywhere without the hassle of running network cables. Now you don't need to suffer from the drilling holes and exposed cables. Once you are connected, you can do anything, just like the wired network. The high-speed wireless cardbus adapter operates seamlessly in both modes of 2.4GHz and 5GHz frequency spectrum supporting the 802.11a (54Mbps) and the 802.11g (54Mbps) wireless standards.



To protect your wireless connectivity, the high-speed wireless cardbus adapter can encrypt all wireless transmissions through 64/128/152-bit WEP data encryption and also supports WPA. Dynamic Frequency Selection (DFS) puts your network on the cleanest channel in your location. With the High-Speed Wireless Cardbus Adapter, you will experience the best wireless connectivity available.

Features	Benefits
2.4GHz IEEE802.11b/g standard and 5GHz IEEE802.11a standard compliant	Fully interoperable with IEEE802.11a/b/g compliant products.
Up to 54Mbps and 108Mps (Super a/g mode) high-speed data rates	Capable of handling heavy data payloads such as MPEG video streaming
802.11i security specifications, provides Advanced Encryption Standard (AES), IEEE802.1x client	Enhances authentication and security.
Site Survey Utility	Allows users to browser the available active access points which users can connect
Transmission Power Control (TPC) support	Offers flexibility to adjust RF output power.
Multi-country Roaming (802.11d) support	Automatically adjusts regulatory domain to operate in different countries.
Seamless roaming	Full mobility

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

7/8/2005

Technical Specifications

Data Rates

802.11a: 6, 9, 12, 18, 24, 36, 48, 54, 72, 96 & 108 (Super a) Mbps

802.11g: 6, 9, 12, 18, 24, 36, 48, 54, 72, 96 & 108 (Super g) Mbps

802.11b: 1, 2, 5.5, 11Mbps

Standards / Compliance

WECA (Wi-Fi & Wi-Fi5 compliance), IEEE802.11, IEEE802.11a, IEEE802.11g, IEEE802.11b, draft IEEE 802.11e, f, h, and i standards, IEEE802.1x

Regulation Certifications

FCC Part 15/UL, ETSI 300/328/CE

Operating Voltage

3.3V

Status LEDs

RF link activity

Drivers

Windows 98SE/ ME/2000/XP

RF Information

Frequency Band

802.11a: 5.15~5.25GHz, 5.25~5.35GHz, 5.47~5.725GHz, 5.725~5.825GHz

802.11b/g: U.S., Europe and Japan product covering 2.4 to 2.484 GHz, programmable for different country regulations

Media Access Protocol

Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA)

Modulation Technology

802.11a/g: OFDM (64-QAM, 16-QAM, QPSK, BPSK)

802.11b: DSSS (DBPSK, DQPSK, CCK)

Operating Channels

802.11b/g

11 for North America, 14 for Japan, 13 for Europe, 2 for Spain, 4 for France

802.11a

US/Canada:12 non-overlapping channel (5.15~5.35GHz, 5.725~5.825GHz)

Europe:19 non-overlapping channel (5.15~5.35GHz, 5.47~5.825GHz)

Japan:4 non-overlapping channel (5.15~5.25GHz)

China:5 non-overlapping channel (5.725~5.85GHz)

Receive Sensitivity (Typical)

- 5.15~5.85GHz
6Mbps@ -89dBm;
54Mbps@ -70dBm
- 2.412~2.472G(IEEE802.11g)
6Mbps@ -90dBm;
54Mbps@ -70dBm
- 2.412~2.472G(IEEE802.11b)
11Mbps@ -90dBm;
1Mbps@ -93dBm

Available Transmit Power

802.11a: 5.15~5.35GHz

18dBm \pm 2dBm @ 6~24Mbps,
15dBm \pm 2dBm @ 54 Mbps

802.11a: 5.725~5.825GHz

17dBm \pm 2dBm @ 6~24Mbps,
14dBm \pm 2dBm @ 54 Mbps

802.11g:

20dBm \pm 2dBm @ 6~24Mbps,
17dBm \pm 2dBm @ 54 Mbps

802.11b:

20dBm \pm 2dBm @ 1~11Mbps,

Antenna

Integrated with built-in diversity

Networking

Topology

Ad-Hoc, Infrastructure

Security

IEEE802.1x support for LEAP/PEAP

WPA – Wi-Fi Protected Access (AES, 64,128,152-WEP with shared-key authentication)

Physical

Form Factor

32-bit Cardbus PC Card Standard V7.1 Type II

Dimensions (HxWxD)

6.3mm x 54mm x 118mm (0.30in x 2.13in x 4.65in)

Environmental

Temperature Range

Operating: -0°C to 55°C
Storage: -40°C to 70°C

Humidity (non-condensing)

5% ~ 95% typical

Package Contents

One Cardbus Adapter
One Quick Start Guide
One CD-ROM with User's Manual and Drivers

Related Product(s)

11a/b/g Wireless Cardbus Adapter

3054CB+ (802.11g)
3054CB+ Aries2 (802.11g)
SPC-362 (802.11g)
5354CB+ Aries2 (802.11a/b/g)

11a/b/g High-power Wireless USB Adapter

SUB-362 (802.11b/g)
SUB-862 (802.11a/b/g)

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

7/8/2005