

Data Sheet

EliteConnect™ Universal SMC2536W-AG



2.4GHz/5GHz High Power Wireless Cardbus Adapter

In today's enterprise world, mobility, flexibility, and security are the important ingredients for enhancing the productivity and convenience of wireless networks in corporate environments. SMC's new EliteConnect™ Universal 2.4GHz/5GHz High Power Wireless Cardbus Adapter (SMC2536W-AG) connects with an existing network installation so wireless enterprise laptop users can gain instant network access and resources from the conference room to the board room. This new member of the EliteConnect product line from SMC combines superior performance, range, security, and reliability.

The new SMC2536W-AG offers some of the highest tri-band transmitting power and receive sensitivity in the industry. The Adapter provides an extended operating range compared to the standard 802.11a/802.11b/802.11g clients. Since it has the ability to significantly decrease indoor multi-path distortion, users will experience dramatic improvements in the quality and throughput of their wireless networking. Equipped with the flexibility of 802.11a, 802.11b, and 802.11g, the SMC2536W-AG fits in any wireless enterprise network.

Based on the IEEE 802.11a/b/g standards, the new product can be configured for Ad-hoc mode (Peer-to-Peer) or Infrastructure mode (communication to the wired network via an Access Point). Since it is based on the 802.11a/b/g standard, it is interoperable among different 802.11a/b/g compliant vendors. The included EZ Installation Wizard enables quick and easy setup, saving time and resources when setting up the wireless users.

The new SMC2536W-AG provides a high level of security to enterprises by supporting Wi-Fi Protected Access (WPA)* and 64/128-bit/152-bit WEP encryption. It also supports 802.1x*, EAPMD5, EAP-TLS, EAP-TTLS, EAP-PEAP and LEAP for user authentication to ensure only authorized users can access the resources of the wireless network. Moreover, profile management software allows the new high power wireless notebook adapter the ability to save multiple wireless settings corresponding to different locations or networks. Furthermore, SMC2536W-AG has a built-in utility program for scanning all available Wireless Access Points on the network.

Combine all of these features including excellent performance, range, reliability, and ease-of-use with our free technical support and you have a state-of-the-art, best-of-breed high power Universal Wireless Client Adapter to seamlessly integrate into a new or existing wireless network.

* Available under Windows 2000/XP.
Support for Windows 98SE/ME will be available Q1 2004.

Features and Benefits

High Performance & Functionality

- High transmit power up to 100mW in 802.11a/b/g
- Enterprise level of security includes support of 64-bit, 128-bit or 152-bit WEP encryption in 802.11a mode; 64-bit or 128-bit WEP encryption in 802.11b and 802.11g modes, Wi-Fi Protected Access (WPA), 802.1x, EAP-MD5, EAP-TLS, EAP-TTLS, EAP-PEAP and LEAP for user authentication, and Advanced Encryption Standard (AES) in all 802.11a/b/g
- EZ Installation Wizard
- IEEE 802.11a, 802.11b and 802.11g compliant
- Data rates up to 108 Mbps turbo mode in 802.11a, up to 54 Mbps in 802.11g, and up to 11Mbps in 802.11b with auto-fallback feature
- Automatic data rate and channel selection
- Extended operating range
- 2.4GHz/5GHz unlicensed frequency band
- Ad-hoc or Infrastructure mode
- Site survey utility
- Ability to define multiple Profile settings
- Ability to support different countries and their available channels in each regulatory domain
- Supports Major Windows Operating Systems

Compatibility

- IEEE 802.11a, 802.11b, 802.11g
- Windows 98SE/ME/2000/XP

Product	Model No	Description
EliteConnect™ Universal	SMC2536W-AG	2.4GHz/5GHz High Power Wireless Cardbus Adapter

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Networks

Specifications

Standards:

- 802.11a
- 802.11b
- 802.11g

Host Interface:

- Cardbus form factor with 32-bit interface, PC Card Standard v7.1 Type II

Operation Mode:

- Infrastructure & Ad-hoc mode

Transfer Data Rate:

- 802.11a (Normal mode)
 - 54, 48, 36, 24, 18, 12, 9, 6Mbps, auto-fallback
- 802.11a (Turbo mode)
 - 108, 96, 72, 48, 36, 24, 18, 12 Mbps, auto-fallback
- 802.11b/g
 - 11, 5.5, 2, 1 Mbps, auto-fallback, up to 54 Mbps

Operating Range:

- 802.11a - up to 654 meters
- 802.11b - up to 538 meters
- 802.11g - up to 568 meters

Security:

- 64-bit, 128-bit, 152-bit WEP Encryption
- Wi-Fi Protected Access (WPA)
- 802.1x, EAP-MD5, EAP-TLS, EAP-TTLS, LEAP, PEAP Authentication
- AES & TKIP Encryption

Frequency Range:

North America:

- 5.15 ~ 5.35GHz
- 5.725 ~ 5.825GHz
- 2.400 - 2.483GHz

Europe:

- 2.412 ~ 2.472GHz, 5.15 ~ 5.35GHz, 5.47 ~ 5.725GHz
- 2.400 - 2.483GHz

Japan:

- 2.421 ~ 2.484GHz, 5.15 ~ 5.25GHz
- 2.400 - 2.483GHz, 4.90 ~ 5.091GHz, 5.15 ~ 5.25GHz

China:

- 2.412 ~ 2.484GHz, 5.725 ~ 5.85GHz
- 2.400 - 2.483GHz

Modulation Technique:

802.11b/g

- DSSS (DBPSK, DQPSK, CCK)
- OFDM for data rate > 20 Mbps

802.11a

- OFDM (BPSK, QPSK, 16-QAM, 64-QAM)

Channels:

802.11b/g

- US/Canada: 11 (1 ~ 11)
- Major European countries: 13 (1 ~ 13)

- France: 4 (10 ~ 13)
- Japan: 14 (1~13 or 14 th)
- China: 13 (1 ~ 13)
- 802.11a
 - US/Canada: 12 non-overlapping channels (5.15 ~ 5.35GHz, 5.725 ~ 5.825GHz)
 - Europe: 19 non-overlapping channels (5.15 ~ 5.35GHz, 5.47 ~ 5.725GHz)
 - Japan: 4 non-overlapping channels (5.15 ~ 5.25GHz)

Media Access Protocol:

- CSMA/CA

Antenna:

- Integrated Patch Antenna

Output Power:

- 11a mode:
 - 20 dBm +-2dBm at 6~24Mbps
 - 19-dBm +-2dBm at 36 Mbps
 - 17-dBm +-2dBm at 48 Mbps
 - 15-dBm +-2dBm at 54 Mbps
- 11g mode:
 - 20 dBm+-2dBm at 6~24Mbps
 - 19-dBm +-2dBm at 36 Mbps
 - 17-dBm +-2dBm at 48 Mbps
 - 15-dBm +-2dBm at 54 Mbps
- 11b mode:
 - 20-dBm +-2dBm at 11Mbps

Operational Voltage:

- 3.3/5V

Current Consumption:

- TX: 11a: < 700 mA
- 11b/g: < 850 mA
- RX: 11a: < 300 mA
- 11b/g: < 500 mA

Receive sensitivity:

802.11a:

- < -80 dBm at 6 Mbps
- < -80 dBm at 9 Mbps
- < -79 dBm at 12 Mbps
- < -78 dBm at 18 Mbps
- < -75 dBm at 24 Mbps
- < -73 dBm at 36 Mbps
- < -70 dBm at 48 Mbps
- < -67 dBm at 54 Mbps

802.11g:

- < -84 dBm at 6 Mbps
- < -84 dBm at 9 Mbps
- < -83 dBm at 12 Mbps
- < -82 dBm at 18 Mbps
- < -79 dBm at 24 Mbps
- < -77 dBm at 36 Mbps
- < -74 dBm at 48 Mbps
- < -71 dBm at 54 Mbps

802.11b:

- < -91 dBm at 1 Mbps
- < -89 dBm at 2 Mbps
- < -88 dBm at 5.5 Mbps
- < -87 dBm at 11 Mbps

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LED:

- Link/Activity

Operation Systems:

- Windows 98SE, ME, 2K, XP

Compliance:

- Wi-Fi Compliant
- Microsoft WHQL ME, 2K, XP Complaint
- FCC part 15 (USA)
- IC RSS210 (Canada)
- ETSI, EN301 893, EN60950 (Europe)

Temperature Range:

- 10°C to 60°C - Operating
- -40°C to 70°C - Storage

Humidity (non-condensing):

- 5% ~ 95% typical

Dimensions:

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

Weight:

- 0,018 kg

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