

## SMC2512W-B EliteConnect™ 2.4GHz 802.11b High Power Wireless PCI Card



### OVERVIEW

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™ 2.4GHz 802.11b High Power Wireless PCI Card (SMC2512W-B) connects with an existing Ethernet installation so wireless enterprise desktop users can gain instant network access and resources. This new member of the EliteConnect™ family of product line from SMC combines superior performance, range and reliability.

The new SMC2512W-B provides wireless LAN access to desktop computer with an available PCI slot. It offers an incredible transmit power of 100 mW, one of the highest in the industry. The SMC EliteConnect 802.11b High Power Wireless PCI Card provides an operating range up to 3 times greater than the standard 802.11b wireless clients. Since it has the ability to significantly decrease indoor multipath distortion, users will experience dramatic improvements in the quality and throughput of their wireless networking. Equipped with a detachable antenna with two available MMCX connectors, user can connect an optional high gain antenna (SMCANT-OM5) to increase the already superior range of the SMC2512W-B.

Based on the IEEE 802.11b standard, this 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 802.11b standard, it is interoperable among different 802.11b compliant vendors. The included EZ Installation Wizard enables quick and easy setup.

The new SMC2512W-B EliteConnect™ 802.11b High Power Wireless PCI Card provides a high level of security to enterprises by supporting both 64/128-bit WEP encryption and the new Wi-Fi Protected Access (WPA)\*. It also supports advanced enterprise level security and RADIUS authentication through 802.1x, EAP-MD5, EAP-TLS, EAP-TTLS, 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 desktop adapter the ability to save multiple wireless settings corresponding to different locations or networks. Furthermore, the SMC2512W-B 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, ease-of-use and you have a state-of-the-art, best-of-breed high power 802.11b Wireless PCI Adapter to seamlessly integrate into a new or existing wireless network.

FEATURES	BENEFITS
IEEE 802.11 compliant	IEEE 802.11b standard means interoperability with other Wi-Fi compliant vendors
Transmit power up to 100 mW (20 dB)	Delivers superior range and performance
Detachable antenna with 2 MMCX connectors	Detachable antennas allows for connection to optional high gain antenna (SMCANT-OM5) to increase operating distance
Advanced Enterprise level security and RADIUS authentication	Robust enterprise class security and RADIUS support to authenticate appropriate personnel to access network resources

**STANDARDS**

- IEEE802.11b, IEEE802.1x
- PCI Local Bus Specification 2.2
- PC Card 95/97 PC-16 Standard Specification
- ACPI 1.0

**INTERFACE**

- 32-Bit PCI Interface Card

**MEDIA ACCESS PROTOCOL**

- CSMA/CA

**OPERATIONAL MODE**

- Infrastructure & Ad-Hoc-Mode

**TRANSFER DATA RATES**

- 11, 5.5, 2, 1 Mbps with auto-Fallback

**MODULATION TYPE**

Modulation	Data Rate
DBPSK	1 Mbps
DQPSK	2 Mbps
CCK	5.5, 11 Mbps

**CHANNELS/FREQUENCY RANGE**

- 2.4 GHz frequency band
- 11 channels, 2.400 ~ 2.4720 GHz (US, Canada)
- 13 channels, 2.400 ~ 2.4835 GHz (ETSI)
- 14 channels, 2.400 ~ 2.4970 GHz (Japan)

**TRANSMIT OUTPUT POWER (E.I.R.P.)**

- 20 dBm @ 11 Mbps

**RECEIVE SENSITIVITY**

Transfer Rate	IEEE802.11b
1 Mbps	-93 dBm
2 Mbps	-90 dBm
5.5 Mbps	-88 dBm
11 Mbps	-85 dBm

**ANTENNA TYPE**

- Integrated 0.23 dBi Antenna
- Two MMCX connectors for external antennas, support RX diversity

**OPERATING RANGE**

- 802.11b: up to 800 m/ 2.700 ft
- Ranges vary based upon numerous environmental factors so individual performance may be significantly different.

**SECURITY**

- 64-/128-bit WEP encryption
- TKIP encryption
- Wi-Fi Protected Access (WPA)
- IEEE802.1x, EAP-MD5, EAP-TLS, EAP-TTLS, LEAP, PEAP

**LED**

- Link, Power

**OS SUPPORT**

- Windows 98SE, ME, 2000, XP

**CURRENT CONSUMPTION**

- TX: < 450 mA, RX: < 350 mA
- Power Save Mode: 60 mA

**OPERATIONAL VOLTAGE**

- 5V

**POWER SUPPLY CURRENT (PCI, OPERATING)**

- 50 mA

**TEMPERATURE**

- SMC2512W-B (PCI)
  - Ambient: 0°C ~ 70°C / 32°F ~ 158°F
  - Storage: -40°C ~ 125°C / -40°F ~ 257°F
- SMC2531W-B/ SMC2532W-B
  - Operating: 0°C ~ 50°C / 32°F ~ 122°F
  - Storage: -20°C ~ 80°C / -4°F ~ 176°F

**HUMIDITY (NON-CONDENSING)**

- 5% ~ 95% typical

**DIMENSION**

- 17.15 x 12.06 cm
- 6.75 x 4.75 in

**WEIGHT (INCLUDING PC CARD)**

- 127 g
- 0.28 lbs

**COMPLIANCE**

- Wi-Fi compliant
- FCC part 15 Class B (USA)
- IC (Canada)
- EN300328-1/EN300328-2/EN60950/EN301489 (Europe)

**WARRANTY**

- Limited Lifetime

**SMCANT-OM5 (NOT INCLUDED)**
**FREQUENCY RANGE**

- 2.400 GHz ~ 2.500 GHz

**ANTENNA GAIN**

- 5 dBi

**POLARIZATION**

- Linear vertical

**BEAM-WIDTH**

- Horizontal: 360°
- Vertical: 40°

**IMPEDANCE**

- 50 Ohm

**VSWR**

- < 1.5

**LIGHTNING PROTECTION**

- DC ground

**CABLE TYPE**

- RG-174

**CONNECTOR TYPE**

- MMCX

**MAX. POWER RATING**

- 50W

**Contact**
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