



## **W301 Wireless 2T2R PCI-E Adapter**

This W301 300Mbps 2T2R PCI-E Adapter is fully compliant with IEEE 802.11n 2.0 specification; it allows users to connect to 802.11n wireless networks up to 300 Mbps. It is also backward-compatible with IEEE 802.11b/g wireless network at 11/54 Mbps respectively. This PCI-E adapter includes a convenient utility software for scanning available wireless networks and an option to save profiles of preferred networks at user's choice. Configurable wireless security and encryption software are also included.

### **Features**

- Ideal for Surfing the Web, Sharing Files, Streaming Video, and Playing Online Games
- Up to 6 Times Faster than Wireless G
- Up to 300 Mbps Transfer Speed
- Protect Your Data with Advanced Wireless Security Features
- Cover Greater Area with Multiple-Input-Multiple-Output Technology
- Comply with PCI Express Base specification revision 1.1
- Compatible with IEEE 802.11n 2.0 specification

- Provide wireless speed up to 300Mbps maximum PHY data rate using 40MHz bandwidth and 144.4Mbps maximum PHY data rate using 20MHz bandwidth
- Support 2x2 Multiple Input Multiple Output (MIMO) technology for extended reception, robustness and exceptional throughput
- Backward compatible with IEEE 802.11g at 54Mbps
- Maximum reliability, throughput and connectivity with automatic data rate switching
- Support IEEE 802.11i (WPA, WPA2), open, shared key and pair-wise key authentication services
- Support wireless data encryption with 64/128-bit WEP standard for security
- Support IEEE 802.11e QoS Enhancement (WMM, WMM-SA client mode)
- Cisco Compatible eXtensions (CCX) for WLAN devices
- Two 2dBi or 5dBi dipole antennas with R-SMA connectors
- Driver available in Windows® XP, Windows Vista® and Windows® 7
- Simple user setup & diagnostics utilities

## **Specifications**

### **Standard:**

IEEE 802.11b

IEEE 802.11g

IEEE 802.11n 2.0

### **Radio Technology:**

IEEE 802.11g / IEEE 802.11n: Orthogonal Frequency Division Multiplexing (OFDM)

IEEE 802.11b: Direct Sequence Spread Spectrum (DSSS)

### **Interface:**

PCI Express Rev. 1.1

### **Security:**

64/128-bits WEP Encryption

WPA-PSK, WPA2-PSK, WPA, WPA2

**Wireless LAN Frequency Range:**

2412 ~ 2484 MHz ISM band (channels 1 ~ 14)

**Range Coverage:**

Indoor: Up to 100 meters (depends on environment)

Outdoor: Up to 300 meters (depends on environment)

**Transmission Rate:**

1, 2, 5.5, 6, 11, 12, 18, 22, 24, 30, 36, 48, 54, 60, 90, 120, 180, 240, 270, 300Mbps (auto sense) for Rx and Tx

**Receiver Sensitivity:**

300Mbps: Typical - 65dBm @ 10% PER

54Mbps: Typical - 68dBm @ 10% PER

11Mbps: Typical - 84dBm @ 8% PER

**Modulation Schemes:**

DBPSK/DQPSK/CCK/OFDM (BPSK/QPSK/16-QAM/64-QAM)

Media Access Protocol

CSMA/CA with ACK

**Transmit Power:**

< 18dBm typically @ 802.11b

< 15dBm typically @ 802.11g

< 13dBm typically @ 802.11n

**Antenna:**

Two 2dBi or 5dBi dipole antenna with R-SMA connector

**Diagnostic LED:**

Activity Status

**Operating Temperature:**

0 ~ 40°C

**Storage Temperature:**

-10 ~ 70°C

**Humidity:**

10% ~ 95% RH, no condensation

**Channel:**

USA: 11

Europe: 13

Japan: 14

**Driver Support:**

Windows® 7/8/ XP; Windows Vista®

**Package Content**

- Wireless W301 PCI-E Adapter x1
- External and Detachable Antenna x2
- Installation CD x1 (User Manual on CD-ROM)

**Requirement**

- Operating System: Windows® 7/8 / XP; Windows Vista®
- Available 1x PCI-E slot
- CD-ROM Drive