

WPIR-129GN

802.11n Draft 2.0 WLAN PCI Adapter



Gemtek WPIR-129GN PCI adapter uses the very latest wireless networking technology, Wireless-N (draft 802.11n). By overlaying the signals of multiple radios, Wireless-N's "Multiple In, Multiple Out" (MIMO) technology multiplies the effective data rate. Unlike ordinary wireless networking technologies that are confused by signal reflections, MIMO actually uses these reflections to increase the range and reduce "dead spots" in the wireless coverage area. The robust signal travels farther, maintaining wireless connections up to 4 times farther than standard Wireless-G.

Once you're connected, you can keep in touch with your e-mail, access the Internet, and share files and other resources such as printers and network storage with other computers on the network, wherever you wander. You'll be able to connect with any of the growing number of public hotspots springing up in coffee shops, airport lounges, hotels and convention centers. At home, you can surf the web or use instant messaging to chat with friends while sitting out on the patio. Your wireless connection can be protected by 64/128-bit WEP and powerful WPA/WPA2 wireless security. The included Setup Wizard will walk you through configuring the adapter to your network's settings, step by step.

- **Multiple In, Multiple Out" (MIMO) technology multiplies the effective data rate. Increase the range and reduce "dead spots" in the wireless coverage area**
- **Conforms to IEEE 802.11b/g standards, and compliant to draft 802.11n specifications**
- **Wireless security supports WPA/WPA2 & 64/128-bit WEP Encryption**
- **Maximizes the performance and ideal for media-centric applications like streaming video, gaming and Voice over IP technology.**
- **Easy configuration for home user setup**



General Specifications

Product Name 802.11n WLAN PCI Adapter	Receive Sensitivity 11Mbps @ -85dBm Typical +/- 2dBm 54Mbps @ -72dBm Typical +/- 2dBm 300Mbps @ -67dBm +/- 2dBm
Model Number WPIR-129GN	Power Consumption 802.11b Continue TX: 620@3.3V Continue RX: 340@3.3V 802.11g Continue TX: 640@3.3V Continue RX: 340@3.3V 802.11n HT20 Continue TX: 660@3.3V Continue RX: 340@3.3V 802.11n HT40 Continue TX: 680@3.3V Continue RX: 340@3.3V
Frequency Range 2.400 ~ 2.4835GHz (subject to local regulations)	LED Indicators Wireless activity
Number of Channel USA and Canada – 11 Most European countries – 13 Japan – 14	Protocol Support TCP/IP, IPX, NDIS4, and NDIS5x
Data Rate 802.11b 11, 5.5, 2, 1 Mbps per channel, auto fallback for extended range 802.11g 54, 48, 36, 24, 18, 12, 9, 6 Mbps per channel, auto fallback for extended range 802.11n(20MHz) MCS0~15, up to 144Mbps 802.11n(40MHz) MCS0~15, up to 300Mbps	Power 3.3V ± 5%
Security WPA, WPA-PSK, WPA2, WPA2-PSK 64, 128 WEP IEEE 802.1x IEEE 802.1i – WPA and TKIP	Operation Requirement Operating Temp: 0°C to 55°C Storage Temp: -20°C to 80°C Operating Humidity: 10%~85%, (non-condensing) Storage Humidity: 5%~90% , (non-condensing)
Spreading 802.11b Direct Sequence Spread Spectrum (DSSS) 802.11g Orthogonal Frequency Division Multiplexing (OFDM) 802.11n Orthogonal Frequency Division Multiplexing (OFDM) multiple-input/multiple-output (MIMO)	Transmitted power 802.11g: 16 +/- 1.5dBm @ normal temp 802.11b: 17 +/- 1.5dBm @ normal temp 802.11n: 13 +/- 1.5dBm @ normal temp
Modulation 802.11b CCK, DQPSK, DBPSK 802.11g 64 QAM, 16 QAM, QPSK, BPSK 802.11n 64 QAM, 16 QAM, QPSK, BPSK	
Peak gain of Antenna Three external reverse-RMA dipole antenna Peak gain: 1.5dBi	
Weight 72g	
Dimension 135* 120 * 23 mm	
Link Rate Up to 300Mbps in 40MHz Channel Mode Up to 150Mbps in 20MHz Channel Mode	