

WL5018B

***Dual-Band Draft 802.11n 3x3 MIMO
mini-PCI Wireless Network Adapter***

Product Specifications

Version 2.0

1. Description:

The **WL5018B** provides ultra-high performance (up to 270 Mbps) transmission rate in the 2.4GHz and 5 GHz band. Backward compatible with the current 802.11 a/b/g network devices gives your laptop the freedom of wireless connectivity with the performance, security, and manageability that businesses desire. A firmware-based architecture is capable of supporting the latest industry standards in the security and quality of service (QoS), as the draft 802.11i and 802.11e standards, respectively. The **WL5018B** is complemented by drivers and networking tools for various versions of the *Windows®* operating system. Extensive technical documentation on integration issues such as antenna design, customizing drivers, and management software can be obtained by request.

2. Features:

- IEEE 802.11a/b/g/n standard compliant
- 3x3 MIMO wireless system
- Ultra-high data rate up to 270 Mbps
- Auto fallback data rate under noisy environment
- Support both 2.4Ghz and 5Ghz band operation
- Support WEP (64-bit/128-bit), 802.1x, and WPA/WPA2
- Conformable to industry-standard Mini-PCI Card Type III-B specification
- Easy integration into mobile and hand-held platforms
- Flexible for design and antenna placement
- Low power consumption & Automatic power management to reduce battery use
- Independent Tx Power Control on a per channel
- Automatic Tx Gain adjustment during temperature variations

3. Application:

- Home and/or office wireless networking
- Wireless multimedia
- Wireless extension of existing wired network

4. Product Specifications:

WLAN Standards	IEEE 802.11 a/b/g/n	
Antenna Connector	Hirose connector supported with diversity	
Medium Access Protocol	CSMA/CA (Collision Avoidance) with ACK	
Frequency Band	2.4~2.4835 GHz and 4.9~5.85 GHz	
Number of Channels	Up to 14 Channels depending on regions	
Modulation	CCK/PSK, DQPSK, DBPSK, OFDM	
Supported Rates	54, 48, 36, 24, 18, 12, 9, 6, 11, 5.5, 2, 1 Mbps 20 MHz BW: 130, 117, 104, 78, 52, 39, 26, 13 Mbps 40 MHz BW: 270, 243, 216, 162, 108, 81, 54, 27 Mbps	
Maximum Receive Level	-20dBm (with PER< 10%) for 802.11g	
Antenna	External (Hirose U-F-L)	
Output Power	3x3: 13.5~16.5 dBm 11g: 13.5~16.5 dBm 11b: 15.5~18.5 dBm 11a: 13.5~16.5 dBm	
802.11g Receive Sensitivity	Data Rates	Receive Sensitivity
	54 Mbps	-68 dBm (typ)
	11 Mbps	-85dBm (typ.)
	6 Mbps	-86 dBm (typ.)
	1 Mbps	-93 dBm (typ.)
Voltage	3.3 VDC from host (+/-0.2V)	
Power Consumption	Standby (average) < 20mW	
Security	WEP (64-bit/128-bit), 802.1x WPA/WPA2 (TKIP, AES)	
Operating System	Windows 98SE/ME/2K/XP, Linux	
Operation Environment	Temperature:	0 ~ 70 °C
	Humidity:	5~95% RH (non-condensing)
Storage Environment	Temperature:	-10 ~ 75 °C
	Humidity:	95% RH (non-condensing)