

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:

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, DOPSK, 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 11b: 15.5~18.5 dBm 11b: 15.5~18.5 dBm 11b: 15.5~18.5 dBm 11b: 16.5 dBm 802.11g Receive Sensitivity Data Rates Receive Sensitivity 54 Mbps -86 dBm (typ) 11 Mbps -93 dBm (typ.) 11 Mbps -93 dBm (typ.) 11 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 WPAWPA2 (TKIP, AES) Operating System Operating System Windows 98	WLAN Standards		a/a
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Operation EnvironmentTemperature:0 ~ 70 °CHumidity:5~95% RH (non-condensing)		WPA/WPA2 (TKIP, AES)	
Humidity: 5~95% RH (non-condensing)	Operating System	Windows 98SE/ME/2K/XP, Linux	
	Operation Environment	Temperature:	0~70 °C
Storage EnvironmentTemperature:-10 ~ 75 °C		Humidity:	5~95% RH (non-condensing)
-	Storage Environment	Temperature:	-10 ~ 75 ℃
Humidity: 95% RH (non-condensing)	_	Humidity:	95% RH (non-condensing)