

## WUBR-501

### Wireless-N USB Dongle



#### Up to 300Mbps data rate, 6x better performance

SparkLAN WUBR-501 USB Dongle is IEEE 802.11n draft 2.0 compliant. It can deliver 6x better performance than normal 802.11g while fully backward compatible with conventional 802.11g gears. MIMO technology (multi-in, multi-out) is successful in enhancing coverage range and throughput and save the cost to purchase additional devices to deploy household WLAN environment. SparkLAN Wireless-N USB Dongle achieves incredible data rate of up to 300Mbps, which can allow you to enjoy high speed internet access for data, video, and voice at home and office. It is designed to stream bandwidth-sensitive applications, including VoIP phone calls, networked TV, time-crucial movies, music, data, online game console, and high-definition video.

#### Ensure your security and privacy

To secure your wireless network and protect users against hackers, SparkLAN Wireless-N USB Adapter incorporates the latest WPA2 encryption, WPA with AES and TKIP.

#### Product Highlights

- IEEE802.11n draft compliant
- Delivers up to 300 Mbps data rate
- 6x better performance
- Ideal for bandwidth-sensitive application
- Designed to stream movies, music, photos, HD video, VoIP phone calls, and large file

#### Features

- MIMO technology
- Backward compliant with 802.11b/g
- Easy-to-install
- Support Window 2000/XP
- Advanced security: 64/128bit WEP, WPA, WPA2
- RF chain: 2T2R, optional 1T1R for 802.11b/g mode

## Specifications

Hardware	
Chipset	Ralink RT2870 ( MAC/BBP ) and RT2820(RF)
Interface	USB 2.0
LED Indicators	ACT
Antenna	Built-in Smart antenna
Radio Characteristics	
Standard	IEEE draft 802.11n, 802.11b/g
Frequency Band	<b>802.11b</b> ISM band 2.400 ~ 2.484GHz (subject to local regulations) <b>802.11g</b> ISM band 2.400 ~ 2.484GHz (subject to local regulations) <b>802.11n draft</b> ISM band 2422 – 2452MHz (channel BW=40MHz) 2400 – 2483.5MHz (channel BW=20MHz)
RF chain	2T2R, Optional 1T1R for 802.11b/g mode
Spreading	<b>802.11b</b> : Direct Sequence Spread Spectrum (DSSS) <b>802.11g</b> : Orthogonal Frequency Division Multiplexing (OFDM) <b>HT20</b> : Orthogonal Frequency Division Multiplexing (OFDM) multiple-input/multiple-output (MIMO) <b>HT40</b> : Orthogonal Frequency Division Multiplexing (OFDM) multiple-input/multiple-output (MIMO)
Modulation	<b>802.11g</b> G64 QAM, 16 QAM,QPSK, BPSK <b>802.11b</b> GCKK,DQPSK,DBPSK <b>HT20,HT40</b> 64 QAM, 16 QAM,QPSK, BPSK Data
Data Rate	<b>802.11b</b> 11, 5.5, 2, 1 Mbps per channel <b>802.11g</b> 54, 48, 36, 24, 18, 12, 9, 6 Mbps per channel <b>HT20</b> 144, 130, 115, 86, 57, 43, 28, 14 Mbps <b>HT40</b> 270, 240, 180, 120, 90, 60, 30Mbps
Receive sensitivity	<b>802.11g ( 1RX)</b> Nominal Temp Range: 6Mbps @ -90dBm, typical, +/-2dBm 54Mbps @ -72dBm, typical, +/-2dBm <b>802.11b b ( 1RX)</b> Typ. -85dBm@11Mbps, +/-2dBm Typ. -92dBm@1Mbps, +/-2dBm <b>HT20(2RX)</b> MCS=0 -87dBm, +/-2dBm MCS=15 -67dBm, +/-2dBm <b>HT40(3RX)</b> MCS=0 -85dbm, +/-2dBm MCS=15 -65dBm, +/-2dBm

Power Consumption	<b>802.11b</b> Continue Tx : 430mA Continue RX : 300mA
	<b>802.11g</b> Continue Tx : 440mA Continue RX : 300mA
	<b>HT20</b> Continue Tx : 450mA Continue RX : 300mA
	<b>HT40</b> Continue Tx : 450mA Continue RX : 300mA
Output Power	<b>802.11g</b> 14.5dBm @ 54Mbps <b>802.11b</b> 17.5dBm@11Mbps <b>HT20</b> 12.5dBm@144Mbps <b>HT40</b> 12.5dBm@270Mbps

Software Features	
Security	<ul style="list-style-type: none"> <li>64/128 WEP Encryption</li> <li>WPA, WPA2, TKIP, AES</li> </ul>
OS Support	Windows 2000/XP/Vista
Environmental Specifications	
Dimensions	100x34x20 mm
Weight	32g
Temperature	Operating: 0°C to 55°C Storage: -20°C to 80°C
Humidity	90%, (non-condensing)
Certification	
FCC, CE	
Package Contents	
Wireless-N USB Dongle	
CD-ROM (User Guide, Utility, QIG, User Manual)	Multi-Language Quick Installation Guide

**Specifications are preliminary and subject to change without notice**