# IEEE 802.11 b/g/n 150Mbps Mini WiFi Adapter Product Specifications

Model: GWF-3S03

Version: 1.5

Date: 2011/6/18



### 1. Introduction

This mini profile WLAN module supporting IEEE 802.11 b/g/n standards with USB connector supporting USB 2.0 interface.





Model: GWF-3S03

# 1.1 Scope:

The GWF-3S03 is a highly integrated MAC/BBP and 2.4GHz RF/PA/LNA single chip with 150Mbps PHY rate supporting. It fully complies with IEEE802.11n and IEEE802.11b/g feature rich wireless connectivity at high standards, delivers reliable, cost-effective, throughput form an extended distance. The optimized RF architecture and baseband algorithms provide superb performance and low power consumption. The intelligent MAC design deploys a high efficient DMA engine and hardware data processing accelerators without overloading the host processor.

The GWF-3S03 is designed to support standard based features in the areas of security, quality of service and international regulation, giving end users the greatest performance anytime in any circumstance. The very small and compact WLAN adapter design is good for wireless connectivity of products with confined space or for portable application.

### 1.2 Features

- 802.11b: 1, 2, 5.5, 11Mbps;
- 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps
- 802.11n: (20MHz) MCS0-7, Support up to 72Mbps
   (40MHz) MCS0-7, Support up to 150Mbps
- OFDM, Peak rate 150Mbps, Peak throughput 90Mbps.
- Security support for 64/128 WEP, WPA, WPA2, TKIP, AES
- Operates in 2.4GHz frequency bands. Power Management



## 2. Product Information

### 2.1 Block Diagram

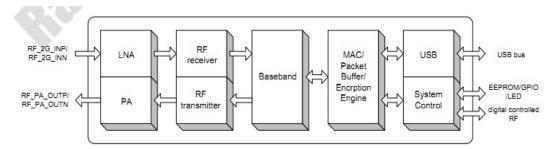
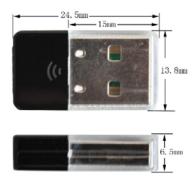


Figure 1: System Block Diagram of GWF-3S03 5.0V WLAN adapter

### 2.2 Outline Information



# Reference packing information:





Note: The pictures are for reference only.

### 2.3 Software and system Information

Operation System	CPU Supplier	Driver
Linux 2.4/2.6	ARM, MIPSII	Available
Windows 2000/XP/Vista/7	X86 Platform	Available
Mac OS X 10.3/10.4/10.5/10.6	N/A	Available



### 2.4 Agency Approval

Agency	Approval
FCC Part15	V
CE	$\sqrt{}$
RoHS	V

### 2.5 Specification Overview

Hardware		
Main Chipset	Ralink RT5370	
Host interface	USB 2.0/1.1 Type A	
LED	Link/ Activity	
RF Performance		
Standards	IEEE802.11b/g & 802.11n (1T1R mode, 150Mbps)	
Antenna	Built-in Antenna	
Operation Frequency	2412~2483.5 MHz	
Typical Antenna Feed Point	802.11b (CCK)11Mbps: 18+/-1dBm; 802.11g (OFDM) 54Mbps: 15+/-1dBm	
Tx Power	802.11n (HT20@MCS7), 14+/-1dBm; 802.11n (HT40@MCS7),14+/-1dBm	
Receive Sensitivity	802.11b: -84+/-1dBm; 802.11g: -72+/-1dBm	
	802.11n (HT20), -68+/-1dBm; 802.11n (HT40), -68+/-1dBm	
Software Support		
Operation System	WindowsCE/2000/XP/Vista/7; Linux 2.6.X; Mac OS X	
Security	WEP 64/128bit , WPA, WPA2, 802.1x, and 802.11i, Cisco CCS Compliant	
Operation conditions		
Voltage Range/Current	DC 5.0V ± 5% / <160mA	
Temperature	Operation: 0°C - 50°C; Storage:-20°C - 70°C	
Humidity(Non-Condensing)	Operation: RH 95%; Storage: RH 95%	
Physical Specification		
Dimensions	24.5*14*6.5 mm	
Net Weight	3.5 g	

### 3. Disclaimer

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