

## IEEE 802.11 b/g/n WIFI DONGLE

### Product Specifications

**RT5370**

**Model: TOP-GS03**

**Version:1.6 Dec**

2013/08/21

地址：深圳市龙岗区坂田坂雪岗大道1-4号金都大厦321室

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## 1. Introduction

TOP-GS03 is a WLAN module supporting IEEE 802.11 b/g/n standards with 4-pin connector supporting USB 2.0 interface. This is a low cost compact WLAN module designed in the product with embedded system for the wireless connectivity.

### 1.1 Scope:

TOP-GS03 WLAN Module is designed to operate in 2.4GHz ISM frequency band, it applies a highly integrated MAC/BBP and RF single chip RT5370 with 150Mbps PHY rate supporting. It fully complies with IEEE802.11n draft 3.0 and IEEE802.11b/g feature.

### 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
- Antenna configuration: Built-in On Board

## 2. Product Information

### 2.1 Specification Overview

<b>Standards</b>	IEEE802.11b/g & 802.11n (1T1R mode)
<b>Operating Frequency</b>	USA (FCC): 2.412GHz ~ 2.462GHz (channel 1 – 11) ISM band
	Europe (CE): 2.412GHz ~ 2.472GHz (channel 1 – 13) ISM band
<b>Protocols</b>	802.11b: CCK, QPSK, BPSK, 802.11g/n: OFDM
<b>Antenna</b>	External Antenna via an I-PEX receptacle/ Built-in On Board
<b>Security</b>	WPA/WP2, 64/128/152-bit WEP, WPS
<b>Transmit Output Power (Typical)</b>	11b: 19±1.0dBm @ 11Mbps; 11g: 16±1dBm @ 54Mbps
	802.11n: (HT20), 16+/-1dBm, 802.11n: (HT40), 16+/-1dBm,
<b>Receive Sensitivity</b>	11b:-86dBm @ 11Mbps;11g:-72dBm @ 54Mbps.

	802.11n: (HT20), -68dBm@MSC7, (HT40), -64dBm@MSC7
<b>Operating Voltage</b>	5.0VDC $\pm$ 5%
<b>Operating Current</b>	<110mA at 5.0V DC input.
<b>Bus Interface</b>	USB 2.0/USB1.1
<b>USB Interface</b>	USB2.0
<b>Antenna Impedance</b>	Built-in Aerial

**Figure 2:** System Block Diagram of TOP-S03 5V WLAN Module

## 2.3 Software and system Information

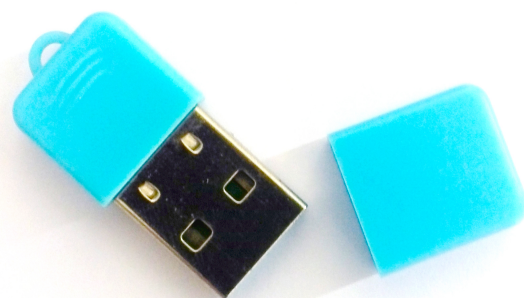
Operation System	CPU Supplier	Driver
Linux 2.4/2.6	ARM, MIPSII	Available
Windows 2000/XP/Vista	X86 Platform	Available
Windows CE 5.0/6.0	ARM, MIPSII	Available
Mac OS X 10.3/10.4/10.5/10.6	<b>N/A</b>	Available

## 2.4 Mechanical Information

### 2.4.1 OUTLINE and USB Connection Information



TOP-GS03A



TOP-GS03B

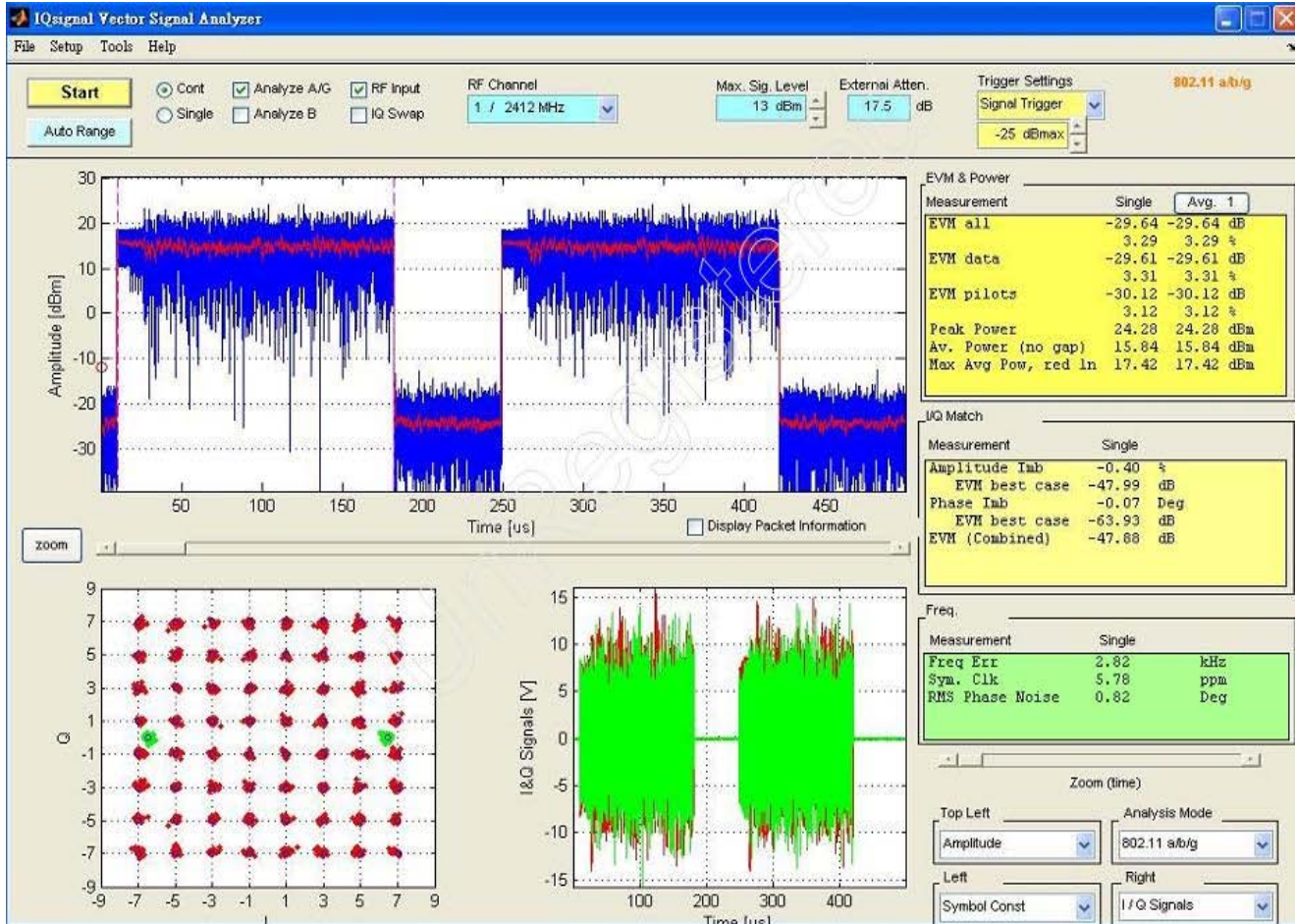
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## 1. TEST PARAMETER



## 2 A Agency A Approval

Agency	Approval
FCC Part15	√
CE	√
RoHS	√

### 4.1 Temperature

#### 4.1.1 Operating Temperature

Continuous reliable operation in ambient temperature: 0°C to +50°C.

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## 4.1.2 Storage Temperature

The product is not damaged or degraded when keeping in -20°C to +85°C.

## 4.2 Humidity

### 4.2.1 Operating Humidity Conditions

The product is capable of continuous reliable operation when subjected to relative humidity in the range of 20% to 80% (non-condensing).

### 4.2.2 Non-Operating Humidity Conditions (including warehouse)

The product is not damaged or degraded when kept in the relative humidity range from 20% to 80%.

## 5 Disclaimer

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**TCB**

**GRANT OF EQUIPMENT  
AUTHORIZATION**

**TCB**

**Certification**

**Issued Under the Authority of the  
Federal Communications Commission**

**By:**

Siemic Inc.  
2206 Ringwood Ave.  
San Jose, CA 95131

**Date of Grant: 06/03/2011**

**Application Dated: 06/03/2011**

**TOPLINKST TECHNOLOGY COMPANY LIMITED  
UNIT 04,7F,BRIGHT WAY TOWER, NO,33 MONG KOK  
ROAD  
KOWLOON,  
Hong Kong**

**Attention: YanHua Zhang , Manager**

**NOT TRANSFERABLE**

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

**FCC IDENTIFIER:** ZLJRT5370S03  
**Name of Grantee:** TOPLINKST TECHNOLOGY COMPANY LIMITED

**Equipment Class:** Digital Transmission System  
**Notes:** wireless USB adapter

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
	15C	2412.0 - 2462.0	0.254		
	15C	2422.0 - 2452.0	0.127		

Power listed is the maximum peak conducted output power.

SAR compliance has been established with a laptop computer as tested in this filing. This USB dongle can be used with laptop computers of substantially similar physical dimensions, construction, and electrical and RF characteristics. Maximum measured SAR value: 0.264 W/kg (Body).

