



WIFI Module

IEEE 802.11 b/g/n 2T/2R

Model Number: W2TM2510

Product Description

The W2TM2510 is a 2.4GHz 2×2 MIMO WIFI module. This module provides a high level of integration with a dual-stream IEEE 802.11n MAC/ base band /radio. The WLAN operation supports 20MHz, 40MHz channels for data rates up to 300Mbps. It fully complies with IEEE 802.11 b/g/n feature rich wireless connectivity at high standards, delivers reliable, cost-effective, throughput from an extended distance.

Product Features

- ◆ Complies with IEEE 802.11b/g/n for 2.4GHz Wireless LAN.
- ◆ Two transmit and Two receive path(2T2R)
- ◆ Works with all existing network infrastructure.
- ◆ Capable of up to 128-Bit WEP Encryption.
- ◆ Freedom to roam while staying connected.
- ◆ UP to 300 Mbps High-Speed Transfer Rate in 802.11n mode of operation.
- ◆ Operating Systems: Linux, Win7, Win8, Win10, XP
- ◆ Low power consumption.
- ◆ Easy to install and configure.
- ◆ High speed USB 2.0 interface
- ◆ ROHS compliant

Product Specification

Model	WIFI Module	
Product Name	W2TM2510	
Standard	802.11 b/g/n	
Interface	USB	
Data Transfer Rate	1,2,5.5,6,11,12,18,22,24,30,36,48,54,60,90 and maximum of 300Mbps	
Modulation Method	DQPSK,DBPSK,CCK(802.11b) QPSK,BPSK,16QAM,64QAM with OFDM (802.11g) QPSK,BPSK,16QAM,64QAM with OFDM (802.11n-HT20) QPSK,BPSK,16QAM,64QAM with OFDM (802.11n-HT40)	
Frequency Band	2400~2483.5 MHz	
Frequency Range:	2412~2462 MHz	
Antenna Type:	PIFA Antenna	
Antenna Gain:	Chain 0	2dBi
	Chain 1	2dBi
Operation Mode	Infrastructure	
Security	WEP, TKIP, AES, WPA, WPA2	
Operating Voltage	3.3V±10%	
Current Consumption	<1000mA	
Antenna Type	PIFA	
Operating Temperature	0 ~ 60°C ambient temperature	
Storage Temperature	-40 ~ 80°C ambient temperature	
Humidity	5 to 95 % maximum (non-condensing)	

FCC standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247



NOTICE:

- ◆ please keep this product and accessories attached to the places which children can't touch;
- ◆ do not splash water or other liquid onto this product, otherwise it may cause damage;
- ◆ do not put this product near the heat source or direct sunlight, otherwise it may cause deformation
- ◆ or malfunction;
- ◆ please keep this product away from flammable or naked flame;
- ◆ please do not repair this product by yourself. Only qualified personnel can be repaired.

FCC Statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

We will retain control over the final installation of the modular such that compliance of the end product is assured. In such cases, an operating condition on the limit modular approval for the module must be only approved for use when installed in devices produced by a specific manufacturer. If any hardware modify or RF control software modify will be made by host manufacturer, C2PC or new certificate should be apply to get approval, if those change and modification made by host manufacturer not expressly approved by the party responsible for compliance, then it is illegal.

The modular can be installed or integrated in mobile or fix devices only. This modular cannot be installed in any portable device.

FCC Radiation Exposure Statement

This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This modular must be installed and operated with a minimum distance of 20 cm between the radiator and user body.

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID:2AC23-W2T Or Contains FCC ID:2AC23-W2T"

When the module is installed inside another device, the user manual of the host must contain below warning statements;

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product.

Any company of the host device which install this modular with limit modular approval should perform the test of radiated & conducted emission and spurious emission, etc. according to FCC part 15C : 15.247 and 15.209 & 15.207 , 15B Class B requirement, Only if the test result comply with FCC part 15C : 15.247 and 15.209 & 15.207 , 15B Class B requirement, then the host can be sold legally.



Canada Statement:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes :

(1) Cet appareil ne doit pas causer d'interférences.

(2) Cet appareil doit accepter toutes les interférences, y compris celles susceptibles de provoquer un fonctionnement indésirable de l'appareil.

IC Radiation Exposure Statement

The modular can be installed or integrated in mobile or fix devices only. This modular cannot be installed in any portable device.

This modular complies with IC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This modular must be installed and operated with a minimum distance of 20 cm between the radiator and user body. Cette modulaire doit être installée et utilisée à une distance minimum de 20 cm entre le radiateur et le corps de l'utilisateur.

If the IC number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains IC: 12290A-W2T"

When the module is installed inside another device, the user manual of this device must contain below warning statements;

1. This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device

2. Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes :

(1) Cet appareil ne doit pas causer d'interférences.

(2) Cet appareil doit accepter toutes les interférences, y compris celles susceptibles de provoquer un fonctionnement indésirable de l'appareil.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product.

CE Statement

Herby, Hui Zhou Gaoshengda Technology Co., LTD declares that this WIFI Module, W2TM2510 is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

In accordance with Article 10(2) and Article 10(10), this product allowed to be used in all EU member states.

Use the WIFI Module in the environment with the temperature between 0°C and 60°C

Operation Frequency: 2412MHz~2472MHz

Max Output Power: 0.0453W

Manufacturer: Hui Zhou Gaoshengda Technology Co., LTD

Address: NO.75 Zhongkai Development Area, Huizhou, Guangdong, China

Tel: +86-0752-2096698

Fax: +86-0752-2096698

E-mail: guanh@gaosd.cn

**Declaration of Conformity**

I hereby declare that the product

Product:

Product Name: WIFI Module
Model: W2TM2510
Brand Name: GSD
Hardware Version: V1.0
Software Version: V0.13

satisfies all the technical regulations applicable to the product within the scope of Council

Directives 2014/35/EU, 2014/30/EU and 2014/53/EU:

EN 60950-1: 2006+A11: 2009+A1: 2010+A12: 2011+A2: 2013

EN62311:2008

Draft ETSI EN 301 489-17 V3.2.0 (2017-03)

Draft ETSI EN 301 489-1 V2.2.1 (2019-03)

Final draft ETSI EN 300 328 V2.2.1 (2019-04)

(Title(s) of regulations, standards, etc.)

All essential radio test suites have been carried out.

NOTIFIED BODY: LGAI Technological Center S.A./Applus(Nr. 0370), has conducted the conformity assessment according to module B of Directive 2014/53 / EU (RED)

– **Address:**

Ronda de la Font del Carme, s/n

08193 Bellaterra – Barcelona

(Spain)

Identification Number: 0370

MANUFACTURER or AUTHORISED REPRESENTATIVE:

– **Address:**

Hui Zhou Gaoshengda Technology Co., LTD

NO.75 Zhongkai Development Area, Huizhou, Guangdong, China

This declaration is issued under the sole responsibility of the manufacturer and, if applicable, his authorised representative.

Signature:

Jul.15, 2019

Hui Guan

Name	Hui Guan
Position	N/A
Company Name	Hui Zhou Gaoshengda Technology Co., LTD
Address	NO.75 Zhongkai Development Area, Huizhou, Guangdong, China
Tel / Fax	+86-0752-2096698/+86-0752-2096698
E-Mail	guanh@gaosd.cn