



RADIO TEST REPORT

Report No: STS2205025H01

Issued for

WIZnet H.K. Limited

Unit 219, Building 1W, Hong Kong Science Park, Pak Shek Kok, New Territories, Hong Kong

Product Name:	WiFi Module
Brand Name:	WIZnet
Model Name:	WizFi360
Series Model:	WizFi360-PA,WizFi360-CON
Test Standard:	EN 50663:2017

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Test Report Certification

Applicant's Name..... : WIZnet H.K. Limited
Address : Unit 219, Building 1W, Hong Kong Science Park, Pak Shek Kok, New Territories, Hong Kong
Manufacture's Name..... : WIZnet Co., Ltd.
Address : 5F Humax Village,216 Hwangsaetul-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, 13595 Korea

Product Description

Product Name..... : WiFi Module
Brand Name : WIZnet
Model Name : WizFi360
Series Model..... : WizFi360-PA,WizFi360-CON


Standards..... : EN 50663:2017

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Date of Test..... :
Date (s) of performance of tests..... : 10 June 2019 ~ 18 June 2019
Date of Issue..... : 10 May 2022
Test Result..... : **Pass**

Testing Engineer : 

 (Chris Chen)

Technical Manager : 

 (Sean she)

Authorized Signatory : 

 (Vita Li)





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**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	21 June 2019	STS1906023H01	ALL	Initial Issue
00	25 Feb. 2020	STS2002179H01	ALL	Updated product name, model name and series model name.
00	05 Nov. 2020	STS2010375H01	ALL	Updated report No, Applicant's Name/Address and Manufacturer's Name/Address
00	10 May 2022	STS2205025H01	ALL	Updated Applicant's Address and Manufacturer's Name/Address.





1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF THE EUT

Product Name	WiFi Module								
Brand Name	WIZnet								
Model Name	WizFi360								
Series Model	WizFi360-PA,WizFi360-CON								
Model Difference	1.WizFi360-PA has a PCB antenna onboard, WizFi360-CON doesn't have; 2.WizFi360-CON has an IPEX antenna connector onboard, WizFi360-PA doesn't have; 3.WizFi360-PA has a LED light onboard, WizFi360-CON doesn't have 4.WizFi360 is the same as wizfi360-PA								
Product Description	<p>The EUT is WiFi Module</p> <table border="1"> <tr> <td>Operation Frequency:</td> <td>802.11b/g/n(20MHz): 2412~2472MHz 802.11n(40MHz):2422~2462MHz</td> </tr> <tr> <td>Modulation Type:</td> <td>802.11b(DSSS): CCK,DQPSK,DBPSK 802.11g(OFDM): BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM): BPSK,QPSK,16-QAM,64-QAM</td> </tr> <tr> <td>Antenna gain:</td> <td>PCB Antenna: 2 dBi External Antenna: 3.5 dBi</td> </tr> <tr> <td>RF output Power:</td> <td>15.81dBm</td> </tr> </table>	Operation Frequency:	802.11b/g/n(20MHz): 2412~2472MHz 802.11n(40MHz):2422~2462MHz	Modulation Type:	802.11b(DSSS): CCK,DQPSK,DBPSK 802.11g(OFDM): BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM): BPSK,QPSK,16-QAM,64-QAM	Antenna gain:	PCB Antenna: 2 dBi External Antenna: 3.5 dBi	RF output Power:	15.81dBm
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Antenna gain:	PCB Antenna: 2 dBi External Antenna: 3.5 dBi								
RF output Power:	15.81dBm								
Power Rating	DC 3.3V								
Hardware Version	Rev 1.2								
Software Version	V1.0.1.2								

Note: 1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

1.2 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. : A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

2. EN50663 REQUIREMENT

2.1 TEST STANDARDS

Equipment complying with the requirements for the general public is deemed to comply with the requirements for workers without further testing.

The evaluation report shall be made according to EN 62311:2008, Clause 9.

EN 62311: 2008	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)
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2.2 HUMAN EXPOSURE TO THE ELECTROMAGNETIC FIELDS

LIMIT

According to EN62311:2008, the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified 1999/519/EC.

Reference levels for electric, magnetic and electromagnetic fields
(0 Hz to 300 GHz, unperturbed rms values)

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (μT)	Equivalent plane wave power density S_{eq} (W/m ²)
0-1 Hz	—	$3,2 \times 10^4$	4×10^4	—
1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	—
8-25 Hz	10 000	$4\ 000/f$	$5\ 000/f$	—
0,025-0,8 kHz	$250/f$	$4/f$	$5/f$	—
0,8-3 kHz	$250/f$	5	6,25	—
3-150 kHz	87	5	6,25	—
0,15-1 MHz	87	$0,73/f$	$0,92/f$	—
1-10 MHz	$87/f^{1/2}$	$0,73/f$	$0,92/f$	—
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	$1,375\ f^{1/2}$	$0,0037\ f^{1/2}$	$0,0046\ f^{1/2}$	$f/200$
2-300 GHz	61	0,16	0,20	10

Notes:

1. f as indicated in the frequency range column.
2. For frequencies between 100 kHz and 10 GHz, S_{eq} , E^2 , H^2 , and B^2 are to be averaged over any six-minute period.
3. For frequencies exceeding 10 GHz, S_{eq} , E^2 , H^2 , and B^2 are to be averaged over any $68/f^{1.05}$ -minute period (f in GHz).
4. No E-field value is provided for frequencies < 1 Hz, which are effectively static electric fields. For most people the annoying perception of surface electric charges will not occur at field strengths less than 25 kV/m. Spark discharges causing stress or annoyance should be avoided.



RESULT

No non-compliance noted

Since average output power is 2.4G WIFI: 15.81dBm(0.0381W) which exceed the exempt condition in EN62311. RF exposure assessment has been performed below to prove that this unit will not generate the harmful EM emission above the reference level as specified in EC Council Recommendation.

Conclusion: PASS

2.3 HUMAN EXPOSURE ASSESSMENT		
EUT Parameter (data form the separate report)		
Max average out put power in Watt (TP)	2.4G WIFI:15.81dBm=0.0381(W)	
Minimum distance in meter (r) (from transmitting structure to the human body)	20cm	
Exposure evaluation		
Given $S=E*H=E*H=P/4\pi r^2$	Conclusion	Limit
Yield: $S1=(0.0381W)/(4*3.14*0.2*0.2)=0.0758W/m^2$	$S1=0.0758W/m^2$	10 W/m ²
Note: Asrequired in annex III table 2 of EC Council Recommendation.This proves that the unit complies with the EN62311 for RF exposure requirement.		

※※※※※END OF THE REPORT※※※※※