



Test Report No.: FS170110N015

# RF EXPOSURE REPORT

Applicant	Qibixx AG
Address	Ringstrasse 15A, 8600 Dubendorf, Switzerland.

Manufacturer or Supplier	GLOBALTRONIC - Electrónica e Telecomunicações, SA.
Address	Raso de Paredes - 3750-909 Águeda PORTUGAL
Product	Wireless module
Brand Name	N/A
Model	QINO
Additional Model & Model Difference	N/A
Date of tests	Jan. 22, 2017 ~ Feb. 07, 2017

☒ **FCC Part 2 (Section 2.1091)**☒ **KDB 447498 D01**☒ **IEEE C95.1****CONCLUSION: The submitted sample was found to COMPLY with the test requirement**Tested by Breeze Jiang  
Project Engineer / EMC DepartmentApproved by Chris Chen  
Manager / EMC Department

Date: Mar. 21, 2017

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Bureau Veritas Shenzhen Co., Ltd.  
Dongguan BranchNo. 34, Chenwulu Section, Guantai Rd., Houjie  
Town, Dongguan City,  
Guangdong 523942, ChinaTel: +86 769 8593 5656  
Fax: +86 769 8593 1080  
Email: [customerservice.dg@cn.bureauveritas.com](mailto:customerservice.dg@cn.bureauveritas.com)



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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FS170110N015	Original release	Mar. 21, 2017

**Bureau Veritas Shenzhen Co., Ltd.**  
**Dongguan Branch**

No. 34, Chenwulu Section, Guantai Rd., Houjie  
Town, Dongguan City,  
Guangdong 523942, China

Tel: +86 769 8593 5656  
Fax: +86 769 8593 1080  
Email: [customerservice.dg@cn.bureauveritas.com](mailto:customerservice.dg@cn.bureauveritas.com)



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## 1. CERTIFICATION

<b>FCC ID:</b>	2ALAR-QINO
<b>PRODUCT:</b>	Wireless module
<b>BRAND NAME:</b>	N/A
<b>MODEL NO.:</b>	QINO
<b>ADDITIONAL NO.:</b>	N/A
<b>TEST SAMPLE:</b>	Engineering Sample
<b>APPLICANT:</b>	Qibixx SA
<b>STANDARDS:</b>	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1



## 2. RF EXPOSURE LIMIT

### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm <sup>2</sup> )	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

## 3. MPE CALCULATION FORMULA

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$R$  = distance between observation point and center of the radiator in cm

## 4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.



## 5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Peak Gain (dBi)	Total Gain (dBi)	Antenna Type
Chain 0	2	5.01	Integral PCB Antenna
Chain 1	2		Integral PCB Antenna

Note: Total Gain=4.32+10log(N=2)=2+(3.01)=5.01dBi

## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
2412-2462	15	+2	13	17

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
802.11b	2412	16.36
802.11g	2412	16.60
802.11n20	2412	16.50

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
2412-2462	17	2	20	0.0316	1.0

--- END ---