



Test Report

Report No.: RKEYS250922345

Date: Sep. 22, 2025

Page 1 of 6

RF EXPOSURE EVALUATION REPORT

for

Product: Edge data acquisition gateway

Model: DAG-WB-T-LV-3.3, DAG-WB-232-HV-5, DAG-WB-T-LV-3.3-S, DAG-WB-232-HV-5-S, DAG-B-01, EDGE100

FCC ID: 2BRWLZH-000001

Report No.: RKEYS250922345

Issued for

Shanxi Zhonghe Technology Co., Ltd.

Room 1502, Building A1, No. 176, Biyuan Second Road, Xi'an City, China

Issued by

Guangdong KEYS Testing Technology Co., Ltd.

Building 1, No.18, Shihuan Road, Dongcheng Subdistrict, Dongguan, Guangdong, China

Guangdong KEYS Testing Technology Co., Ltd.

Address: Building 1, No.18, Shihuan Road, Dongcheng Subdistrict, Dongguan, Guangdong, China
Tel: +86-0769-89798319 <http://www.keys-lab.com> E-mail: info@keys-lab.com

This report is only responsible for the test results of the samples submitted for inspection, and is not responsible for the source of the samples submitted for inspection.
This report shall not be altered, increased or deleted. Without written approval of KEYS, this test report shall not be copied except in full and published as advertisement.

CONTENTS

	PAGE
1. TEST CERTIFICATION	3
2. GENERAL INFORMATION	4
2.1. GENERAL DESCRIPTION OF E.U.T.	4
3. RF EXPOSURE EVALUATION	5
3.1. LIMITS	5
3.2. CALCULATION METHOD	5
3.3. TEST RESULT	5
3.4. CONCLUSION	6

1. TEST CERTIFICATION

Product: Edge data acquisition gateway

Trade mark: /

FCC ID: 2BRWLZH-000001

Main Model: DAG-WB-T-LV-3.3

Model List(s): DAG-WB-232-HV-5,DAG-WB-T-LV-3.3-S,DAG-WB-232-HV-5-S,DAG-B-01,EDGE100

Applicant : Shanxi Zhonghe Technology Co., Ltd.

Address: Room 1502,Building A1,No. 176, Biyuan Second Road, Xi'an City, China

Manufacturer: Shanxi Zhonghe Technology Co., Ltd.

Address: Room 1502,Building A1,No. 176, Biyuan Second Road, Xi'an City, China

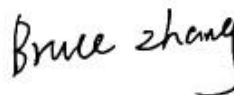
Applicable Standards: CFR 47, FCC Part 2.1091

The above equipment has been tested by Guangdong KEYS Testing Technology Co., Ltd. and found compliance with the requirements in the technical standards mentioned above. The test results presented in this report only relate to the product/system tested. The other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.



Prepared by:

Evan Fang/ Engineer



Approved by:

Bruce Zhang / Manager

2. GENERAL INFORMATION

2.1. General Description of E.U.T.

Product Name	:	Edge data acquisition gateway
Main Model	:	DAG-WB-T-LV-3.3
Specification	:	2.4G WIFI,Bluetooth
Mode	:	802.11b/g/n20,BLE
Operating frequency	:	2412-24622MHz for 802.11b/g/n20; 2402-2480MHz for BLE
Number of Channel	:	11 Channels for 802.11b/g/n20 40 Channels for BLE
Antenna installation	:	External antenna (declared by manufacturer)
Antenna Gain	:	4.96dBi
Type of Modulation	:	DSSS for 802.11b; OFDM for 802.11g/n; GFSK for BLE

Note: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

3. RF EXPOSURE EVALUATION

3.1. Limits

According to ANSI/IEEE C95.1-1992, the criteria listed in Table as below shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in 1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

3.2. Calculation method

The following formula was used to calculate the Power Density:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S: Power density(W/m²)

P: power input to antenna (Watt)

G: is the antenna gain relative to an isotropic antenna;

R: is the distance from observation point to the antenna

Note:

1) P (Watts)=(10 ^ (dBm /10))/1000

2) G (Antenna gain in numeric) = 10^ (Antenna gain in dBi /10)

3) π=3.142

3.3. Test Result

Test mode	Maximum Conducted Output Power(dBm)	Tune-up Power(dBm)
b mode	17.89	17±1.5dBm
g mode	14.94	15±1.5dBm

n mode	13.49	14±1.5dBm
BLE	12.84	13±2dBm

The maximum power density at a distance of 0.2 m is shown as below:

Mode	Maximum Tune up Power (dBm)	Antenna Gain (dBi)	Antenna Gain (linear)	Maximum E.I.R.P. (mW)	Power density (mW/cm ²)	Power density Limit (mW/cm ²)	Result
2.4G WIFI	18.5	4.96	3.13	0.0708	0.7306	1	PASS
BLE	15	4.96	3.13	0.0316	0.1971	1	PASS

Note: According to the EUT characteristic, WLAN 2.4GHz and Bluetooth cannot transmit simultaneously.

3.4. Conclusion

According to 47 CFR 2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.

**** End of Report ****