MPE REPORT

FCC ID: 2AWSB-MGENET

Date of issue: June 28, 2020

Report number:	MTi20051408-4E2
Sample description:	MG Flasher Enet Wifi
Model(s):	MG Flasher Enet Wifi
Applicant:	JR Auto Performance Inc.
Address:	1428 Speers Rd Unit#3 Oakville, Ontario L6L 5M1 Canada
Date of test:	June 10, 2020 to June 28, 2020

Shenzhen Microtest Co., Ltd.

http://www.mtitest.com

Tel:(86-755)88850135 Fax: (86-755) 88850136 Web: http://www.mtitest.com E-mail: mti@51mti.com
Address: No.102A & 302A, East Block, Hengfang Industrial Park, Xingye Road, Xixiang, Bao'an District, Shenzhen, Guangdong, China

TEST RESULT CERTIFICATION	
Applicant's name:	JR Auto Performance Inc.
Address:	1428 Speers Rd Unit#3 Oakville, Ontario L6L 5M1 Canada
Manufacture's name:	Autosvs Technology Co., Ltd.
Address:	Rm A 15/F Bldg A NO.1 World Plaza HongLi West Road LianHua Street FuTian District ShenZhen 518034 Guangdong China
Product name:	MG Flasher Enet Wifi
Trademark:	N/A
Model and/or type reference:	MG Flasher Enet Wifi
Serial model:	N/A
RF exposure procedures:	KDB 447498 D01 v06

This device described above has been tested by Shenzhen Microtest Co., Ltd and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

Tested by: Danny Xu

Danny Xu June 28, 2020

Reviewed by: Leo Su

Leo Su June 28, 2020

Approved by: Tom Xue

Tom Xue June 28, 2020

RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

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 Exposure				
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
300-1,500			f/300	6
1,500-100,000			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
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

MPE Calculation Method

Friis transmission formula: $Pd= (Pout*G)\ (4*pi*R^2)$

Where

Pd= Power density in mW/cm2

Pout=output power to antenna in mW

G= Numeric gain of the antenna relative to isotropic antenna

Pi=3.1415926

R= distance between observation point and center of the radiator in cm(20cm)

Pd the limit of MPE, 1mW/cm2. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

Measurement Result

WIFI:

Operation Frequency: WIFI 802.11b/g/n HT20: 2412-2462MHz,

802.11n HT40: 2422-2452MHz,

Power density limited: 1mW/ cm^2

Antenna Type: Internal Antenna;
WIFI antenna gain: 1dBi

R=20cm

mW=10^(dBm/10)

antenna gain Numeric=10^(dBi/10)= 10^(1/10)=1.26

Channel Freq. (MHz)	modulation	conducted power	Tune-up power	Max		Antenna	Evaluation result at 20cm	Power density Limits
		(dBm)	(dBm)	tune-up power		Gain	Power density(mW/cm2)	(mW/cm2)
				(dBm)	(mW)	Numeric		
		Ant A	Ant A	Ant A	Ant A	Ant A	Ant A	
2412	802.11b	13.81	14±1	15	31.622777	1.26	0.00629	1
2437		14.38	14±1	15	31.622777	1.26	0.00629	1
2462		14.22	14±1	15	31.622777	1.26	0.00629	1
2412	802.11g	11.55	11±1	12	15.848932	1.26	0.00315	1
2437		12.45	11±1	12	15.848932	1.26	0.00315	1
2462		12.18	11±1	12	15.848932	1.26	0.00315	1
2412	802.11n H20	11.54	11±1	12	15.848932	1.26	0.00315	1
2437		12.35	11±1	12	15.848932	1.26	0.00315	1
2462		12.1	11±1	12	15.848932	1.26	0.00315	1
2422	802.11n H40	11.66	11±1	12	15.848932	1.26	0.00315	1
2437		11.81	11±1	12	15.848932	1.26	0.00315	1
2452		11.85	11±1	12	15.848932	1.26	0.00315	1

Conclusion:

For the max result: 0.00629≤ 1.0 for 1g SAR, No SAR is required.

----END OF REPORT----