



## RF Exposure Evaluation Report

**Report Reference No.**..... : **MTEB24050313-H**

**FCC ID**..... : **2ALZG-324**

Compiled by  
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Date of issue..... : **May.30,2024**

**Representative Laboratory Name.** : **Shenzhen Most Technology Service Co., Ltd.**

Address..... : No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park,  
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**Applicant's name**..... : **Qingdao Magene Intelligence Technology Co., Ltd.**

Address..... : No.126 Shuyu Road,Chengyang District, Qingdao,Shandong,  
 China.

**Test specification/ Standard**..... : **47 CFR Part 1.1307**

**47 CFR Part 2.1093**

TRF Originator..... : Shenzhen Most Technology Service Co., Ltd.

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**Test item description**..... : Spider Power Meter

Trade Mark..... : Magene

Manufacturer..... : Qingdao Magene Intelligence Technology Co., Ltd.

Model/Type reference..... : P0121302A

Listed Models ..... : N/A

Modulation Type..... : GFSK

Operation Frequency..... : GFSK: From 2402 - 2480MHz

Rating..... : DC 3.7V (by Battery)

DC 5V (by USB Port)

Hardware version..... : 1.0

Software version ..... : 1.0

Result..... : **PASS**

## TEST REPORT

Equipment under Test : Spider Power Meter

Model /Type : P0121302A

Listed Models : N/A

Remark : N/A

Applicant : Qingdao Magene Intelligence Technology Co., Ltd.

Address : No.126 Shuyu Road,Chengyang District, Qingdao,Shandong,  
China.

Manufacturer : Qingdao Magene Intelligence Technology Co., Ltd.

Address : No.126 Shuyu Road,Chengyang District, Qingdao,Shandong,  
China.

<b>Test Result:</b>	<b>PASS</b>
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The test report merely corresponds to the test sample.  
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

## 1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2024.05.30	Initial Issue	Alisa Luo

## **2. SAR Evaluation**

### **2.1 RF Exposure Compliance Requirement**

#### **2.1.1 Standard Requirement**

According to KDB447498D01 General RF Exposure Guidance v06

##### 4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

#### **2.1.2 Limits**

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq$  50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

$f(\text{GHz})$  is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

. The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq$  50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $<$  5 mm, a distance of 5 mm is applied to determine SAR test exclusion

2.1.3 EUT RF Exposure

BLE

Antenna Gain: -0.081dBi

GFSK				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	1.454	1.454 ± 1	2.454	1.76
Middle(2440MHz)	1.002	1.002 ± 1	2.002	1.59
Highest(2480MHz)	1.513	1.513 ± 1	2.513	1.78

Worst case: GFSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold	SAR Test Exclusion
		(dBm)	(mW)			
Highest (2480MHz)	1.531	2.513	1.78	0.558	3.0	Yes

Note: 1) Refer to report **MTEB24050313-R1** for EUT test Max Conducted average Output Power value.

ANT+  
 Antenna Gain: -0.081dBi

GFSK				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
CH1(2457MHz)	-0.201	-0.201 ± 1	0.799	1.20

Worst case: GFSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold	SAR Test Exclusion
		(dBm)	(mW)			
Highest (2457MHz)	-0.201	0.799	1.20	0.376	3.0	Yes

Note: 1) Refer to report **MTEB24050313-R2** for EUT test Max Conducted average Output Power value.

.....**THE END OF REPORT**.....