



# RF EXPOSURE Test Report

**Report No.:** MTi201218030-01E2

**Date of issue:** Mar. 04, 2021

**Applicant:** GuangDong Bekey technology.,  
Ltd.

**Product name:** Smart Grip Wireless Charging  
Car Mount

**Model(s):** 15425, FEN-1006A, BEY-1008A,  
W6, MB-WCS05

**FCC ID:** 2AVCH-15425

Shenzhen Microtest Co., Ltd.

<http://www.mtitest.com>



## Instructions

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3. This report is invalid without the seal and signature of the laboratory;
4. This report is invalid if transferred, altered or tampered with in any form without authorization;
5. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.



**TEST RESULT CERTIFICATION**

|                           |  |
|---------------------------|--|
| Applicant's name.....:    | GuangDong Bekey technology., Ltd.  |
| Address.....:             | R building, Dong Yuan reservoir region immigrationbase, Butterfly Lodge Ind District, DongYuan, HeYuan city, GuangDong province, China |
| Manufacturer's Name ..... | GuangDong Bekey technology., Ltd.  |
| Address.....:             | R building, Dong Yuan reservoir region immigrationbase, Butterfly Lodge Ind District, DongYuan, HeYuan city, GuangDong province, China |

**Product description**

|                      |  |
|----------------------|--|
| Product name .....   | Smart Grip Wireless Charging Car Mount               |
| Trademark .....      | Naztech, FENERGY, BEKEY, SooPii, mbeat               |
| Model Name .....     | 15425  |
| Serial Model .....   | FEN-1006A, BEY-1008A, W6, MB-WCS05                   |
| Standards.....:      | FCC CFR 47 PART 1 , 1.1310                           |
| Test procedure.....: | KDB 680106 D01 RF Exposure Wireless Charging App v03 |

**Date of Test**

|  |                               |
|--|-------------------------------|
| Date (s) of performance of tests ..... | Dec. 24, 2020 ~ Feb. 04, 2021 |
| Test Result.....:                      | Pass                          |

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.

**Testing Engineer** :

*Danny Xu*

(Danny Xu)

**Technical Manager** :

*Leo Su*

(Leo Su)

**Authorized Signatory** :

*Tom Xue*

(Tom Xue)



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## 1 General Information

### 1.1 Description of EUT

|                            |   |
|----------------------------|---|
| Product name:              | Smart Grip Wireless Charging Car Mount  |
| Brand name:                | Naztech, FENERGY, BEKEY, SooPii, mbeat  |
| Model name:                | 15425   |
| Series model:              | FEN-1006A, BEY-1008A, W6, MB-WCS05  |
| Deference in serial model: | All the models are of the same circuit and RF module, except the model No. and trademark. |
| Operation frequency:       | 115–205 kHz   |
| Operational mode:          | Wireless charging   |
| Modulation type:           | ASK   |
| Antenna type:              | Coil Antenna  |
| Power source:              | DC 9V from car charger DC 12V   |
| Car charger information:   | Input: DC 12V-24V<br>Fast Charge Output: 5V/3A, 9V/2A, 12V/2A<br>USB Output: 5V/2.4A      |

### 1.2 Ancillary equipment list

| Equipment | Model | S/N | Manufacturer |
|-----------|-------|-----|--------------|
| Load      | /     | /   | /            |

### 1.3 Measurement uncertainty

Measurement Uncertainty for a Level of Confidence of 95 %,  $U=2xUc(y)$

|                                 |           |
|---------------------------------|-----------|
| Radiated emission(150kHz~30MHz) | ± 2.5 dB  |
| Radiated emission(30MHz~1GHz)   | ± 4.2 dB  |
| Radiated emission (above 1GHz)  | ± 4.3 dB  |
| Temperature                     | ±1 degree |
| Humidity                        | ± 5 %     |



## 2 Testing site

|                       |   |
|-----------------------|---|
| Test Site             | Shenzhen Microtest Co., Ltd   |
| Test Site Location    | 101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao' an District, Shenzhen, Guangdong, China. |
| FCC Registration No.: | 448573  |

Address: 101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao' an District, Shenzhen, Guangdong, China.



### 3 List of test equipment

| Equipment No. | Equipment Name                               | Manufacturer                     | Model    | Serial No. | Calibration date | Due date   |
|---------------|--|----------------------------------|----------|------------|------------------|------------|
| MTI-E115      | Electric and Magnetic Field Probe - Analyzer | Narda Safety Test Solutions GmbH | EHP-200A | /          | 2020/11/12       | 2021/11/11 |



## 4 Test Results

### 4.4 Maximum permissible exposure

#### 4.4.1 Limit

| Frequency range(MHz)   | Electric field strength(V/m) | Magnetic field strength(A/m) | Power density(mW/cm <sup>2</sup> ) | 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 <sup>2</sup>                | 6                       |
| 30-300   | 61.4                         | 0.163                        | 1.0 6                              | 6                       |
| 300-1500   |                              |                              | f/300                              | 6                       |
| 1500-100000  |                              |                              | 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 <sup>2</sup>                | 30                      |
| 30-300   | 27.5                         | 0.073                        | 0.2                                | 30                      |
| 300-1500   |                              |                              | f/1500                             | 30                      |
| 1500-100000  |                              |                              | 1                                  | 30                      |
| f = frequency in MHz * = Plane-wave equivalent power density |                              |                              |                                    |                         |

#### 4.4.2 Test Procedures

E and H-field measurements should be made with the center of the probe at a distance of 15 cm surrounding the device and 20 cm above the top surface of the primary/client pair.

These measurements should be repeated for three different client battery levels, 1%, 50%, and 99%.

Record the test results.

KDB 680106 D01 RF Exposure Wireless Charging App v03:

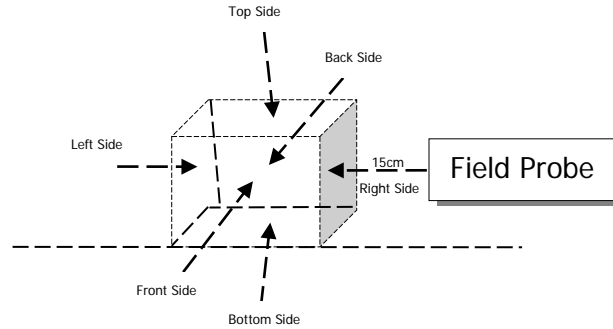
- (1) Power transfer frequency is less than 1MHz.
- (2) Output power from each primary coil is less than or equal to 15 watts.
- (3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.
- (4) Client device is placed directly in contact with the transmitter.
- (5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
- (6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.





Note: The device is in compliance with KDB 680106 D01 RF Exposure Wireless Charging App v03 6 conditions.

### 4.4.3 Test Setup



### 4.4.4 Test Result

| Maximum permissible Exposure |            |                   |                |              |
|------------------------------|------------|-------------------|----------------|--------------|
| Battery levels               | Test sides | Test distance(cm) | E – field(V/m) | H–field(A/m) |
| <1%                          | Top        | 20                | 0.42           | 0.0115       |
| <1%                          | Bottom     | 15                | 0.40           | 0.0113       |
| <1%                          | Left       | 15                | 0.42           | 0.0112       |
| <1%                          | Right      | 15                | 0.42           | 0.0108       |
| <1%                          | Front      | 15                | 0.41           | 0.0105       |
| <1%                          | Back       | 15                | 0.41           | 0.0112       |
| Limit                        |            |                   | 614            | 1.63         |
| Margin Limit (%)             |            |                   | 0.069%         | 7.12%        |



| Maximum permissible Exposure |            |                   |                |              |
|------------------------------|------------|-------------------|----------------|--------------|
| Battery levels               | Test sides | Test distance(cm) | E – field(V/m) | H–field(A/m) |
| <50%                         | Top        | 20                | 0.41           | 0.0119       |
| <50%                         | Bottom     | 15                | 0.40           | 0.0115       |
| <50%                         | Left       | 15                | 0.41           | 0.0113       |
| <50%                         | Right      | 15                | 0.42           | 0.0108       |
| <50%                         | Front      | 15                | 0.41           | 0.0110       |
| <50%                         | Back       | 15                | 0.42           | 0.0111       |
| Limit                        |            |                   | 614            | 1.63         |
| Margin Limit (%)             |            |                   | 0.069%         | 7.30%        |

| Maximum permissible Exposure |            |                   |                |              |
|------------------------------|------------|-------------------|----------------|--------------|
| Battery levels               | Test sides | Test distance(cm) | E – field(V/m) | H–field(A/m) |
| <99%                         | Top        | 20                | 0.43           | 0.0120       |
| <99%                         | Bottom     | 15                | 0.41           | 0.0109       |
| <99%                         | Left       | 15                | 0.40           | 0.0107       |
| <99%                         | Right      | 15                | 0.41           | 0.0105       |
| <99%                         | Front      | 15                | 0.41           | 0.0111       |
| <99%                         | Back       | 15                | 0.41           | 0.0106       |
| Limit                        |            |                   | 614            | 1.63         |
| Margin Limit (%)             |            |                   | 0.070%         | 7.36%        |



**4.4.5 MPE Setup photo**



**----END OF REPORT----**