

# RF Exposure Evaluation Report

**Product** : Dynamic ECG recorder  
**Trade mark** : N/A  
**Model/Type reference** : ER1  
**Serial Number** : N/A  
**Report Number** : EED32M00166302  
**FCC ID** : 2AD XK-3613  
**Date of Issue** : Aug. 05, 2020  
**Test Standards** : 47 CFR Part 1.1307  
47 CFR Part 2.1093  
KDB447498D01 General RF  
Exposure Guidance v06  
**Test result** : PASS

Prepared for:

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Prepared by:

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Aug. 05, 2020



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## 2 Version

| Version No. | Date          | Description |
|-------------|---------------|-------------|
| 00          | Aug. 05, 2020 | Original    |
|             |               |             |
|             |               |             |

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## 4 General Information

### 4.1 Client Information

|                          |                                                                                           |
|--------------------------|-------------------------------------------------------------------------------------------|
| Applicant:               | Shenzhen Viatom Technology Co., Ltd.                                                      |
| Address of Applicant:    | 4E, 3#, Tingwei Industrial Park, Honglang North 2nd Road, Baoan District, Shenzhen, China |
| Manufacturer:            | Shenzhen Viatom Technology Co., Ltd.                                                      |
| Address of Manufacturer: | 4E, 3#, Tingwei Industrial Park, Honglang North 2nd Road, Baoan District, Shenzhen, China |
| Factory:                 | Shenzhen Viatom Technology Co., Ltd.                                                      |
| Address of Factory:      | 4E, 3#, Tingwei Industrial Park, Honglang North 2nd Road, Baoan District, Shenzhen, China |

### 4.2 General Description of EUT

|                                  |                                        |
|----------------------------------|----------------------------------------|
| Product Name:                    | Dynamic ECG recorder                   |
| Model No.(EUT):                  | ER1                                    |
| Trade Mark:                      | N/A                                    |
| EUT Supports Radios application: | 4.0 BT Single mode, 2402MHz to 2480MHz |

### 4.3 Product Specification subjective to this standard

|                                                                             |                                                                                          |
|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Frequency Range:                                                            | 2402MHz~2480MHz                                                                          |
| Modulation Type:                                                            | GFSK                                                                                     |
| Test Power Grade:                                                           | Default                                                                                  |
| Test Software of EUT:                                                       | NrF                                                                                      |
| Antenna Type:                                                               | Chip Antenna                                                                             |
| Antenna Gain:                                                               | 0 dBi                                                                                    |
| Power Supply:                                                               | DC 5V                                                                                    |
| Max Conducted Peak Output Power:                                            | -8.422dBm<br>The Max Conducted Peak Output Power data refer to the report EED32M00166301 |
| Sample Received Date:                                                       | Jun. 10, 2020                                                                            |
| Sample tested Date:                                                         | Jun. 10, 2020 to Jul. 30, 2020                                                           |
| The tested sample(s) and the sample information are provided by the client. |                                                                                          |

#### **4.4 Test Location**

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

#### **4.5 Deviation from Standards**

None.

#### **4.6 Abnormalities from Standard Conditions**

None.

#### **4.7 Other Information Requested by the Customer**

None.

## 5 SAR Evaluation

### 5.1 RF Exposure Compliance Requirement

#### 5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06  
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.

#### 5.1.2 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:

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

$f(\text{GHz})$  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

### 5.1.3 EUT RF Exposure

The tune-up power is -9.0 dBm +/- 1dB, therefore the highest tune-up power is

-8.00 dBm (0.16 mW) @ 2480 MHz

When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

So,

$$(0.16\text{mW} / 5\text{mm}) * (2.480\text{GHz}^{0.5}) = 0.1$$

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] = 0.1 < 3.0$$

Therefore, standalone SAR measurements are not required for both head and body

## PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32M00166301 for EUT external and internal photos.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

\*\*\* End of Report \*\*\*