



Test report

Number T251-0193/23

Project file: C20230303

Date: 2023-09-06

Pages: 5

Product: Smart Watch

Type reference: ECG200

Ratings: 3,8 V_{DC} (Battery powered)
Protection class: III

Trademark: TeltoHeart

Applicant: UAB TELTONIKA TELEMEDIC
Naugarduko st. 102, LT-03160 Vilnius, Lithuania

Manufacturer: TELTONIKA EMS, UAB
Ditvos g. 6, LT-02121 Vilnius, Lithuania

Place of manufacture: TELTONIKA EMS, UAB
Ditvos g. 6, LT-02121 Vilnius, Lithuania

Summary of testing

Testing method: 47 CFR FCC Part 2.1091(b) in conjunction with Part 1.1310(e)(1) and KDB 447498 D01 General RF Exposure Guidance v06

Testing location: SIQ Ljubljana
Mašera-Spasičeva ulica 10, SI-1000 Ljubljana, Slovenia

Remarks: Date of receipt of test items: 2023-02-07
Number of items tested: 1
Date of performance of tests: 2023-03-08
The test results presented in this report relate only to the items tested.
The test items were tested in the condition as received.
The product complies with the requirements of the testing methods.

Tested by: Nik Vončina

Approved by: Luka Tosetto

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1 GENERAL

History sheet			
Date	Report No.	Change	Revision
2023-04-05	T251-0193/23	Initial Test Report issued.	--
2023-09-06	T251-0193/23 A1	This test report substitutes previously issued test report T251-0193/23, dated 2023-04-05, due to of the test report. Calculation results were corrected due to typing error.	1.0

1.1 Equipment under test

Smart Watch
Type: ECG200

Environment: Uncontrolled / General Public
Assessment distance: 5 mm

FCC ID: 2BAIF-ECG200
Antenna type: Integral antenna
Antenna gain: 1.1 dBi



2 ASSESSMENT PROCEDURE

According to 2.1091(b):

Determine that they qualify for the exemption with the exposure limits in 1.1310(e)(1) of this chapter:

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(ii) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/ <u>f</u>	2.19/ <u>f</u>	*(180/ <u>f</u> ²)	<30
30-300	27.5	0.073	0.2	<30
300-1,500			<u>f</u> /1500	<30
1,500-100,000			1.0	<30

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

Calculation:

$$P_d = \frac{P_t}{4 * \pi * R^2}$$

Where:

P_d = Power density in mW/cm²

P_t = EIRP in mW

π = 3.14

R = Evaluation distance

KDB 447498 D01 General RF Exposure Guidance v06 Clause 4.3.1. Standalone SAR test exclusion considerations

SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition(s), listed below, is (are) satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.

For frequencies below 100 MHz, the following may be considered for SAR test exclusion:

- For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

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



3 MEASUREMENTS / CALCULATIONS

According to 2.1093(b):

Frequency (MHz)	Maximum* Power with antenna gain and tune-up (dBm)	Maximum* Power with antenna gain and tune-up (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2402	-0.6	0.87096	0.0000007703	1.0
2440	0	1.00000	0.0000008844	1.0
2480	-0.6	0.87096	0.0000007703	1.0

KDB 447498 D01 General RF Exposure Guidance v06 Clause 4.3.1:

Frequency (MHz)	Maximum* power with tune-up (dBm)	Maximum* power with tune-up (mW)	SAR Test Exclusion Threshold (mW)
2402-2480	0	1.00000	9.525

Conclusion: PASS

There is no simultaneous transmission between any other transmitter.