

RF EXPOSURE REPORT



FCC Applicant: DÜRR DENTAL SE
Höpfigheimer Str. 17, 74321 Bietigheim-Bissingen, Germany

Product Name: RFID Modul 2144100082

Brand Name: DÜRR DENTAL SE

Model No.: RFID Modul 2144100082

Model Difference: N/A

Report Number: TESA2207000238ES

FCC ID 2ATTE-2144100082

Host Information: refer to section 1.2

Issue Date: Jun. 08, 2023

Approved By _____

John Yeh

We hereby certify that:

The above equipment was evaluated by SGS Taiwan Ltd. The evaluation in this report is in compliance with FCC KDB 447498 D01v06.

The results of this report relate only to the sample identified in this report.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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Revision History

Report Number	Revision	Description	Issue Date	Revised By	Remark
TESA2207000238ES	00	Original	Feb. 02, 2023	Cindy Chou	*
TESA2207000238ES	01	Modify the use distance	Mar. 16, 2023	Cindy Chou	*
TESA2207000238ES	02	Modify the use distance	Mar. 23, 2023	Cindy Chou	*
TESA2207000238ES	03	Modify comment	Apr. 28, 2023	Cindy Chou	*
TESA2207000238ES	04	Modify comment	Jun. 08, 2023	Cindy Chou	

Note:

- The remark "*" indicates modification of the report upon requests from certification body.

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Table of Contents

1	DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)	4
1.1	Product Description	4
1.2	Host Information	4
2	rf EXPOSURE EVALUATION FOR MOBILE CONDITIONS	5
2.1	FCC Standard Applicable	5
2.2	Power Density Calculation	6

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1 DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)

1.1 Product Description

Product Name:	RFID Modul 2144100082
Brand Name:	DÜRR DENTAL SE
Model No.:	RFID Modul 2144100082
Model Difference:	N/A

1.2 Host Information

Host Product Name:	ScanX Swift 2.0
Host Brand Name:	Air Techniques
Host Model No.:	XPS07.1A1

Host Product Name:	ScanX Swift View 2.0
Host Brand Name:	Air Techniques
Host Model No.:	XPS07.2A1

Host Model No.:	XPS07.xyz
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x - numeric 1-2, indicates type and size of display and housing shape
 1: 2.4" display portrait mode without touch, no ambient illumination board.
 2: 5" display landscape mode with touch. Ambient illumination board
 Shape of housing parts and type of display control board depends on size of display.
 There are no other differences in electronics, laser, motors, wiring and FW other as indicated.

y - alphanumeric A...Z, indicate customer specific variation
 Colours of housing parts, product name, GUI schemata, Logos, minor FW features
 No other differences on external or internal components

z - numeric 0...9, indicates county specific version
 county specific languages for GUI, FW settings and national amendment for label
 No other differences on external or internal components

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2 RF EXPOSURE EVALUATION FOR MOBILE CONDITIONS

2.1 FCC Standard Applicable

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

This is a Mobile device, the MPE is required.

According to §1.1310 and §2.1091 RF exposure is calculated.

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 (minute)
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
300-1500	/	/	f/1500	30
1500-100000	/	/	1.0	30

f = frequency in MHz

* = Plane-wave equipment power density

Prediction of MPE limit at a given distance

$$S = PG / 4\pi R^2$$

Where: S = Power density

P = Power input to antenna

G = Power gain of the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation of the antenna

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2.2 Power Density Calculation

Host:XPS07.2A1

Operation Mode	Evaluation Frequency (MHz)	Operation Distance (cm)	Max. Output Power Include Tolerance (dBm)	Max. EIRP (mW)	Power Density (PD) (mW/cm ²)	Limit (mW/cm ²)	Pass / Fail	Power Density / Limit
NFC	13.56	20	-62.43757	0.00	0.0000	0.979	Pass	0.000

Host:XPS07.1A1

Operation Mode	Evaluation Frequency (MHz)	Operation Distance (cm)	Max. Output Power Include Tolerance (dBm)	Max. EIRP (mW)	Power Density (PD) (W/m ²)	Limit (W/m ²)	Pass / Fail	Power Density / Limit
NFC	13.56	20	-75.38757	0.00	0.000	0.979	Pass	0.000

~ End of Report ~

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