

RF EXPOSURE REPORT



Applicant: GIGA-TMS INC.
9F-2, No.31, Lane 169, Kang-Ning St., Hsi-Chih, New Taipei
City 22180, Taiwan

Product Name: Time Recorder

Brand Name: PROMAG, GIGATEK, ProxData

Model No.: TR515A

Model Difference: N/A

Report Number: E2/2021/90013

FCC ID: WXATR515AR

Issue Date: October 15, 2021

Date of EUT Received: August 17, 2021

Approved By

John Yeh

We hereby certify that:

The above equipment was evaluate by SGS Taiwan Ltd. The evaluation in this report is in compliance with FCC Rule Part §2.1091 and RSS-102.

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
E2/2021/90013	00	Original	October 15, 2021	Ariel Chang

Note:

1、Disclaimer

Antenna information provided by the applicant, the test results of this report are applicable to the sample EUT received.

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1 DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)

1.1 Product Description

Product Name	Time Recorder
Brand Name	PROMAG,GIGATEK,ProxData
Model No.	TR515A
Model Difference	N/A
Power Supply	5Vdc to 12Vdc (Typical: 9Vdc)

1.2 Antenna Designation

Antenna Type	Supplier	Antenna Part No.	Freq. (MHz)
COIL Antenna	N/A	N/A	13.56

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2 MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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 Permissive 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

Operation mode	Frequency (MHz)	distance (cm)	EIRP (mW)	PD (mW/cm ²)	Limit (mW/cm ²)
NFC	13.56	20	0.009961	0.000001983	0.9789

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