



Ke Mei Ou Lab Corp.



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RF Exposure Evaluation Report

Under :
47 CFR Part 2.1091

Prepared For :
RISCO LTD.
Hachoma 14 ,75655 Rishon LeZion,Israel

FCC ID: JE4RK200DTG3US
EUT: IND. LUNAR DT AM G3, US
Model: RK200DTG3

November 16, 2020 Issue Date:
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 Review By: Apollo Liu / Manager

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Report Revision History

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KSZ2020090401J02	Rev.01	Initial issue of report	November 10, 2020
KSZ2020090401J02	Rev.02	Update clause 1.6 of report	November 16, 2020

1. General Information

1.1 Notes

The test results of this report relate exclusively to the test item specified in 1.5. The KMO Lab does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the KMO Lab.

1.2 Testing Laboratory

Test Firm Name:	Ke Mei Ou Lab Co., Ltd.
Test Firm Address:	2013-2016, 20th Floor, Business Center, Jiahui Xin Cheng, No 3027, Shen Nan Road, Fu Tian, Shen Zhen, Guang Dong, P. R. China
FCC Designation Number:	CN1532
Test Firm Registration Number:	344480
Internet:	www.kmolab.com
Email:	kmo@kmolab.com
ANSI-ASQ National Accreditation Board/ACLASS ISO/IEC 17025 Accredited Lab for telecommunication standards. The Registration Number is AT-1532. The testing quality system meets with ISO/IEC-17025 requirements, This approval results is accepted by MRA of ILAC.	

1.3 Details of Applicant

Name	RISCO LTD.
Address	Hachoma 14 ,75655 Rishon LeZion,Israel

1.4 Application Details

Date of Receipt of Application	: September 4, 2020
Date of Receipt of Test Item	: September 21, 2020
Date of Test	: October 9 ~ November 9, 2020

1.5 Details of Manufacturer

Name	RISCO LTD.
Address	Sderot Yahalom 6 Kiryat Gat, Israel

1.6 Test Item

EUT Feature				
EUT Description:	IND. LUNAR DT AM G3, US			
Brand Name:	RISCO			
Model Name:	RK200DTG3			
Equipment Class:	<input checked="" type="checkbox"/> FDS - Part 15 Field Disturbance Sensor			
HW Version:	A			
SW Version:	V28			
PCB P/N:	1PC200DTG300F			
EUT Stage:	<input type="checkbox"/> Identical Prototype <input checked="" type="checkbox"/> Production			
Note: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.				
Additional Information				
Standard Product Specification				
Tx/Rx Frequency Range	<input type="checkbox"/> 902-928 MHz, <input type="checkbox"/> 2435-2465 MHz, <input type="checkbox"/> 5785-5815 MHz,		<input checked="" type="checkbox"/> 10500-10550 MHz, and <input type="checkbox"/> 24075-24175 MHz	
Number of Channels	1			
Type of radio transmission:	Single Carrier			
Antenna Type / Gain	Chain Number	Antenna Gain	Internal	External
Antenna Type / Gain	1	0dBi	<input type="checkbox"/> Dielectric Chip <input type="checkbox"/> PIFA <input checked="" type="checkbox"/> PCB	<input type="checkbox"/> Dipole <input type="checkbox"/> Whip
Type of Modulation	<input type="checkbox"/> N0N <input checked="" type="checkbox"/> CW <input type="checkbox"/> AC			
EUT Operational Condition	<input checked="" type="checkbox"/> DC → 9~16Vdc <input type="checkbox"/> From Battery → <input type="checkbox"/> External AC adapter <input type="checkbox"/> POE <input type="checkbox"/> Li-ion battery			
Specification of Accessory				
<input type="checkbox"/> AC/DC Adapter #1 (Charger)	Brand Name	N/A	Model Name	N/A
	Power Rating	N/A		

1. 7 Applicable Standards

Applicable Standards	
According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards: 47 CFR Part 2.1091	
Note:	All test items were verified and recorded according to the standards and without any deviation during the test.

2. Technical Test

2. 1 Summary of Test Results

The EUT has been tested according to the following specifications:

FCC Rules	Test Type	Limit	Result	Notes
47 CFR Part 2.1091	Exposure Evaluation	< 1.0m W/cm ²	PASS	Complies.

3. EUT Modifications

No modification by test lab.

4. FCC Maximum Permissible Exposure (MPE)

4.1 Limit of MPE

(A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
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
1500-100,000	--	--	1.0	30

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

4.2 RF Exposure Requirements

RF Exposure Requirements	
The MPE was calculated to show compliance with the power density limit.	
<input type="checkbox"/> $S = \frac{P * G}{4 * \pi * r^2}$ <p>Where:</p> <ul style="list-style-type: none"> ➤ S=Power density ➤ P=Power input to antenna ➤ G=Power gain of the antenna relative to an isotropic radiator ➤ R=Distance to the center of radiation of the antenna 	<input checked="" type="checkbox"/> $E(V/m) = \frac{\sqrt{30 * P * G}}{r}; S(W/m^2) = \frac{E^2}{377} \text{ or } S = \frac{30 * P * G}{377 * r^2}$ <p>Where:</p> <ul style="list-style-type: none"> ➤ E=Electric field (V/m) ➤ P=Power output power (W) ➤ G=Power gain of the antenna relative to an isotropic radiator ➤ R= Distance to the center of radiation of the antenna

4.3 Conclusion

<input checked="" type="checkbox"/> Test Mode 1		Compliance with FCC Rules						
Frequency (MHz)	Prediction distance(cm)	G _{EUT} (dBi)	Max Emission (dBuV/m)	Tolerance (dB)	EIRP _{Max} (dBm)	EIRP _{Max} (mW)	Power Density (mW/m ²)	MPE Limit (mW/m ²)
10525.00	20.00	0.00	102.97	0.00	7.73	5.93	0.0012	1.00
Conclusion: EUT complies with the FCC requirement.								
Device Category:		<input type="checkbox"/> Portable (< 20 cm separation) <input type="checkbox"/> Mobile (> 20 cm separation) <input checked="" type="checkbox"/> Others						
Exposure Evaluation:		<input checked="" type="checkbox"/> MPE <input type="checkbox"/> SAR <input type="checkbox"/> N/A						

-----End of Report-----