中认信通
CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)

ACCREDITED
TESTING LABORATORY
CERTIFICATE # 6356.01

MAXIMUM PERMISSIBLE EXPOSURE EVALUATION REPORT

Applicant: **Autel Robotics Co., Ltd.**

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FCC ID: **2AGNTMDX600958A**

Product Name: **EVO Max**

Standard(s): **47 CFR §1.1310, 47 CFR §2.1091, 47 CFR §15.247(i),47 CFR §15.407(f) 47 CFR §15.225(g)**

The above device has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: **CR230955603-00A**

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Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol "▲". Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR230955603-00A	Original Report	2023/11/14

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

1.1.1 General:

EUT Name:	EVO Max
EUT Model:	MDX
Rated Input Voltage:	DC 14.88V from battery
EUT Received Date:	2023/9/22
EUT Received Status:	Good

2 RF EXPOSURE EVALUATION (MPE)

2.1 RF Exposure Evaluation

2.1.1 Applicable Standard

According to subpart 15.247(i)& 15.407(f)& 15.225(g)and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (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;

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

2.1.2 Calculation formula:

Prediction of power density at the distance of the applicable MPE limit
$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm^2);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

2.1.3 Calculated Data:

Operation Modes	Frequency (MHz)	Antenna Gain		Conducted output power including Tune-up Tolerance		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
SRD	904-926	0.3	1.07	29	794.33	20.00	0.169	0.6
	2403.5-2475.5	1.9	1.55	27	501.19	20.00	0.155	1.0
	5154-5246	0.7	1.17	20.5	112.20	20.00	0.026	1.0
	5728-5847	0.9	1.23	25	316.23	20.00	0.077	1.0
WiFi	2412-2462	2.2	1.66	27	501.19	20.00	0.166	1.0
	5150-5250	2.6	1.82	18	63.10	20.00	0.023	1.0
	5725-5850	3.7	2.34	16.5	44.67	20.00	0.021	1.0
Radar	60000-64000	7.2	5.25	11	12.59	20.00	0.013	1.0

Note:
The Maximum Conducted Power including Tune-up Tolerance was declared by manufacturer.

For Simultaneous transmission:

SRD/ Radar can`t transmit simultaneously with WiFi,
SRD and 4 Radars can transmit simultaneously:

$$\sum_i \frac{S_i}{S_{Limit,i}} \le 1$$

$= S_{SRD} / S_{limit\text{-}SRD} + S_{Radar} / S_{limit\text{-}Radar} * 4$

$=0.169/0.6+0.013/1 * 4$

$=0.33$

Result: Compliant. The device compliant Simultaneous transmission at 20cm distances.

===== END OF REPORT =====