



Test Report No.:
FCCSZ2024-0004-H

RF Test Report

FCC ID : 2BEA6IPCRK3588
EUT : IBOX3588
MODEL : VT-IPC-RK3588
BRAND NAME : N/A
APPLICANT : Vantron Technology, Inc.
Classification of Test : N/A

CVC Testing Technology (Shenzhen) Co., Ltd.



Client		Name: Vantron Technology, Inc. Address: 48434 Milmont Drive Fremont, CA 94538-7324, USA	
Manufacturer		Name: Vantron Technology, Inc. Address: 48434 Milmont Drive Fremont, CA 94538-7324, USA	
Equipment Under Test		Product Name: IBOX3588 Model/Type: VT-IPC-RK3588 Brand Name: N/A Serial NO.: N/A Sample NO.: 3-1	
Date of Receipt.	2024.01.18	Date of Testing	2024.01.18~2024.03.12
Test Specification		Test Result	
FCC Part 2 (Section 2.1091) KDB 447498 D04, IEEE C95.3		PASS	
Evaluation of Test Result	The equipment under test was found to comply with the requirements of the standards applied. Seal of CVC Issue Date: 2024.03.12		
Tested by: <i>Cai Jianyu</i> <u>Cai Jianyu</u> Name Signature	Reviewed by: <i>Mo Xianbiao</i> <u>Mo Xianbiao</u> Name Signature	Approved by: <i>Dong Sanbi</i> <u>Dong Sanbi</u> Name Signature	
Other Aspects: NONE.			
Abbreviations: OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			

This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FCCSZ2024-0004-H	Original release	2024.03.12



1. GENERAL PRODUCT INFORMATION

PRODUCT	IBOX3588
BRAND	N/A
MODEL	VT-IPC-RK3588
ADDITIONAL MODEL	N/A
POWER SUPPLY	DC 24V From Adapter
STANDARDS	FCC Part 2 (Section 2.1091) KDB 447498 D04, IEEE C95.3

Remark:

1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. EUT photo refer to the report (Report NO.: FCCSZ2024-0004-EUT).



2. RF EXPOSURE LIMIT

(Option C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda / 2 \pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda / 4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

RF SOURCE FREQUENCY (MHZ)	THRESHOLD ERP(W)
0.3 -1.34	$1,920 R^2$
1.34 - 30	$3,450 R^2 F^2$
30 -300	$3.83 R^2$
300-1500	$0.0128 R^2 F$
1500-100,000	$19.2R^2$



3. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

4. CALCULATION RESULT OF MAXIMUM CONDUCTED PK POWER

The measured conducted Peak Power

Mode	Antenna	Power (dBm)
BT-EDR	ANT1	6.62
BT-LE	ANT1	7.34
2.4G WIFI	ANT1	15.54
	ANT2	15.13
5.1G WIFI	ANT1	13.96
	ANT2	14.46
5.8G WIFI	ANT1	13.25
	ANT2	12.85

MAXIMUM PERMISSIBLE EXPOSURE (FCC)

Mode	Frequency (MHz)	Antenna	Max Power (dBm)	Antenna Gain (dBi)	R (cm)	EIRP (dBm)	ERP (dBm)	ERP (W)	Threshold ERP(W)	Ratio
BT-EDR	2402-2480	ANT1	6.62	2.75	20	9.37	7.22	0.005	0.77	0.007
BT-LE	2402-2480	ANT1	7.34	2.75	20	10.09	7.94	0.006	0.77	0.008
2.4G WIFI	2412-2472	ANT1	15.54	2.75	20	18.29	16.14	0.041	0.77	0.053
		ANT2	15.13	2.75	20	17.88	15.73	0.037	0.77	0.049
5.1G WIFI	5180-5240	ANT1	13.96	2.79	20	16.75	14.60	0.029	0.77	0.037
		ANT2	14.46	2.79	20	17.25	15.10	0.032	0.77	0.042
5.8G WIFI	5745-5825	ANT1	13.25	2.79	20	16.04	13.89	0.024	0.77	0.032
		ANT2	12.85	2.79	20	15.64	13.49	0.022	0.77	0.029
Sum of ratio = BT-LE + WIFI ANT1+ WIFI ANT2										0.110

Note1: This device can operate simultaneously in BT and WIFI.

Note2: ERP=EIRP-2.15dB

Conclusion:

Therefore, the worst-case situation is 0.110(Sum of Ratios), which is less than "1". This confirmed that the device compliance with FCC RF exposure requirements..

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



Important

- (1) The test report is invalid without the official stamp of CVC;
- (2) Any part photocopies of the test report are forbidden without the written permission from CVC;
- (3) The test report is invalid without the signatures of Approval and Reviewer;
- (4) The test report is invalid if altered;
- (5) Objections to the test report must be submitted to CVC within 15 days.
- (6) Generally, commission test is responsible for the tested samples only.
- (7) As for the test result “-” or “N” means “not applicable”, “/” means “not test”, “P” means “pass” and “F” means “fail”

The test data and test results given in this test report should only be used for purposes of scientific research, teaching and internal quality control when the CMA symbol is not presented.

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