HCT CO.,LTD.
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FCC MPE REPORT

FCC Certification

Applicant Name:
FRTEK CO., LTD.

Address:
11-25, Simin-daero 327beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea

Date of Issue:
March 20, 2019

Location of test lab:
HCT CO., LTD.,
74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA

Report No.: HCT-RF-1904-FC001

FCC ID:	**2AFEG-700-850-21**
APPLICANT:	**FRTEK CO., LTD.**

Model: ROTECH7085FRT

EUT Type: INOVA ERU

The measurements shown in this report were made in accordance with the procedures specified in §2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998,21 U.S. C.853(a)

Report prepared by : Kyung Soo Kang
Engineer of Telecommunication testing center

Approved by : Yong Hyun Lee
Manager of Telecommunication testing center

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-1904-FC001	March 20, 2019	- First Approval Report

RF Exposure Statement

1. LIMITS

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

(B) Limits for General Population/Uncontrolled Exposures

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

2. MAXIMUM PERMISSIBLE EXPOSURE Prediction

Prediction of MPE limit at a given distance

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

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

3. RESULTS

- Lower 700 MHz (MBS)

Max Peak output Power at antenna input terminal	22.00	dBm
Max Peak output Power at antenna input terminal	158.49	mW
Prediction distance	20.00	cm
Prediction frequency	730.50	MHz
Antenna Gain(typical)	3.000	dBi
Antenna Gain(numeric)	1.995	-
Power density at prediction frequency(S)	0.063	mW/cm2
MPE limit for uncontrolled exposure at prediction frequency	0.487	mW/cm2

- Upper 700 MHz (MBS)

Max Peak output Power at antenna input terminal	22.00	dBm
Max Peak output Power at antenna input terminal	158.49	mW
Prediction distance	20.00	cm
Prediction frequency	748.50	MHz
Antenna Gain(typical)	3.000	dBi
Antenna Gain(numeric)	1.995	-
Power density at prediction frequency(S)	0.063	mW/cm2
MPE limit for uncontrolled exposure at prediction frequency	0.499	mW/cm2

- Cellular

Max Peak output Power at antenna input terminal	22.00	dBm
Max Peak output Power at antenna input terminal	158.49	mW
Prediction distance	20.00	cm
Prediction frequency	870.25	MHz
Antenna Gain(typical)	3.000	dBi
Antenna Gain(numeric)	1.995	-
Power density at prediction frequency(S)	0.063	mW/cm2
MPE limit for uncontrolled exposure at prediction frequency	0.580	mW/cm2