

RF Exposure Report

Report No.: SA190225D05

FCC ID: P27RC8335PRO

Test Model: RC8335PRO

Received Date: Feb. 25, 2019

Test Date: Mar. 6 to 18, 2019

Issued Date: Mar. 22, 2019

Applicant: Sercomm Corp.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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**FCC Registration /
Designation Number:** 198487 / TW2021



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Release Control Record

Issue No.	Description	Date Issued
SA190225D05	Original release.	Mar. 22, 2019

1 Certificate of Conformity

Product: SmartThings Smart Camera, SmartThings Cam

Brand: SmartThings, Sercomm

Test Model: RC8335PRO

Sample Status: Engineering sample

Applicant: Sercomm Corp.

Test Date: Mar. 6 to 18, 2019

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

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Date: Mar. 22, 2019

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Approved by :

Rex Lai

Date: Mar. 22, 2019

Rex Lai / Associate Technical Manager

2 RF Exposure

2.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
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
1500-100,000	...	...	1.0	30

f = Frequency in MHz ; *Plane-wave equivalent power density

2.2 MPE Calculation Formula

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

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**.

2.4 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2412-2462	28.65	5.63	20	0.5330	1
5180-5240	21.13	5.82	20	0.0986	1
5745-5825	21.17	7.09	20	0.1333	1

NOTE:

2.4GHz: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 5.63\text{dBi}$

5.0GHz (5180-5240MHz): Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 5.82\text{dBi}$

5.0GHz (5745-5825MHz): Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 7.09\text{dBi}$

2.4GHz & 5GHz technologies cannot transmit at same time.

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