RF Exposure Report

Report No.: SA180131D11 R1

FCC ID: KA2CSH100A1

Test Model: DCS-H100

Received Date: Jan. 31, 2018

Test Date: Feb. 12 ~ Mar. 1, 2018

Issued Date: May 10, 2018

Applicant: D-Link Corporation

Address: 289 Xinhu 3rd RD Neihu district Taipei Taiwan

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

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Release Control Record

Issue No.	Description	Date Issued
SA180131D11	Original release.	Mar. 2, 2018
SA180131D11 R1	Modify Modulation Type from Z-Wave to FSK.	May 10, 2018

1 Certificate of Conformity

Product: Hub for Battery Cam

Brand: D-Link Corporation

Test Model: DCS-H100

Sample Status: Engineering sample

Applicant: D-Link Corporation

Test Date: Feb. 12 ~ Mar. 1, 2018

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.

Prepared by : Annie Chang , **Date:** May 10, 2018

Annie Chang / Senior Specialist

Approved by : Rex. Lai , **Date:** May 10, 2018

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

$Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm^2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 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	26.60	5.54	20	0.3256	1
922	-5.03	-	20	0.0001	0.61

NOTE: 1. Directional gain =2.53dBi + 10log(2) = 5.54dBi

2. Max Power (dBm): 90.17dBuV/m=-5.03dBm

Conclusion:

The formula of calculated the MPE is:

CPD1 / LPD1 + CPD2 / LPD2 + ……etc. < 1

CPD = Calculation power density

LPD = Limit of power density

WLAN + FSK =0.3256+0.0002=0.3258

Therefore the maximum calculations of above situations are less than the "1" limit.

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