

## Statement of compliance to Maximum Permissible Exposure (MPE) No. 160500840SHA-002

Applicant : Telehems Labs Corporation

45401 Research Ave, Suite 208, Fremont, CA 94539

Manufacturer : Ningbo Ruiming Electric Co., Ltd

18 Beihai Road 239 Long, Jiangbei, Ningbo, Zhejiang,

China

Product Name : Telehems Smart Switch

Type/Model: HEMS-F2-15US

According to §2.1091, §2.1093 and §1.1307(b), 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.

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Reviewed by:



FCC ID: 2AIKN-HEMSF215US

Power density (S) is calculated according to the formula:

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

Where  $S = power density in mW/cm^2$ 

P = transmit power in mW

G = numeric gain of transmit antenna (numeric gain=Log-1(dB antenna gain/10))

R = distance (cm)

The calculations in the table below use the highest gain of antenna for client EUT. These calculations represent worst case in terms of the exposure levels.

## For BT:

Frequency band	Power			Antenna Gain		R	S	Limits
(MHz)	dBuV/m	dBm	mW	dBi	(Numeric)	(cm)	(mW/cm2)	(mW/cm2)
2402 -2480	104.5	9.3	8.51	0	1	20	0.002	1

For WIFI (See FCC ID: AZY-HF-LPB100 Report)

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	Frequency band	Power		Antenna Gain		R	S	Limits	
	(MHz)	dBm	mW	dBi	(Numeric)	(cm)	(mW/cm2)	(mW/cm2)	
	2412 -2462	20.94	124.17	2	1.58	20	0.039	1	

Simultaneous transmission: Max.  $\Sigma S = 0.002 + 0.039 = 0.041 < 1.0$ .

Note: 1 mW/cm2 from 1.310 Table 1





## Appendix I

## **Definition below must be outlined in the User Manual:**

To satisfy FCC RF exposure requirements, a separation distance of  $20\,\mathrm{cm}$  or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended.