

## RF Exposure Report

**Report No.:** SA190212E02

**FCC ID:** 2ANPR-M-PWRSENS

**Test Model:** M-PWRSENS

**Received Date:** Feb. 12, 2019

**Test Date:** Feb. 22, 2019

**Issued Date:** Mar. 12, 2019

**Applicant:** SensThys, Inc.

**Address:** 21060 Homestead Rd. Suite 226 Cupertino, CA 95014

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

**Lab Address:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,  
Taiwan R.O.C.

**Test Location:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,  
Taiwan R.O.C.

**FCC Registration /  
Designation Number:** 723255 / TW2022

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### Release Control Record

Issue No.	Description	Date Issued
SA190212E02	Original release.	Mar. 12, 2019

## 1 Certificate of Conformity

**Product:** M-PWRSENS

**Brand:** SensThys, Inc.

**Test Model:** M-PWRSENS

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** SensThys, Inc.

**Test Date:** Feb. 22, 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 EMC characteristics under the conditions specified in this report.

**Prepared by :**



**Date:**

Mar. 12, 2019

Cindy Hsin / Specialist

**Approved by :**



**Date:**

Mar. 12, 2019

May Chen / 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 <sup>2</sup> )	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 <sup>2</sup> )*	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/cm<sup>2</sup>

$P_{out}$  = 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 22cm away from the body of the user.  
So, this device is classified as **Mobile Device**.

## 2.4 Antenna Gain

Ant. No.	Antenna Net Gain (dBi)	Frequency range (MHz to MHz)	Antenna Type	Connector Type	Cable Loss(dB)	Excluding cable loss Antenna Gain(dBic)
1	4.75	902~928	Patch	SMA Female	0.75	8.5
2	5.25	902~928	Patch	SMA Female	0.75	9

Note:

1. The EUT has four chain ports (chain 0 / chain 1 / chain 2 / chain 3 ) and can connect any one to function. When one chain port functions, another don't any function.
2. From the above conditions, the worst cases were found in **Chain 0**. Therefore only the test data of the mode was recorded in this report.

## 2.5 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
902.75 ~ 927.25	893.305	5.25	22	0.49198	0.60183

Note: Limit of Power Density=  $f/1500$

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