

# RF Exposure Evaluation

## FCC ID: 2AE8S-TSH01

### 1. Client Information

**Applicant** : TRASENSE INTERNATIONAL CORPORATION LIMITED  
**Address** : FLAT/RM B07 23/F HOVER INDUSTRIAL BUILDING NO.26-38  
 KWAI CHEONG ROAD HK  
**Manufacturer** : TRASENSE INTERNATIONAL CORPORATION LIMITED  
**Address** : FLAT/RM B07 23/F HOVER INDUSTRIAL BUILDING NO.26-38  
 KWAI CHEONG ROAD HK

### 2. General Description of EUT

<b>EUT Name</b>	:	Smart Watch	
<b>Models No.</b>	:	TS-H01, TS-H02, TS-H03, TS-H04, TS-H05, TS-H06, TS-H07, TS-H08, TS-H09, TS-H10	
<b>Model difference</b>	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is model name for commercial.	
<b>Product Description</b>	:	Operation Frequency: 2402~2480MHz	
	:	Number of Channel:	Bluetooth 4.0 (BLE): 40 channels
	:	Max Peak Output Power:	-1.17dBm Conducted Power
	:	Antenna Gain:	1 dBi Integral Antenna
	:	Modulation Type:	GFSK
<b>Power Supply</b>	:	DC power by Lithium Battery.	
<b>Power Rating</b>	:	DC 3.0V Lithium Battery.	
<b>Connecting I/O Port(S)</b>	:	Please refer to the User's Manual	

#### Note:

More test information about the EUT please refer the RF Test Report.

## SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v05r02.

(1) Clause 4.3: General SAR test reduction and exclusion guidance

Sub clause 4.31: Standalone SAR test exclusion considerations

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance  $\leq 5$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{\text{(GHz)}}}] \leq 3.0$  for 1-g SAR

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{\text{(GHz)}}}] \leq 7.5.0$  for 10-g SAR

2.

Calculation:

Test separation: 5mm					
BLE(GFSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-1.18	$\pm 0.5$	0.855	0.265	3.0
2.442	-1.17	$\pm 0.5$	0.857	0.268	3.0
2.480	-1.22	$\pm 0.5$	0.847	0.267	3.0

**So standalone SAR measurements are not required.**