

FCC SAR EXCLUSION STATEMENT

PER

447498 D01 GENERAL RF EXPOSURE GUIDANCE V06

Client: Smartcap Technologies
Address: 1/18 Finchley Street, Milton, QLD 4064, Australia
Report Number: 0613HYD_LifeBand_SARExempt(FCC)
File Number: HYD160527-B

Equipment Name: LifeBand
Equipment Model No: 820 00008
Equipment Description: LifeBand is a wearable EEG sensor for wellness applications with BLE radio communication

Result: **COMPLIES**
(General Public Exposure, Non-Aware User)

Assessed by: **Colin Gan**



Approved by: **Phillip Kane**



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Results appearing herein relate only to the sample(s) assessed through the submitted test report(s).
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EQUIPMENT DETAILS Note 1	
MANUFACTURER:	Smartcap Technologies
MODEL:	820 00008
OPERATING FREQUENCY:	BLE – 2402MHz to 2480MHz, 40 channels
TRANSMITTER POWER INTO ANTENNA:	-3.4dBm (0.457mW)
TYPE OF ANTENNA:	Integral circuit antenna
ANTENNA GAIN:	2.5dBi

Notes:

1. Data taken from Austest FCC report 0221HYD_LifeBand_FCC15C.

SAR Exclusion Justification

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition(s), listed below, is (are) satisfied.

a) For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR

$$(1\text{mW} / 5\text{mm}) \times \sqrt{(2.480)} = 0.3 \text{ (which is less than 3.0)}$$

where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

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The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

Austest Summary and Recommendations:

The equipment is exempted from FCC SAR compliance based on the exclusion justification above.

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