

## RF Exposure Report

**Report No.:** SA180817C04

**FCC ID:** NKS-DUO-WIFI  
NKS-DUO-LTE

**Test Model:** Trimble Duo

**Received Date:** Aug. 17, 2018

**Date of Evaluation:** Sep. 07, 2018

**Issued Date:** Sep. 10, 2018

**Applicant:** PeopleNet Communications Corporation

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

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**Test Location:** No. 19, Hwa Ya 2nd Rd, Wen Hwa Vil, Kwei Shan Dist., Taoyuan City 33383, Taiwan (R.O.C)

**FCC Registration /  
Designation Number:** 788550 / TW0003



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### Release Control Record

Issue No.	Description	Date Issued
SA180817C04	Original Release	Sep. 10, 2018

## 1 Certificate of Conformity

**Product:** Tablet

**Brand:** Trimble

**Test Model:** Trimble Duo

**Sample Status:** Mass product

**Applicant:** PeopleNet Communications Corporation

**Date of Evaluation:** Sep. 07, 2018

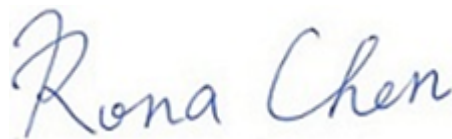
**Standards:** FCC Part 2 (Section 2.1091)

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 EMC characteristics under the conditions specified in this report.

**Prepared by :**



**Date:**

Sep. 10, 2018

Rona Chen / Specialist

**Approved by :**



**Date:**

Sep. 10, 2018

Dylan Chiou / Project Engineer

## 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

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

where

Pd = power density in mW/cm<sup>2</sup>

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 Antenna Gain

## 2.5 Calculation Result of Maximum Conducted Power

Band	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WCDMA II	1850-1910	24.22	3.56	20	0.119	1.00
WCDMA IV	1710-1755	24.19	1.24	20	0.069	1.00
WCDMA V	824-849	23.87	4.14	20	0.126	0.55
LTE 2	1850-1910	22.60	3.56	20	0.082	1.00
LTE 4	1710-1755	23.00	1.24	20	0.053	1.00
LTE 5	824-849	22.50	4.14	20	0.092	0.55
LTE 17	704-716	22.00	2.28	20	0.053	0.47
WLAN	2412-2462	26.40	2.54	20	0.156	1.00
	5180-5240	16.40	4.02	20	0.022	1.00
	5745-5825	13.20	3.81	20	0.010	1.00
BT	2402-2480	9.40	2.54	20	0.003	1.00

### Conclusion:

The formula of calculated the MPE is:

$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$

CPD = Calculation power density

LPD = Limit of power density

$WLAN + WWAN + BT = 0.156/1 + 0.126/0.55 + 0.003/1 = 0.388$

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

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