



RF EXPOSURE REPORT

- Product: Smart Kiosk
- Model Name: SK600
- Additional model: SK800
 - FCC ID: V5PSK
 - Applicant: PAX Technology Limited
 - Address: Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour Hong Kong, China
 - Manufacturer: PAX Computer Technology (Shenzhen) Co., Ltd.
 - Address: 4/F, No.3 Building, Software Park, Second Central Science-Tech Road, High-Tech industrial Park, Shenzhen, Guangdong, P.R.C.
 - Prepared by: BV 7Layers Communications Technology (Shenzhen) Co. Ltd
 - Lab Location: No.B102, Dazu Chuangxin Mansion, North of Beihuan Avenue, North Area, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China
 - TEL: +86 755 8869 6566
 - **FAX:** +86 755 8869 6577
 - E-MAIL: customerservice.dg@cn.bureauveritas.com
 - Report No.: SA200417W002-1
 - Received Date: Apr. 17, 2020
 - **Test Date:** Apr. 18, 2020 ~ May. 06, 2020
 - Issued Date: May. 07, 2020

This report should not be used by the client to claim product certification, approval, or endorsement by A2LA or any government agencies.

This report is governed by, and incorporates by reference, CPS Conditions of Service as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/gps/about-us/terms-conditions/and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute you unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



TABLE OF CONTENTS

| R | F EXPOSURE REPORT | .1 |
|---|---|-----|
| R | ELEASE CONTROL RECORD | .3 |
| 1 | CERTIFICATION | 4 |
| 2 | GENERAL INFORMATION | .5 |
| | 2.1 GENERAL DESCRIPTION OF EUT | 5 |
| 3 | RF EXPOSURE | .7 |
| | 3.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE) | .7 |
| | 3.2 MPE CALCULATION FORMULA | .7 |
| | 3.3 CLASSIFICATION | .7 |
| | 3.4 CONDUCTED POWER | . 8 |
| | 3.5 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER | . 9 |
| | 3.6 CONCLUSION OF SIMULTANEOUS TRANSMITTER 1 | 0 |



RELEASE CONTROL RECORD

| ISSUE NO. | REASON FOR CHANGE | DATE ISSUED |
|----------------|--|---------------|
| SA190429W001-1 | Original release | Jul. 13, 2019 |
| SA191120W002-1 | Based on the original product add one model SK800, changed power module. All test date is copied from the original test report SA190429W001-1. | Dec. 11, 2019 |
| SA200417W002-1 | Based on the original report RF191120W002-1 changed the WWAN module from ME3630 to GM500_U1A, the module ME3630 and module GM500_U1A are identical in hardware, only cancel LTE B17 and GSM function, no affect other RF function. In this report test data was copied from the original test report RF191120W002-1. | May. 07, 2020 |



1 CERTIFICATION

PRODUCT:Smart KioskBRAND NAME:PAXMODEL NAME:SK600ADDITIONAL MODEL:SK800APPLICANT:PAX Technology LimitedTESTED:Apr. 18, 2020 ~ May. 06, 2020TEST SAMPLE:Production UnitSTANDARDS:FCC Part 2 (Section 2.1091)FCC OET Bulletin 65, Supplement C (01-01)KDB 447498 D01 General RF Exposure Guidance v06IEEE C95.1

The above equipment has been tested by **BV 7Layers Communications Technology (Shenzhen) Co. Ltd** 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:** May. 07, 2020 (Alex Chen/ Engineer) lupe lu APPROVED BY : **DATE:** May. 07, 2020 (Luke Lu / Manager)

BV 7Layers Communications Technology (Shenzhen) Co. Ltd

No.B102, Dazu Chuangxin Mansion, North of Beihuan Avenue, North Area, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China Tel: +86 755 8869 6566 Fax: +86 755 8869 6577 Email: <u>customerservice.sw@bureauveritas.com</u>



2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

| PRODUCT | Smart Kiosk | | | | | | | | |
|--------------------------------|-----------------|--|--|--|--|--|--|--|--|
| MODEL NAME | SK600 | SK600 | | | | | | | |
| ADDITIONAL MODEL | SK800 | SK800 | | | | | | | |
| NOMINAL VOLTAGE | AC120V | AC120V | | | | | | | |
| OPERATING TEMPERATURE RANGE | 0 ~ 50°C |) ~ 50°C | | | | | | | |
| MODULATION TYPE | WLAN | 802.11b : DSSS 802.11a/g/n/ac : OFDM Bluetooth : GFSK, π/4-DQPSK, 8-DPSK, LE | | | | | | | |
| | WCDMA | BPSK/QPSK | | | | | | | |
| | LTE | QPSK, 16QAM | | | | | | | |
| | WIFI 2.4G | WLAN : 2412 ~ 2462, 5150 ~ 5350, 5470 ~ 5725, 5725 ~ 5825 Bluetooth : 2402 ~ 2480 | | | | | | | |
| OPERATING FREQUENCY | WCDMA | 1852.4MHz ~ 1907.6MHz (FOR WCDMA II) 826.4MHz ~ 846.6MHz (FOR WCDMA V) | | | | | | | |
| TREGUENCI | LTE | 1850.7MHz ~ 1909.3MHz (FOR LTE Band2) 1710.7MHz ~ 1754.3MHz (FOR LTE Band4) 824.7MHz ~ 848.3MHz (FOR LTE Band5) 699.7MHz ~ 715.3MHz (FOR LTE Band12) | | | | | | | |
| | WLAN 2.4G | External Antenna with 1.5dBi gain | | | | | | | |
| | WLAN 5G | External Antenna with 6.04dBi gain for B1 External Antenna with 5.79dBi gain for B2 External Antenna with 5.25dBi gain for B3 External Antenna with 4.75dBi gain for B4 | | | | | | | |
| ANTENNA GAIN | WCDMA V | Fixed External Antenna with 1.0dBi gain | | | | | | | |
| ANTENNA GAIN | WCDMA II | Fixed External Antenna with 1.5dBi gain | | | | | | | |
| | LTE Band 2 | Fixed External Antenna with 1.5dBi gain | | | | | | | |
| | LTE Band 4 | Fixed External Antenna with 1.5dBi gain | | | | | | | |
| | LTE Band 5 | Fixed External Antenna with 1.0dBi gain | | | | | | | |
| | LTE Band 12 | Fixed External Antenna with 1.0dBi gain | | | | | | | |
| HW VERSION | NA | | | | | | | | |
| SW VERSION | NA | | | | | | | | |
| I/O PORTS | Refer to user's | manual | | | | | | | |
| CABLE SUPPLIED | N/A | | | | | | | | |



NOTE:

- 1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- 2. The hardware differences between SK800 with SK600:

| Product size and weight | | | | | | |
|-------------------------|--|--|--|--|--|--|
| SK600 | Size: 660 x325 x 178 (mm) Weight: 7.8kg | | | | | |
| SK800 | Size: 965x 390x 175 (mm) Weight: 13kg | | | | | |

| Product screen size | | | | | | |
|---------------------|--------------------|--|--|--|--|--|
| SK600 | screen size: 15" | | | | | |
| SK800 | screen size: 23.8" | | | | | |

Except Listings above, the others are the same.

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report. SK600 was main test model for full conducted test items.



3 RF EXPOSURE

3.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| FREQUENCY RANGE (MHz) | ELECTRIC FIELDMAGNETIC FIELDPOWER DENSITYSTRENGTH (V/m)STRENGTH (A/m)(mW/cm²) | | AVERAGE TIME (minutes) | | | | | | |
|---|---|--|---------------------------|----|--|--|--|--|--|
| LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE | | | | | | | | | |
| 300-1500 | | | F/1500 | 30 | | | | | |
| 1500-100,000 | | | 1.0 | 30 | | | | | |

F = Frequency in MHz

3.2 MPE CALCULATION FORMULA

 $Pd = (Pout^*G) / (4^*pi^*r2)$

where

Pd = power density in mW/cm2

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

3.3 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**.



3.4 CONDUCTED POWER

TUNE-UP POWER TABLE

| Band | Frequency (MHz) | Operating Mode | Tune-Up Power And Tolerance (dBm) |
|------------|--------------------|-------------------|---|
| ВТ | 2441 | GFSK | 9.5 |
| WIFI 2.4G | 2437 | 11b(20MHz) | 16.0 |
| WIFI 5G B1 | 5230 | 11a(20MHz) | 15.0 |
| WIFI 5G B2 | 5270 | 11a(20MHz) | 15.0 |
| WIFI 5G B3 | 5510 | 11a(20MHz) | 15.0 |
| WIFI 5G B4 | 5755 | 11a(20MHz) | 15.0 |
| WCDMA II | 1880 | RMC12.2K | 23.5 |
| WCDMA V | 836.4 | RMC12.2K | 24.5 |
| LTE 2 | 1880 | QPSK | 23.0 |
| LTE 4 | 1732.5 | QPSK | 23.0 |
| LTE 5 | 836.5 | QPSK | 23.5 |
| LTE 12 | 707.5 | QPSK | 24.0 |



3.5 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

BT

| Band | Frequency (MHz) | Operating Mode | Antenna Gain (dBi) | Tune-up Power (dBm) | E.I.R.P Power (mW) | Power Density (mW/cm^2) | limit (mW/cm^2) | PASS / FAIL |
|-----------|--------------------|-------------------|--------------------------|---------------------------|--------------------------|-------------------------------|--------------------|----------------|
| Bluetooth | 2441 | BT_GFSK | 1.50 | 9.50 | 12.589 | 0.003 | 1.00 | PASS |

WIFI 2.4G

| Band | Frequency (MHz) | Operating Mode | Antenna Gain (dBi) | Tune-up Power (dBm) | E.I.R.P Power (mW) | Power Density (mW/cm^2) | limit (mW/cm^2) | PASS / FAIL |
|-----------|--------------------|-------------------|--------------------------|---------------------------|--------------------------|-------------------------------|--------------------|----------------|
| WIFI 2.4G | 2437 | 11b | 1.50 | 16.00 | 56.234 | 0.011 | 1.00 | PASS |

WIFI 5G

| Band | Frequency (MHz) | Operating Mode | Antenna Gain (dBi) | Tune-up Power (dBm) | E.I.R.P Power (mW) | Power Density (mW/cm^2) | limit (mW/cm^2) | PASS / FAIL |
|------------|--------------------|-------------------|--------------------------|---------------------------|--------------------------|-------------------------------|--------------------|----------------|
| WIFI 5G B1 | 5230 | 11a | 6.04 | 15.00 | 127.057 | 0.025 | 1.00 | PASS |
| WIFI 5G B2 | 5270 | 11a | 5.79 | 15.00 | 119.950 | 0.024 | 1.00 | PASS |
| WIFI 5G B3 | 5510 | 11a | 5.25 | 15.00 | 105.925 | 0.021 | 1.00 | PASS |
| WIFI 5G B4 | 5755 | 11a | 4.75 | 15.00 | 94.406 | 0.019 | 1.00 | PASS |

WCDMA

| Band | Frequency (MHz) | Operating Mode | Antenna Gain (dBi) | Tune-up Power (dBm) | E.I.R.P Power (mW) | Power Density (mW/cm^2) | limit (mW/cm^2) | PASS / FAIL |
|----------|--------------------|-------------------|--------------------------|---------------------------|--------------------------|-------------------------------|--------------------|----------------|
| WCDMA II | 1880.0 | RMC12.2K | 1.50 | 23.50 | 316.228 | 0.063 | 1.00 | PASS |
| WCDMA V | 846.4 | RMC12.2K | 1.00 | 24.50 | 354.813 | 0.071 | 0.56 | PASS |

LTE

| Band | Frequency (MHz) | Operating Mode | Antenna Gain (dBi) | Tune-up Power (dBm) | E.I.R.P Power (mW) | Power Density (mW/cm^2) | limit (mW/cm^2) | PASS / FAIL |
|---------|--------------------|-------------------|--------------------------|---------------------------|--------------------------|-------------------------------|--------------------|----------------|
| Band 2 | 1880 | QPSK | 1.50 | 23.00 | 281.838 | 0.056 | 1.00 | PASS |
| Band 4 | 1732.5 | QPSK | 1.50 | 23.00 | 281.838 | 0.056 | 1.00 | PASS |
| Band 5 | 836.5 | QPSK | 1.00 | 23.50 | 281.838 | 0.056 | 0.56 | PASS |
| Band 12 | 707.5 | QPSK | 1.00 | 24.00 | 316.228 | 0.063 | 0.47 | PASS |



3.6 CONCLUSION OF SIMULTANEOUS TRANSMITTER

Both of the WLAN and plug-in device can transmit simultaneously, the formula of calculated the MPE is:

CPD1/LPD1+CPD2/LPD2+.....etc. < 1

CPD = Calculation power density

LPD = Limit of power density

Therefore the worst-case situation is, which is less than "1", This confirmed that the device comply with FCC 1.1310 MPE limit.

| Band | Frequency (MHz) | Power Density (mW/cm^2) | limit (mW/cm^2) | Power Density / Limit | Total Power Density / Limit | MPE Limit | PASS / FAIL |
|-----------------|--------------------|----------------------------|--------------------|--------------------------|-----------------------------------|--------------|-------------|
| WIFI 5G-11a | 5230 | 0.025 | 1 | 0.025 | 0.096 | 1.000 | PASS |
| WCDMA Band V | 846.4 | 0.071 | 1 | 0.071 | | | |

--END---