RF Exposure Report

Report No.:	SA160509E03B
FCC ID:	MQT-200I10YXF
Test Model:	xCE_E200I-10YXF
Series Model:	xCE_E200I-10NXF, xCE_E200I-10YXX, xCE_E200I-10NXX
Received Date:	May 09, 2016
Test Date:	June 06, 2016
Issued Date:	Aug. 24, 2016
Applicant:	XAC AUTOMATION CORP.
Address:	4F, No. 30, INDUSTRY E. RD. IX, SCIENCE-BASED INDUSTRIAL PARK,HSINCHU,TAIWAN
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.

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Table of Contents

Release Control Record **3**

1 Certificate of Conformity **4**

2 RF Exposure **5**

2.1 Limits for Maximum Permissible Exposure (MPE) 5
2.2 MPE Calculation Formula 5
2.3 Classification 5
2.4 Antenna Gain 6

3 Calculation Result of Maximum Conducted Power **7**

Release Control Record

Issue No.	Description	Date Issued
SA160509E03B	Original release.	Aug. 24, 2016

1 Certificate of Conformity

Product:	Terminal
Brand:	XAC
Test Model:	xCE_E200I-10YXF
Series Model:	xCE_E200I-10NXF, xCE_E200I-10YXX, xCE_E200I-10NXX
Sample Status:	ENGINEERING SAMPLE
Applicant:	XAC AUTOMATION CORP.
Test Date:	June 06, 2016
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:** Aug. 24, 2016

Midoli Peng / Specialist

Approved by : _____ , **Date:** Aug. 24, 2016

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^2)	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	…	…	F/1500	30
1500-100,000	…	…	1.0	30

F = Frequency in MHz

2.2 MPE Calculation Formula

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

where

Pd = power density in mW/cm^2

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

Brand	Model	Antenna Type	Connecter Type	Antenna Gain(dBi)	Frequency range
INPAQ	ACM3-5036-A1-CC-S	Chip	NA	3	2.4~2.4835GHz 5.15~5.85GHz

3 Calculation Result of Maximum Conducted Power

WLAN

Frequency (MHz)	Conducted Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
2412-2462	80.168	3	20	0.03182	1
5180-5240	11.324	3	20	0.00449	1
5260-5320	11.429	3	20	0.00454	1
5500-5700	7.925	3	20	0.00315	1
5745-5825	7.709	3	20	0.00306	1

BT-EDR

Frequency (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
2402-2480	11.455	3	20	0.00455	1

BT-LE

Frequency (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
2402-2480	4.121	3	20	0.00164	1

Conclusion:

The formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

WLAN 2.4GHz + BT-EDR = 0.03182/1 + 0.00455/1 = 0.03637

WLAN 5GHz + BT-EDR = 0.00449/1 + 0.00455/1 = 0.00909

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

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