# CLIMAX TECHNOLOGY CO., LTD. No. 258, Sinhu 2nd Rd., Neihu District Taipei City 114 Taiwan ( R.O.C.)

Federal Communications Commission Authorization and Evaluation Division Equipment Authorization Branch 7435 Oakland Mills Road Columbia, MD 21046

# Applicant's declaration concerning RF Radiation Exposure

We hereby indicate that the product

Product description: Smart Home Alarm System Model No: VST-27xx Series (x=0~9, A~Z or blank)

The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The integral antennas used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter within the host device.

A safety statement concerning minimum separation distances from enclosure of the

Product: Smart Home Alarm System

will be integrated in the user's manual to provide end-users with transmitter operating conditions for satisfying RF exposure compliance.

The appropriate information can be drawn from the test report no: W6M21312-13751-P2224 and the accompanying calculations.

Company: CLIMAX TECHNOLOGY CO., LTD.

Address: No. 258, Sinhu 2nd Rd., Neihu District Taipei City 114 Taiwan (R.O.C.)

Date: 3 January 2014

Signature George Lin



# Worldwide Testing Services(Taiwan) Co., Ltd.

Report Number: W6M21312-13751-P-2224

FCC ID: GX92752

9 Maximum Permissible Exposure

## 9.1 Applicable Standard

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

#### 9.2 MPE Calculation Method

### (A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)	
0.3-3.0	614	1.63	(100)*	6	
3.0-30	1842/f	4.89/f	$(900/f^2)*$	6	
30-300	61.4	0.163	1.0	6	
300-1500			f/300	6	
1500-100,000			5	6	

#### (B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)	
0.3-1.34	614	1.63	(100)*	30	
1.34-30	824/f	2.19/f	$(180/f^2)*$	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

E (V/m) • 
$$\frac{\sqrt{30 \times P \times G}}{d}$$
 Power Density:  $Pd$  (W/m²) •  $\frac{E^2}{377}$ 

E = Electric field (V/m) P = output power (W) G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

Pd • 
$$\frac{30 \times P \times G}{377 \times d^2}$$

<sup>\*</sup>Plane-wave equivalent power density



Report Number: W6M21312-13751-P-2224

FCC ID: GX92752

Frequency	Max outp	out power / (W)	Antenna Gain	Power Density(S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
GSM 850	32.52	1.786	-0.97	0.284	1.0	Complies
PCS 1900	30.06	1.014	4.38	0.553	1.0	Complies
Band II	21.46	0.140	4.38	0.076	1.0	Complies
Band V	23.05	0.202	-0.97	0.032	1.0	Complies

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2 m, as well as the gain of the used antenna, the RF power density can be obtained.