



**FCC RF EXPOSURE REPORT**

*For*

**Conbox**

**MODEL NUMBER: SR-700**

**FCC ID: 2ATCV-SR700**

**IC: 25038-SR700**

**REPORT NUMBER: 4788821505-2**

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*Prepared for*

**Shanghai Gaussian Automation Technology Development Co.,LTD**

*Prepared by*

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	05/12/2019	Initial Issue	



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## 1. ATTESTATION OF TEST RESULTS

### Applicant Information

Company Name: Shanghai Gaussian Automation Technology Development Co.,LTD  
Address: No.899 Dangui Rd., Pudong District Shanghai, 201203,China

### Manufacturer Information

Company Name: Shanghai Gaussian Automation Technology Development Co.,LTD  
Address: No.899 Dangui Rd., Pudong District Shanghai, 201203,China

### Factory Information

Company Name: Suzhou Gaozhixian Automation Technology Co., Ltd  
Address: Workshop No.2,No.1 Jifu Road, Korea Industrial Park, Fenghuang Town, Zhangjiagang City, Jiangsu Province, China

### EUT Description

EUT Name: Conbox  
Model: SR-700  
Sample Status: Good  
Sample Received Date: February 26, 2019  
Date of Tested: February 26~ May 10, 2019

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47CFR§2.1091	Complies
KDB-447498 D01 V06	

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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v06.

## 3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p><b>A2LA (Certificate No.: 4102.01)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p><b>FCC (FCC Designation No.: CN1187)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules</p> <p><b>IC(Company No.: 21320)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320.</p> <p><b>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B, the VCCI registration No. is C-20012 and T-20011</p>
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Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30MHz had been correlated to measurements performed on an OFS.



## 4. REQUIREMENT

### LIMIT

Limits for General Population/Uncontrolled Exposure

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 <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/150	30
1500-100,000	--	--	1.0	30
Note 1: f = frequency in MHz, * means Plane-wave equivalent power density				
Note 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.				
Note 3: The limit value 1.0mW/cm <sup>2</sup> is available for this EUT.				

### MPE CALCULATION METHOD

$$S = PG / (4\pi R^2)$$

where: S = power density (in appropriate units, e.g. mW/ cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)



## **CALCULATED RESULTS**

### Radio Frequency Radiation Exposure Evaluation

WIFI2.4G (Worst case_Ant1+Ant2)					
Operating Mode	Max. Tune up Power	Directional gain		Power density	Limit
	(dBm)	(dBi)	(num)	(mW/ cm <sup>2</sup> )	
802.11 b	16.0	6.01	2	0.0316	1

Note: Directional gain=  $10\log[(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}] = 6.01\text{dBi}$

$N_{ANT}$ : the number of Antenna

$G1=3.0\text{dBi}$ ;  $G2=3.0\text{dBi}$

Note:

1. the calculated distance is 20cm.
2. For this product, it has two antennas, antenna1 and antenna2, it can transmit at the same time during work at 802.11B & 802.11G & 802.11N20 & 802.11N40 modes, but only the 802.11N20 & 802.11N40 modes support the MIMO technical.

## **END OF REPORT**