# YUNEEC International (China) Co., Ltd.

# **Motion Camera**

Main Model: C-GO1 Serial Model: N/A

March 06, 2014
Report No.: 14050004-FCC-H1-V1
(This report supersedes NONE)



**Modifications made to the product: None** 

This Test Report is Issued Under the Authority of:				
William Long	Alexalin			
William Long Compliance Engineer	Alex Liu Technical Manager			

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Test result presented in this test report is applicable to the representative sample only.

# RF Exposure Evalution Report

SIEMIC, INC.

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# **Laboratory Introduction**

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to <u>testing</u> and <u>certification</u>, SIEMIC provides initial design reviews and <u>compliance</u> <u>management</u> through out a project. Our extensive experience with <u>China</u>, <u>Asia Pacific</u>, <u>North America</u>, <u>European</u>, <u>and international</u> compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the <u>global markets</u>.

**Accreditations for Conformity Assessment** 

recteditations for comormity rispessment			
Country/Region	Scope		
USA	EMC, RF/Wireless, Telecom		
Canada	EMC, RF/Wireless, Telecom		
Taiwan	EMC, RF, Telecom, Safety		
Hong Kong	RF/Wireless ,Telecom		
Australia	EMC, RF, Telecom, Safety		
Korea	EMI, EMS, RF, Telecom, Safety		
Japan	EMI, RF/Wireless, Telecom		
Singapore	EMC, RF, Telecom		
Europe	EMC, RF, Telecom, Safety		

SIEMIC, INC.

Accessing global markets

Title: RF Exposure Evaluation Report for Motion Camera
Main Model: C-GO1
Serial Model: N/A

To: FCC 2.1091: 2013

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## 1. EXECUTIVE SUMMARY & EUT INFORMATION

The purpose of this test programme was to demonstrate compliance of the YUNEEC International (China) Co., Ltd., Motion Camera and model: C-GO1against the current Stipulated Standards. The Motion Camera has demonstrated compliance with the FCC 2.1091: 2013.

### **EUT Information**

EUT Description	Motion Camera
Main Model	C-GO1
Serial Model	N/A
Antenna Gain	WIFI: 0dBi
Input Power	Model:YP-1 Li-Po BATTERY PACK 3.7V 1050mAh
Maximum Conducted Peak Power to Antenna	20dBm
Classification Per Stipulated Test Standard	FCC 2.1091: 2013



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# 2. TECHNICAL DETAILS

<b></b>	IECHNICAL DETAILS		
Purpose	Compliance testing of Motion Camera with stipulated standard		
Applicant / Client	YUNEEC International (China) Co., Ltd. No.388, Zhengwei Road, Jinxi Town, Kunshan, Jiangsu, China		
Manufacturer	YUNEEC International (China) Co., Ltd. No.388, Zhengwei Road, Jinxi Town, Kunshan, Jiangsu, China		
Laboratory performing the tests	SIEMIC (Nanjing-China) Laboratories NO.2-1,Longcang Dadao, Yuhua Economic Development Zone, Nanjing, China Tel: +86(25)86730128/86730129 Fax: +86(25)86730127 Email: China@siemic.com		
Test report reference number	14050004-FCC-H1-V1		
Date EUT received	February 20, 2014		
Standard applied	FCC 2.1091: 2013		
Dates of test	February 28 to March 01, 2014		
No of Units	#1		
<b>Equipment Category</b>	DTS		
Trade Name	YUNEEC		
RF Operating Frequency (ies)	5745 MHz		
Number of Channels	802.11a: CH 149(Only one channel)		
Modulation	OFDM		
FCC ID	2ABB5-C-GO1		

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# 3. MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### FCC §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### **Applicable Standard**

According to §1.1307(b)(1), 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 level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated.

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure					
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2)	Averaging Time (minutes)	
0.3-1.34	614	1.63	*(100)	30	
1.34-30	824/f	2.19/f	*(180/f2)	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

Test Data

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

Where: S = power density (in appropriate units, e.g. mW/cm2)

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, the power gain factor, is normally numeric gain.

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

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

Note: base on different type antenna and their gain, the bellow result is the worst case.

### 802.11a:

Maximum peak output power at antenna input terminal: 17.5(dBm) Maximum peak output power at antenna input terminal: 56 (mW)

Prediction distance: >20 (cm) Predication frequency: 5745 (MHz) Antenna Gain (typical): 0 (dBi) Antenna Gain (typical): 1 (numeric)

The worst case is power density at predication frequency at 20 cm: 0.011 (mW/cm2) MPE limit for general population exposure at prediction frequency: 1.0 (mW/cm2)

0.011(mW/cm2) < 1.0(mW/cm2)

**Result: Pass**