
OET Bulletin 65 (MPE)

Test Report

Report No.: AGC161111101F7

FCC ID : A379502
PRODUCT DESIGNATION : RFID Reader
BRAND NAME : N/A
TEST MODEL : 9502
CLIENT : SHENZHEN HQS INTEL.& TECH. CO., LTD
DATE OF ISSUE : Nov. 29, 2011
STANDARD(S) : OET Bulletin 65

Attestation of *Global Compliance Co., Ltd.*

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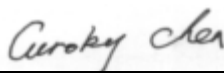
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1. TEST RESULT CERTIFICATION

Applicant Name:	SHENZHEN HQS INTEL. & TECH. CO., LTD
Address:	Room 403, Block 205, East. TaiRan Industrial Parl. FuTian District, S.Z.
Manufacturer Name:	SHENZHEN HQS INTEL. & TECH. CO., LTD
Address:	Room 403, Block 205, East. TaiRan Industrial Parl. FuTian District, S.Z.
Product Designation	RFID Reader
Brand Name:	N/A
Model Name	9502, 9502E, 9511, 9511E, ,9512, 9512E, 9514, 9514E, 9518, 9518E, 9521, 9522, 9524, 9528
Difference description:	All the same except for the appearance, and the main test model is 9502.
FCC ID	A379502
Test Standard	OET Bulletin 65 (Edition 97-01) Supplement C (Edition 01-01)
File Number:	AGC161111101F7
Date of Test:	Nov.24, 2011 to Nov.28, 2011

We (AGC), Attestation of Global Compliance Co., Ltd. for compliance with the requirements set forth in the European Standard OET Bulletin 65 (Edition 97-01) Supplement C (Edition 01-01) The results of testing in this report apply to the product/system which was tested only. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Tested By: 
Curoky Chen Nov.29, 2011

Reviewed By: 
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Approved By: 
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2. TECHNICAL INFORMATION

Note: the following data is based on the information by the applicant.

2.1 EUT DESCRIPTION

Operation Frequency	902.5 MHz ~ 927 MHz
Modulation	AFSK
Number of channels	50
Antenna Designation	Detachable Antenna
Antenna Gain	7dBi
Hardware Version	N/A
Software Version	N/A
Power Supply	DC9V by adapter

Note:

1. For more details, please refer to the User's manual of the EUT.

3. RF EXPOSURE MEASUREMENT

3.1 INTRODUCTION

Human exposure to RF emissions from mobile devices (47 CFR §2.1091) may be evaluated based on the MPE limits adopted by the FCC for electric and magnetic field strength and/or power density, as appropriate, since exposures are assumed to occur at distances of 2.5 cm or more from persons.

The 1992 ANSI/IEEE standard (See Listed limit table) specifies a minimum separation distance of 1cm for performing reliable field measurements to determine adherence to MPE limits.

If the minimum separation distance between a transmitter and nearby persons is more than 2.5 cm under normal operating conditions, compliance with MPE limits may be determined at such distance from the transmitter. When applicable, operation instructions and prominent warning labels may be used to alert the exposed persons to maintain a specified distance from the transmitter or to limit their exposure durations and usage conditions to ensure compliance.

3.2 FCC LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE(MPE)

LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² 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

*Note:

1. f=Frequency in MHz * Plane-wave Equivalent Power Density
2. The averaging time for General Population/Uncontrolled exposure to fixed transmitters is not applicable for mobile and portable transmitters. See 47 CFR §§2.1091 and 2.1093 on source-based time-averaging requirements for mobile and portable transmitters.

4. CLASSIFICATION OF THE ASSESSMENT METHODS

According to user manual, The antenna of the product, under normal use condition is at least 0.3m away from the body of the user. Warning statement to the user for keeping at least 30cm separation distance and the prohibition of operating to a person has been printed on the user's manual. So, this product under normal use is located on electromagnetic far field between the human body.

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

Where:

S=power density

P=power input to antenna

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

5. EUT OPERATION CONDITION

Make the EUT to transmit at lowest, middle and highest channel individually at maximum power.

6. TEST RESULTS

Antenna Gain=7dBi(Numeric 5.0), Π =3.1416

Channel	Frequency	Output Power	Output Power	Power Density	Power Density Limit	Result
	MHz	dBm	mW	mW/cm2	mW/cm2	Pass/Fail
CH 1	902.5	27.91	618.016	0.273	0.60	Pass
CH 26	915	27.84	608.135	0.269	0.61	Pass
CH 50	927	27.83	606.736	0.268	0.62	Pass