RF Exposure Evaluation Declaration

Product Name ： Tire-pressure monitoring system (TPMS)
Model No. ： VT-56, VT-56025

Applicant : CONTROL TECHNOLOGY CO. TAIWAN BRANCH
Address ： 221, SAN JIA DONG STREET, 40642, TAICHUNG, TAIWAN

Date of Receipt : 2014/01/23
Issued Date : 2014/04/10
Report No. : 1410463R-RF-CE-Exp
Version : V2.0

Test Result for Inspection

Issued Date : 2014/04/10

Report No. : 1410463R-RF-CE-Exp

Product Name	:	Tire-pressure monitoring system (TPMS)
Applicant	:	CONTROL TECHNOLOGY CO. TAIWAN BRANCH
Address	:	221, SAN JIA DONG STREET, 40642, TAICHUNG, TAIWAN
Manufacturer	:	CONTROL TECHNOLGY CO. TAIWAN BRANCH
Model No.	:	VT-56, VT-56025
EUT Voltage	:	AC 100-240V, 50/60Hz
Applicable Standard	:	EN 62479 : 2010
Test Result	:	Pass
Description for Test	:	None

(Roy Wang / Director)

(Bruno Tsai / Assistant Engineer)

Laboratory Information

We, **QuieTek Corporation**, are an independent RF consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted (audited or listed) by the following related bodies in compliance with ISO 17025 specified testing scopes:

Taiwan R.O.C.	**:**	**TAF, Accreditation Number: 1313**
USA	**:**	**FCC, Registration Number: 365520**
Canada	**:**	**IC, Submission No: 150981**

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site:http://www.quietek.com/tw/ctg/cts/accreditations.htm
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory:
No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

LinKou Testing Laboratory:
No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

Suzhou Testing Laboratory:
No. 99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., Suzhou,China.
TEL : +86-512-6251-5088 / FAX : +86-512-6251-5098 E-Mail : service@quietek.com

1. EN 62479 REQUIREMENT

1.1. HUMAN EXPOSURE TO ELECTROMAGNETIC FIELDS (10MHz to 300GHz)

LIMIT

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 of the following limits.

For frequency range 10 MHz to 10 GHz

The basic restriction at frequencies between 10 MHz and 100 GHz is on localized SAR in the head. Any device with output power below 20 mW cannot produce an exposure exceeding this restriction under the most pessimistic exposure conditions.

The basic restriction is 2 W/kg so any unit which supplies less than 20 mW (=2/100W) from its antenna port, averaged over 6 minutes, will meet the basic restriction.

For frequency range 10 GHz to 300 GHz

The most conservative assumption is that all the transmitted power is absorbed within the specified area, therefore any device which supplies less than 20 mW will meet the basic restriction. The average time is equal to $68/f^{-1.05}$ munutes (where f is in GHz)

In the frequency range 10 GHz to 300 GHz, the basic restriction is 10 Wm^{-2} averaged over any 20 cm^2 of exposed area with a spatial maximum of 200 Wm^{-2} averaged over 1 cm^2

Criteria A: All electromagnetic fields

If the average power emitted by apparatus operating in the frequency range 10 MHz - 300GHz is less that or equal to 20 mW and the transmitting peak power is less than 20W then the apparatus is deemed to comply with the basic restrictions without testing. Averaging time is 6 minutes in the frequency range 10 MHz to 10 GHz. The average time is equal to $68/f^{1.05}$ minutes (where f is in GHz) in the frequency range 10 GHz to 300 GHz.

If the total supply power or the input power to the circuitry producing the greatest emissions in the device is less than or equal to 20 mW then it is assumed that the emitted power is less than 20 mW.

Criteria B: Pulse modulated electromagnetic fields with pulse duration less than 30 microseconds

For pulses of duration less than 30 microseconds at frequencies between 300 MHz and 10 GHz, there is also a basic restriction on Specific energy absorption (SA). This is 2mJ kg^{-1} in any 10g of tissue in the head. For most pulses, the SAR restriction will be more stringent, but for pulses with a repetition frequency of less than 100 Hz, the SA restriction will predominate. For devices producing pulses with repetition rates below 100 Hz, the average power should be less than 20 x prf mW (pulse repetition frequency, prf in Hz).

TEST RESULTS

Power Measurement:		
Frequency (MHz)	Average Power (dBm)	Average Power (mW)
0.125	-1.51	0.71

Conclusion:

Average Power is less than or equal to 20mW with averaging time is 6 minutes in the frequency range 10 MHz to 10 GHz. This proves that the unit complies with the EN 62479 (2010) for RF power measurement.

* Average Power (dBm) = Reading Level + Antenna Gain