Prüfbericht - Nr.: *Test Report No.:*	**14707210 001**	**Seite 1 von 12** *Page 1 of 12*
Auftraggeber: *Client:*	**YUYAO ARJEXTOOLS PACKING CO., LTD.** NO. 51 SHUNCHUANG ROAD, YANGMING INDUSTRIAL ZONE, YUYAO CITY, ZHEJIANG PROVINCE 315400 P.R. China	
Gegenstand der Prüfung: *Test item:*	**Trailer Tester**	
Bezeichnung: *Identification:*	**80503-18**	**Serien-Nr.:** *Serial No.:* **Engineering Sample**
Wareneingangs-Nr.: *Receipt No.:*	**1103016875**	**Eingangsdatum:** *Date of receipt:* **2012.01.17**
Zustand des Prüfgegenstandes bei Anlieferung: *Condition of test item at delivery:*	**The Sample is OK for testing without damage**	
Prüfort: *Testing location:*	**Refer to section 1.1**	
Prüfgrundlage: *Test specification:*	**EN 61000-6-3:2007+A1** **EN 61000-6-1:2007**	
Prüfergebnis: *Test Result:*	**Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n).** *The test item passed the test specification(s).*	
Prüflaboratorium: *Testing Laboratory:*	**TÜV Rheinland / CCIC (Ningbo) Co., Ltd.**	

geprüft/ *tested by:* **kontrolliert/** *reviewed by:*

Datum / *Date*	Name/Stellung / *Name/Position*	Unterschrift / *Signature*	Datum / *Date*	Name/Stellung / *Name/Position*	Unterschrift / *Signature*
2012.03.02	Raymond Tu/PE	Raymond Tu	2012.03.05	Feng Liang/TC	Feng Liang

Sonstiges/ *Other Aspects:*

Abkürzungen:				*Abbreviations:*			
	P(ass)	=	*entspricht Prüfgrundlage*		*P(ass)*	=	*passed*
	F(ail)	=	*entspricht nicht Prüfgrundlage*		*F(ail)*	=	*failed*
	N/A	=	*nicht anwendbar*		*N/A*	=	*not applicable*
	N/T	=	*nicht getestet*		*N/T*	=	*not tested*

TEST SUMMARY

4.1.1 RADIATED DISTURBANCE

Result:

Pass

5 IMMUNITY

Result:

Pass

Contents

1 Test Sites

1.1 Test Facilities

Laboratory: Ningbo Entry-Exit Inspection and Quarantine Bureau.

Electrical Safety Testing Center for Optics&Electronics products (NOETC)

5-9 Zhufeng Road Ningbo Export Processing Zone, Beilun Ningbo, Zhejiang province, 315800, P. R. China

The used test equipments is in accordance with CISPR 16-1 series stanards for measurement of radio interference.

The tests performed in Laboratory have been conducted by "Ningbo Entry-Exit Inspection and Quarantine Bureau. Electrical Safety Testing Center for Optics&Electronics products (NOETC)", under supervision of TÜV Rheinland/CCIC's engineer.

1.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

No.	Equipment	Model	Inventory no.	Cal. due date
1	EMI test receiver	ESCI	100708	2012.06.01
2	Combined Antenna	HL562	100335	2012.05.29

2 General Product Information

2.1 Product Function and Intended Use

The EUT (equipment under test) is an ordinary Trailer Tester for using in residential, commercial and similar environments. For the further information, refer to the user's manual.

2.2 Ratings and System Details

Rated Voltage	:	DC 12V
Protection class	:	III

2.3 Independent Operation Mo des

The basic operation modes are: "On" or "Off".

2.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit diagram, PCB layout.

2.5 Submitted Documents

Circuit diagram, PCB layout etc.

3 Test Set-up and Operation Modes

3.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test conditions were adapted accordingly in reference to the instructions for use.

Refer to the related paragraph of this report.

Immunity:

Refer to the related paragraph of this report.

3.2 Physical Configuration for Testing

Refer to the related paragraph of this report.

3.3 Test Operation and Test Software

Refer to the related paragraph of this report. No software was used.

3.4 Special Accessories and Auxiliary Equipment

None.

3.5 Countermeasures to achieve EMC Compliance

The tested sample contained noise suppression devices.

4 Test Results EMISSION

4.1 Emission in the Frequency Range above 30 MHz

4.1.1 Radiated disturbance

Result:	**Pass**

Date of testing	:	2012.03.01
Port	:	Enclosure
Frequency Range	:	30 – 1000MHz
Kind of test site	:	Semi-anechoic Chamber
Limit	:	EN 61000-6-3:2007+A1, Emission limits for enclosure port, Table 1

Measuring configuration and description

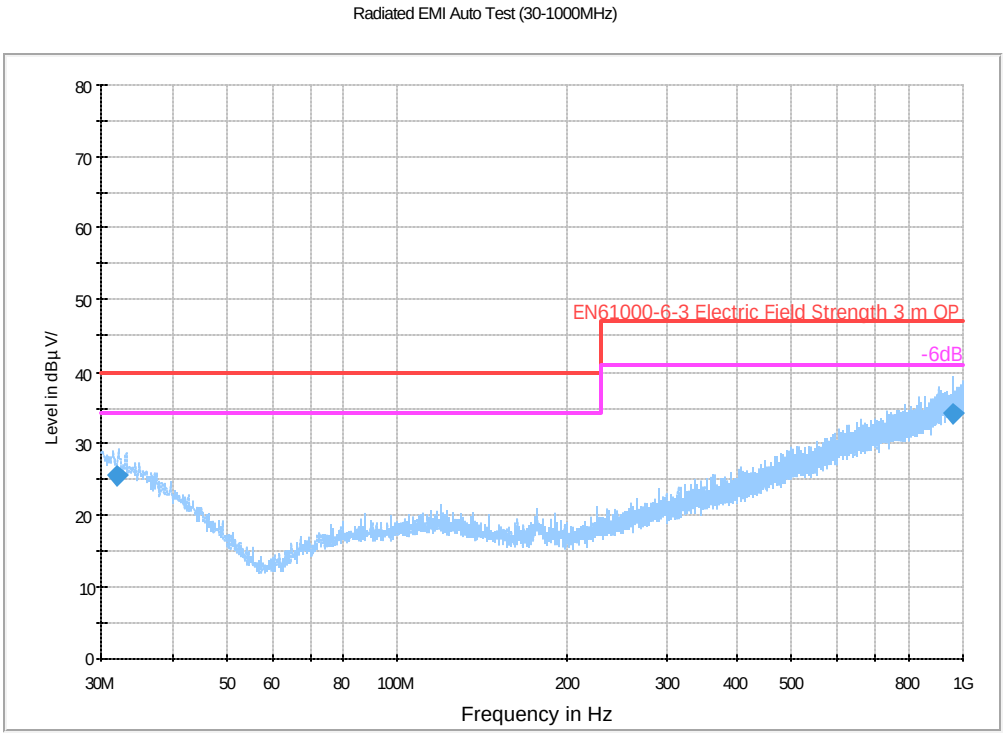
The radiated disturbance test was carried out in a semi-anechoic chamber and the distance form the EUT to the antenna is 3 meter.

The EUT was placed on a wooden table that is 0.8m high. During the test, the wooden table was circumvolved 360° around while the antenna was varied from 1m to 4m at the same time to find the maximum disturbance.

The test was performed with the antenna both in its horizontal and vertical polarizations.

According to Table 1 description: “If the highest internal frequency of the EUT is less than 108MHz, the measurement shall only be made up to 1GHz.” , the radiated emission test was performed up to 1GHz.

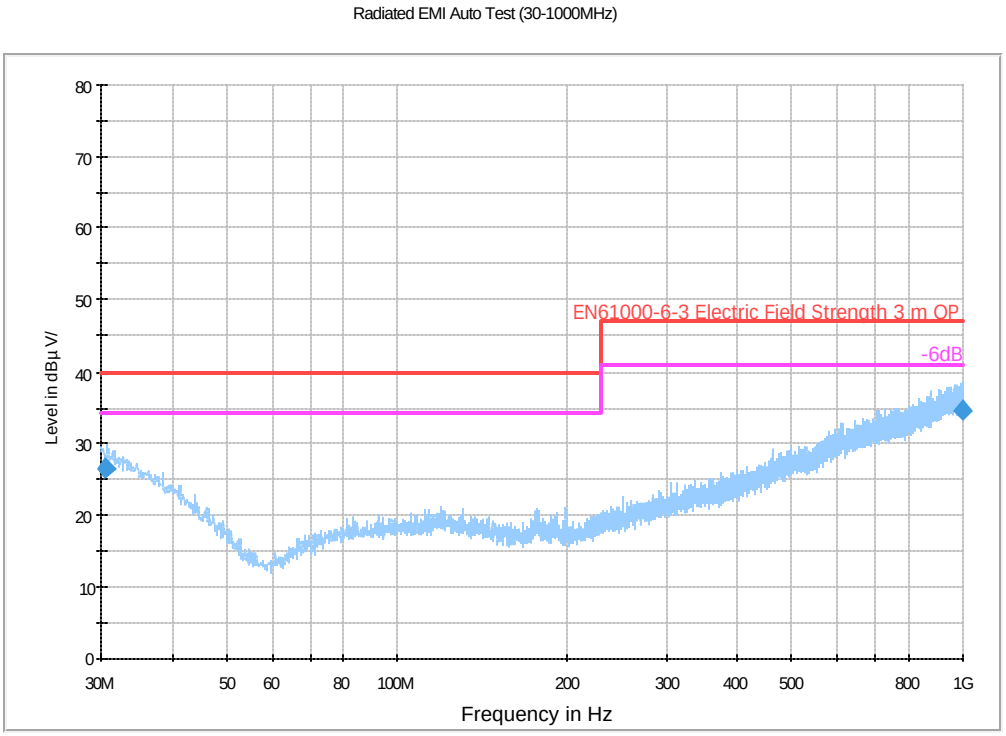
Figure 1: Spectral Diagrams, Radiated Emission, 30MHz-1000MHz, Horizontal



MEASUREMENT RESULT:

Frequency (MHz)	QuasiPeak (dBµ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµ V/m)
31.877000	25.5	1000.0	120.000	177.0	H	273.0	18.6	14.5	40.0
964.221000	34.2	1000.0	120.000	165.0	H	91.0	25.2	12.8	47.0

Figure 2: Spectral Diagrams, Radiated Emission, 30MHz-1000MHz, Vertical



MEASUREMENT RESULT:

Frequency (MHz)	QuasiPeak (dBµ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµ V/m)
30.499000	26.4	1000.0	120.000	100.0	V	196.0	19.3	13.6	40.0
999.147000	34.7	1000.0	120.000	191.0	V	-17.0	25.7	12.3	47.0

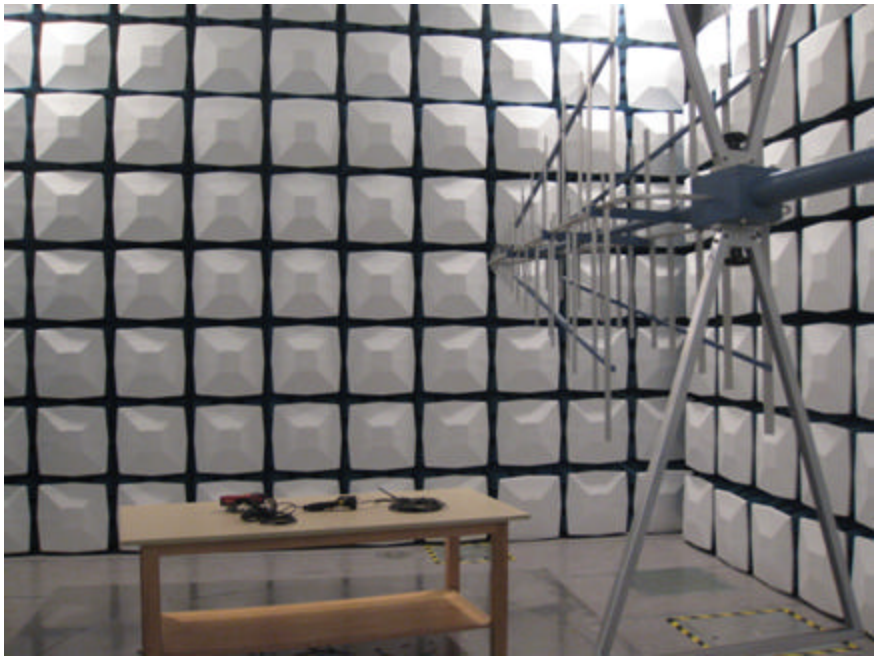
5 Test Results I MM U N I T Y

The immunity test was not necessary for the EUT because it contains no electronic control circuity.

According to clause 7 of EN 61000-6-1:2007, the EUT is deemed to fulfill the relevant immunity requirements without actual testing.

6 Photographs of the Test Set-Up

Photograph 1: Set-up for Radiated Emission



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