

**EMC TEST REPORT****No. SH08060457-001**

Applicant : Changzhou Jutai Electronic Co., Ltd.  
No.8 Huayang Road, Hi-Tech Industry  
Develop Zone, Changzhou 213031, Jiangsu,  
China

Manufacturer : Changzhou Jutai Electronic Co., Ltd.  
No.8 Huayang Road, Hi-Tech Industry  
Develop Zone, Changzhou 213031, Jiangsu,  
China

Equipment : Power supply for general purpose (Linear  
Transformer)

Type/Model : See APPENDIX I for details.

**TEST RESULT : PASS**

**SUMMARY**

The equipment comply with the requirements according to the following standards:

**EN 55014-1: 2006:** Electromagnetic compatibility-Requirements for household appliances, electric tools and similar apparatus Part 1: Emission

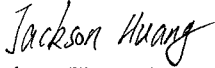
**EN 55014-2: 1997/+A1:2001:** Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus Part 2: Immunity – Product family standard

**EN 61000-3-2: 2006:** Limits for harmonic current emissions(equipment input current  $\leq 16A$  per phase)

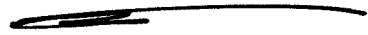
**EN 61000-3-3: 1995/+A1:2001/+A2:2005:** Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current  $\leq 16A$

Date of issue: June 19, 2008

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Reviewed by:

  
Jonny Jing (*Reviewer*)

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## 1.GENERAL INFORMATION

### 1.1 Description of Equipment Under Test (EUT)

EUT : Power supply for general purpose (Linear Transformer)

Description of EUT : EUT has serials models. They are tested in the original reports. All input charge to 230-240 VAC 50 Hz and standard has been updated. After technical evaluation, no further test is conducted. We listed the worst data here. For further information see the Original Test Report.

No.	Original Test Report No.	MODEL
1	JSH0405356-001,JSH0405356-001A1	JT-6V1000,JT-6V1200, JT-6V2000,JT-6V2500,JT-12V500, JT-12V830, JT-12V1000,JT-12V1250, JT-12V1700,JT-12V2100,JT-12V2500,JT-12V3000,JT-12V4200, JT-12V5000, JT-12V6000, JT-12V7000,JT-12V8000, JT-12V9000, JT-250, JT-300, JT-450,JT-500, JT-650, JT-850,JT-1000, JT-1200,JT-1270, JT-1500,JT-2000,JT-2500,JT-3000,JT-3500,JT-4000, JT-4500, JT-5000, JT-6250, JT-6700, JT-7500,JT-36V280,JT-36V560,JT-36V1000
2	JSH05110746-001 JSH05110746-001/A1	JT-36V800 JT12V3500 JT-36V1250 JT-1875 JT-36V1670 JT-36V2000 JT-36V2660 JT-36V3000 JT-1200
3	JSH05120723-001	JT-12V600,JT-36V167,JT-36V445,JT-36V612,JT-917
4	JSH006050155-001	JT-aaVbbbb(1-40VAC,10-5000mA)
5	JSH006080009-001	JT-***V*** (1-40V,10-2000mA,MAX:M 24VA)
6	JSH0310018-001	JT-12V500-IP44,JT-12V830-IP44,JT-12V1250-IP44,JT-12V500-IP64,JT-12V830-IP64,JT-12V1250-IP64
7	JSH007010669-001	JT-250(IP44),JT-300(IP44), JT-450(IP44),JT-650(IP44),JT-850(IP44),JT-1000(IP44),JT-6V2000-IP44,JT-12V1000-IP44, JT-12V1700-IP44
8	V007110115-1	JT-24V1660-IP64, JT-24V1875-IP44, JT-12V3500-IP64, JT-12V3750-IP64
9	JSH0405357-001 JSH0405357-001A1 JSH0405357-001A2	JT-6V2000-IP64,JT-12V1000-IP64,JT-12V1700-IP64,JT-12V2100-IP64,JT-12V2500-IP64,JT-12V3000-IP64,JT-12V4200-IP64,JT-12V5000-IP64,JT-12V6000-IP64,JT-12V7000-IP64,JT-12V8000-IP64,JT-12V9000-IP64,JT-12V10000-IP64,JT-12V12500-IP64,JT-12V15000-IP64,JT-450(IP64),JT-650(IP64),JT-850(IP64),JT-1000(IP64),JT-1200(IP64),JT-1500(IP64),JT-2000(IP64),JT-2500(IP64),JT-3000(IP64),JT-3500-IP64,JT-4000-IP64,JT-4500-IP64,JT-5000-IP64,JT-6250-IP64,JT-6700-IP64,JT-7500-IP64,JT-8350-IP64,JT-3.5V7000(IP64)
10	JSH0412026-001	JT-1500-IP68,JT-2500-IP68,JT-3500-IP68,JT-4500-IP68,JT-6250-IP68
11	JSH006110356-001	JT-12V5000-IP64, JT-12V8000-IP64, JT-12V9000-IP64, JT-12V10000-IP64, JT-12V15000-IP64
12	JSH006110788-001	JT-***v***-IP44(1-40V,10-1700mA)

No.	Original Test Report No.	MODEL
13	ST20024DC	JT-DC3V500,JT-DC4.5V1000,JT-DC6V400,JT-DC6V1000,JT-DC6V2000,JT-DC7.5V450,JT-DC9V450,JT-DC9V1000,JT-DC12V400,JT-DC12V500,JT-DC12V1000,JT-DC15V400,JT-DC15V500,JT-DC18V400,JT-DC18V500,JT-DC20V400,JT-DC20V500
14	JSH0304102	JT-DC4.5V450
15	JSH0405358-001	JT-DC6V150,JT-DC6V500,JT-DC9V450,JT-DC12V400,JT-DC12V500,JT-DC15V400,JT-DC15V500,JT-DC18V400,JT-DC6V1000,JT-DC18V500,JT-DC20V400,JT-DC20V500,JT-DC24V400,JT-DC24V500,JT-DC28V400,JT-DC12V1000,JT-DC15V1400,JT-DC18V1000,JT-DC12V2000,JT-DC12V3000,JT-DC12V4000,JT-DC12V5000
16	JSH0411521-001	JT-DC3V150. JT-DC4.5V100,JT-DC4.5V300,JT-DC8V400,JT-DC12V200,JT-DC12V300,JT-DC15V200,JT-DC15V600,JT-DC15V800,JT-DC24V200,JT-DC24V300
17	JSH006030688-001	JT-DCaaVbbbb(1-40VDC,10-2000mA,MAX 15W)
18	JSH0310016-001	JT-DC12V200-IP44,JT-DC12V300-IP44,JT-DC12V400-IP44,JT-DC12V500-IP44,JT-DC12V600-IP44,JT-DC12V200-IP64,JT-DC12V300-IP64,JT-DC12V400-IP64,JT-12V500-IP64,JT-12V600-IP64
19	JSH05040153-001	JT-DC24V50-IP44, JT-DC24V200-IP44, JT-DC24V300-IP44, JT-DC24V400-IP44, JT-DC24V500-IP44, JT-DC24V600-IP44, JT-DC24V850-IP44
20	JSH006110790	JT-DC***V****-IP44

Model number : See APPENDIX I for details.

Rating : See APPENDIX I for details.

Mains lead : None

Data cable : None

EUT type :  Table top

Floor standing

EUT is toy, defined as :  Category A

Category B

Category C

Category D

Category E

Sample received date : June 11, 2008

Date of test : June 19, 2008

**1.2 Description of Client**

Applicant : Changzhou Jutai Electronic Co., Ltd.  
No.8 Huayang Road, Hi-Tech Industry Develop  
Zone, Changzhou 213031, Jiangsu, China

Person of contact : Ms. Lana Li

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Manufacturer : Changzhou Jutai Electronic Co., Ltd.  
No.8 Huayang Road, Hi-Tech Industry Develop  
Zone, Changzhou 213031, Jiangsu, China

**1.3 Description of Test Facility**

Name Intertek Testing Service Shanghai Limited

Address Building 86, No. 1198 Qinzhou Road(North),  
Shanghai 200233, P.R. China

Telephone 86 21 61278200

Telefax 86 21 54262353

Subcontractor :

Name Shanghai Institute of Measurement Technology

Address 716 Yishan Road, Shanghai 200233, P.R. China

Telephone 86 21 64700066

## **2.TEST SPECIFICATIONS**

### **2.1 Standards**

EN 55014-1: 2006: Electromagnetic compatibility-Requirements for household appliances, electric tools and similar apparatus Part 1: Emission

EN 55014-2: 1997/+A1: 2001: Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus Part 2: Immunity – Product family standard

EN 61000-3-2: 2006: Limits for harmonic current emissions(equipment input current  $\leq 16\text{A}$  per phase)

EN 61000-3-3: 1995/+A1: 2001/+A2: 2005: Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current  $\leq 16\text{A}$

### **2.2 Mode of operation during the test / Test peripherals used**

Within this test report, EUT was tested with a variable resistive load designed to ensure that the maximum specified current and/or voltage of the device under test could be obtained and the worst data was listed in the report.

### 2.3 Instrument list

Equipment	Type	Manu.	Internal no.	Cal. Date	Due date
Test Receiver	ESCS 30	R&S	EC 2107	2008-1-23	2009-1-22
Test Receiver	ESIB 26	R&S	EC 3045	2007-6-30	2008-6-29
Voltage Probe	ESH2-Z3	R&S	EC 3405	2008-1-23	2009-1-22
A.M.N.	ESH2-Z5	R&S	EC 3119	2008-1-23	2009-1-22
A.M.N.	ESH3-Z5	R&S	EC 2109	2008-1-23	2009-1-22
A.M.N.	ENV 216	R&S	EC 3394	2007-10-19	2008-10-18
I.S.N.	ENY 22	R&S	EC 3218	2008-1-23	2009-1-22
I.S.N.	ENY 41	R&S	EC 3220	2008-1-23	2009-1-22
Current probe	EZ-17	R&S	EC 3221	2008-1-23	2009-1-22
Absorbing clamp	MDS 21	R&S	EC 2108	2008-1-26	2009-1-25
Tri-loop	HXYZ 9170	Schwarzbeck	EC 3384	2007-6-30	2008-6-29
Harmonic-flicker system	5001ix-PACS-1	CI	EC 2110	2008-1-23	2009-1-22
Conduct immunity system	UCS 500M6B	EM TEST	EC 2958	2008-2-9	2009-2-8
Automatic transformer	MV2616	EM TEST	EC 2957	Not required	Not required
Capacity clamp	HFK	EM TEST	EC 2959	Not required	Not required
ESD generator	ditto	EM TEST	EC 2956	2008-1-24	2009-1-23
Surge generator	TSS 500M4	EM TEST	EC 2961	2008-1-23	2009-1-22
Surge generator	TSS 500M2F	EM TEST	EC 2960	2008-1-23	2009-1-22
Surge Coupling network	CNV 504M	EM TEST	EC 2958-2	2008-1-23	2009-1-22
Surge Coupling network	CNV 504S1	EM TEST	EC 2958-1	2008-1-23	2009-1-22
Signal generator	SML 01	R&S	EC 2338	2008-1-23	2009-1-22
Power amplifier	75A250	AR	EC 3043-1	2007-8-21	2008-8-20
CDN	CDN M216	Schaffner	EC 2113-2	2007-1-23	2009-1-22
CDN	CDN M316	Schaffner	EC 2113-1	2007-1-23	2009-1-22
CDN	CDN T2	EM TEST	EC 3043-2	2008-1-23	2009-1-22
CDN	CDN T4	EM TEST	EC 3043-4	2008-1-23	2009-1-22
EM clamp	EM 101	EM TEST	EC 3043-6	2007-8-21	2008-8-20
Power meter	PM2002	AR	EC3043-7	2008-1-23	2009-1-22
Power sensor	PH2000	AR	EC3043-8	2008-1-23	2009-1-22
Attenuator	ATT6/75	EM TEST	EC 3043-3	2008-1-23	2009-1-22
Attenuator	68-6-44	Weinschel	EC 3043-9	2008-1-23	2009-1-22
DDC	DC 2600	AR	EC 3043-5	2008-1-23	2009-1-22
DDC	DC 6180A	AR	EC 3044-5	2008-1-23	2009-1-22
DDC	DC 7144A	AR	EC 3044-6	2008-1-23	2009-1-22
Calibration Impedance	50	AR	EC 3043-12	2008-1-23	2009-1-22
Calibration Impedance	R100	AR	EC 3043-10	2008-1-23	2009-1-22
Calibration Impedance	R100	AR	EC 3043-11	2008-1-23	2009-1-22
Calibration Impedance	CAL U100A	Schaffner	EC 2113-3	2008-1-23	2010-1-22
Calibration Impedance	TRA U150	Schaffner	EC 2113-4	2008-1-23	2010-1-22
Ultra-broadband antenna	HL 562	R&S	EC 3046-1	2007-6-30	2008-6-29

Horn antenna	HF 906	R&S	EC 3049	2007-6-30	2008-6-29
Pre-amplifier	Pre-amp 18	R&S	EC 3222	2007-6-30	2008-6-29
Log-period antenna	AT 1080	AR	EC 3044-7	2007-8-21	2008-8-20
Biconical antenna	3109PX	ETS	EC3564	2007-8-21	2008-8-20
Horn antenna	AT 4002	AR	EC 3044-8	2007-8-21	2008-8-20
Signal generator	SMR 20	R&S	EC 3044-1	2007-8-21	2008-8-20
Power amplifier	150W1000	AR	EC 3044-2	2007-8-21	2008-8-20
Power amplifier	25S1G4	AR	EC 3044-4	2007-8-21	2008-8-20
Field meter	FM 5004	AR	EC 3044-3	2007-8-21	2008-8-20
Field sensor	FP 6001	AR	EC 3044-9	2007-8-21	2008-8-20
Semi-anechoic chamber	-	Albatross project	EC 3048	2007-7-13	2008-7-12
Fully-anechoic chamber	-	Albatross project	EC 3047	2007-7-13	2008-7-12
Digital illuminance meter	TES 1332	TES	EC 2451	2008-6-3	2009-6-2
Therom-Hygrograph	ZJ1-2A	S.M.I.F.	EC 3323	2008-1-11	2009-1-10
Therom-Hygrograph	ZJ1-2A	S.M.I.F.	EC 3324	2008-2-5	2009-2-4
Therom-Hygrograph	ZJ1-2A	S.M.I.F.	EC 3325	2007-12-22	2008-12-21
Therom-Hygrograph	ZJ1-2A	S.M.I.F.	EC 3326	2007-12-22	2008-12-21
Pressure meter	YM3	Shanghai Mengde	EC 3320	2007-3-23	2008-3-22
Isolation transformer	-	Intertek	EC 2100	Not required	Not required
Stable power source	APS 11020	APC	EC 3209	Not required	Not required
Freq. Variable power source	AFC 11010	APC	EC 3210	Not required	Not required
Freq. Variable power source	AFC 33020	APC	EC 3211	Not required	Not required
Multi-meter	179	FLUKE	EC 3226	2007-9-11	2008-9-10
Shielded room	-	Zhongyu	EC 2838	2004-2-3	2009-2-2
Shielded room	-	Zhongyu	EC 2839	2004-2-3	2009-2-2

#### 2.4. Test Summary

**This report applies to tested sample only. This report shall not be reproduced in part without written approval of Intertek Testing Service Shanghai Limited.**

TEST ITEM	RESULT	NOTE
Mains terminal continuous disturbance voltage	Pass	
Mains terminal discontinuous disturbance voltage/click	NA	
Continuous disturbance power	Pass	
Radiated emission	NA	
Harmonics	Pass	
Voltage fluctuation-Flicker	Pass	

Notes: 1: NA =Not Applicable

### Emission Test

### 3. Mains/Load/Control Terminal Continuous Disturbance Voltage

**Test result: PASS**

#### 3.1 Terminal Voltage Limits for the frequency range 148.5kHz to 30MHz

3.1.1 Limits for household appliances, electric power tools and similar devices at mains terminals

For household appliance

Frequency range (MHz)	Limits dB(μV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 ~ 56 *	59 ~ 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

Note : 1. \* means the limit decreasing linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz  
 2. If the limit for the measurement with the average detector is met when using a receiver with a quasi-peak detector, the equipment under test shall be deemed to meet both limits and the measurement using the receiver with an average detector need not be carried out.

For electric power tools

Frequency (MHz)	Rated motor power not exceeding 700W		Rated motor power above 700W and not exceeding 1000W		Rated motor power above 1000W	
	dB(μV)		dB(μV)		dB(μV)	
	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.15-0.35	66-59*	59-49*	70-63*	63-53*	76-69*	69-59*
0.35-5	59	49	63	53	69	59
5-30	64	54	68	58	74	64

Notes : 1. \* means the limit value decreasing linearly with the logarithm of the frequency.  
 2. If the limit for the measurement with the average detector is met when using a receiver with a quasi-peak detector, the equipment under test shall be deemed to meet both limits and the measurement using the receiver with an average detector need not be carried out.

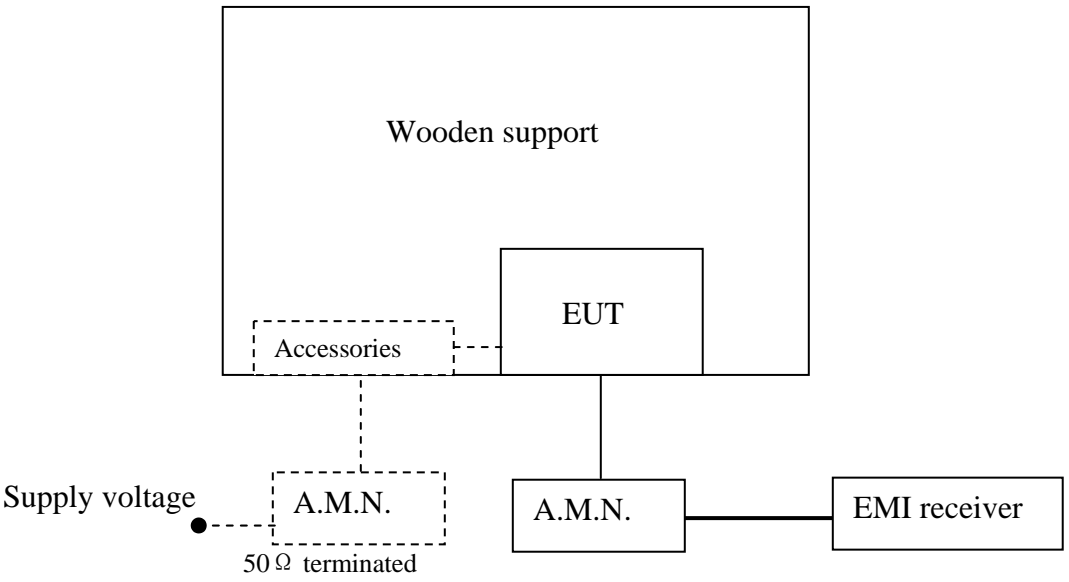
3.1.2 Limits for household appliances and similar devices at additional terminals

Frequency range (MHz)	Limits dB(μV)	
	Quasi-peak	Average
0.15 ~ 0.5	80	70
0.5 ~ 5	74	64
5 ~ 30	74	64

Note: 1. If the limit for the measurement with the average detector is met when using a receiver with a quasi-peak detector, the equipment under test shall be deemed to meet both limits and the measurement using the receiver with an average detector need not be carried out.

3.2 Test setup

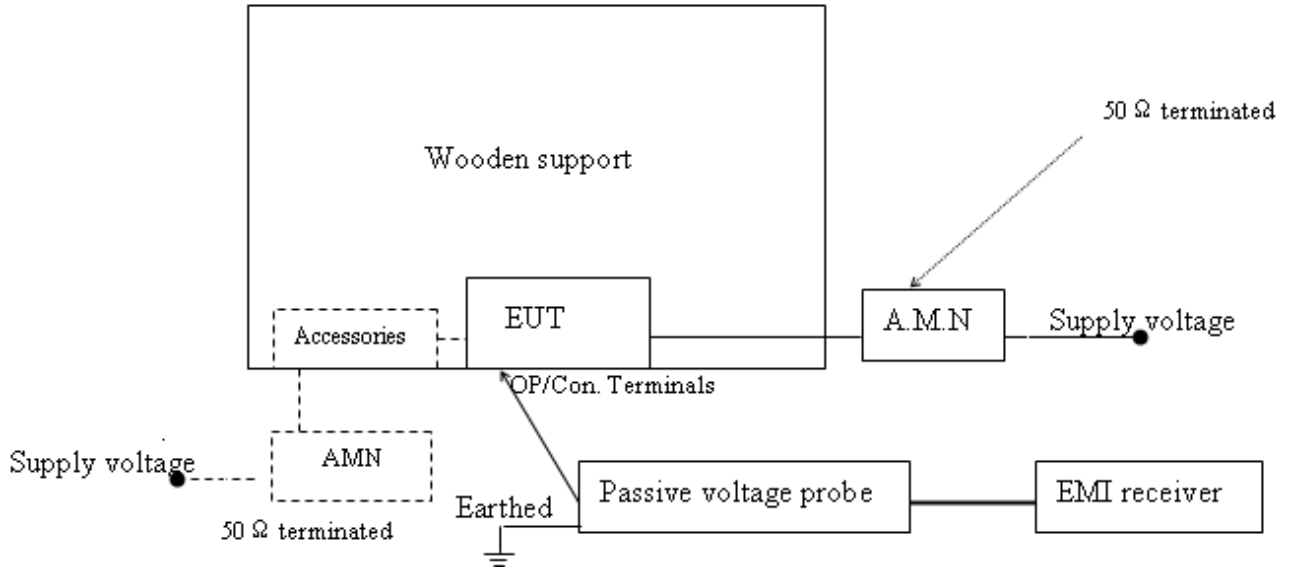
At mains terminal



For table top equipment, wooden support is 0.8m height table

For floor standing equipment, wooden support is 0.1m height rack.

At output and control terminals



Note: — : power line  
 — : signal line  
 - - - - - : means the test setup while available

### 3.3 Test Setup and Test Procedure

Measurement was performed in shielded room, and instruments used were follow EN 55014-1 clause 5.1.1, 5.1.2, 5.1.3 and 5.1.4 if applicable.  
 Detailed test procedure and arrangement was follow EN 55014-1 clause 5.2.  
 Measurement methods and operation conditions of EUT was according to EN 55014-1 clause 7.  
 Frequency range 150kHz – 30MHz was checked and EMI receiver measurement bandwidth was set to 9kHz.

### 3.4 Test Protocol

Temperature : 20°C Relative Humidity : 40%

#### At mains terminal: Pass

Frequency (MHz)	Quasi-peak		Average	
	Disturbance level dB(μV)	Permitted limit dB(μV)	Disturbance level dB(μV)	Permitted limit dB(μV)
0.16	*	*	*	*
0.24	*	*	*	*
0.55	*	*	*	*
1.00	*	*	*	*
1.40	*	*	*	*
2.00	*	*	*	*
3.50	*	*	*	*
6.00	*	*	*	*
10.00	*	*	*	*
22.00	*	*	*	*
30.00	*	*	*	*

Note: \* means the emission level 6dB below the relevant limit.

#### At load/control terminal: NA

Frequency (MHz)	Quasi-peak		Average	
	Disturbance level dB(μV)	Permitted limit dB(μV)	Disturbance level dB(μV)	Permitted limit dB(μV)
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

Note: \* means the emission level 20dB below the relevant limit.

### **3.5 Emission Waveform**

### **3.6 Measurement Uncertainty**

The measurement uncertainty describes the overall uncertainty of the given measured value during the operation of the EUT.

Measurement uncertainty at mains terminal:  $\pm 1.99\text{dB}$

Measurement uncertainty at load/control terminal:  $\pm 1.98\text{dB}$

The measurement uncertainty is given with a confidence of 95%,  $k=2$ .

The measurement uncertainty is traceable to internal procedure TI-036.

## 4. Continuous Disturbance Power

**Test result: PASS**

### 4.1 Disturbance Power Limits for the frequency range 30MHz to 300MHz

#### 4.1.1 Limits for household and similar appliances

Frequency (MHz)	Quasi-peak dB(pW)	Average dB (pW)
30 to 300	45 to 55*	35 to 45*

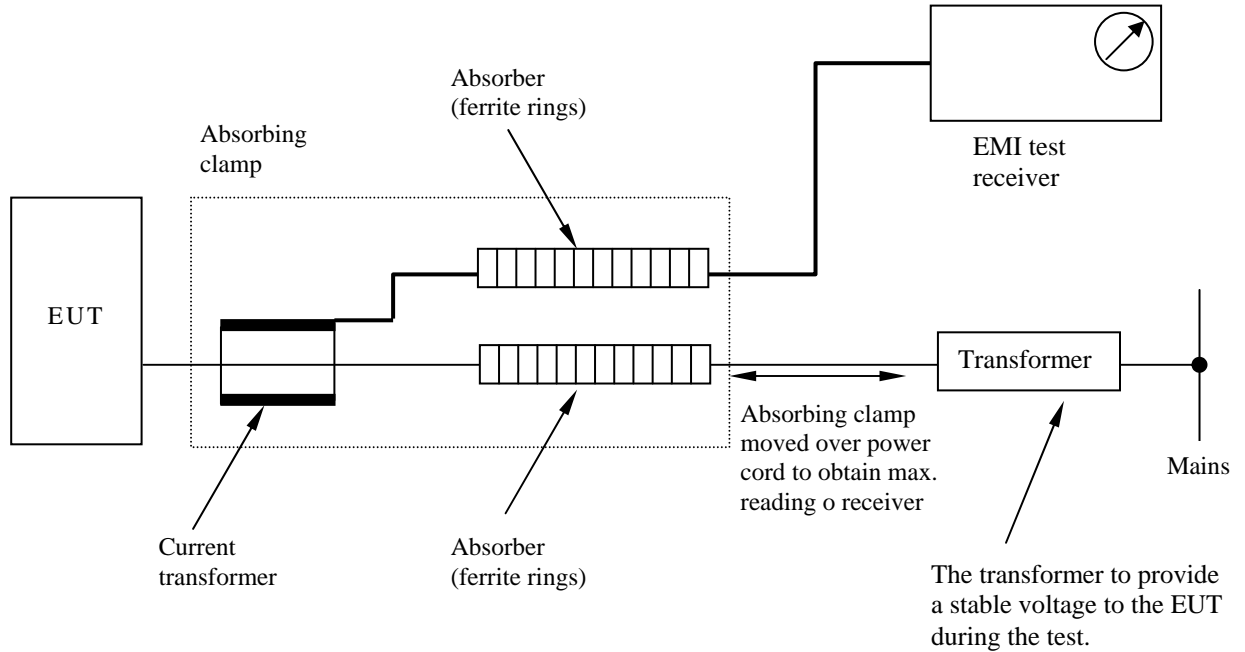
Note: 1. \* means the limit increasing linearly with the frequency.  
2. If the limit for the measurement with the average detector is met when using a receiver with a quasi-peak detector, the equipment under test shall be deemed to meet both limits and the measurement with the receiver with average detector need not be carried out.

#### 4.1.2 Limits for electric tools

Frequency (MHz)	Rated motor power not exceeding 700W		Rated motor power above 700W and not exceeding 1000W		Rated motor power above 1000W	
	dB(pW)		dB(pW)		dB(pW)	
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
30-300	45-55*	35-45*	49-59*	39-49*	55-65*	45-55*

Notes: 1. \* means the limit increasing linearly with the frequency.  
2. If the limit for the measurement with the average detector is met when using a receiver with a quasi-peak detector, the equipment under test shall be deemed to meet both limits and the measurement with the receiver with average detector need not be carried out.

### 4.2 Block Diagram of Test Setup



### 4.3 Test Setup and Test Procedure

Measurement was performed in shielded room.  
 Instruments used were follow EN 55014-1 clause 6.1.  
 Detailed test procedure and arrangement was follow EN 55014-1 clause 6.2 and 6.3.  
 Operation conditions of EUT was according to EN 55014-1 clause 7.  
 Frequency range 30MHz – 300MHz was checked and EMI receiver measurement bandwidth was set to 120kHz.

#### 4.4 Test Protocol

Temperature : 20°C      Relative Humidity : 40%

At mains lead: Pass

Frequency (MHz)	Quasi-peak		Average	
	Disturbance level dB(pW)	Permitted limit dB(pW)	Disturbance level dB(pW)	Permitted limit dB(pW)
30.00	*	45.00	*	35.00
45.00	*	45.56	*	35.56
65.00	*	46.30	*	36.30
90.00	*	47.22	*	37.22
150.00	*	49.44	*	39.44
180.00	*	50.56	*	40.56
220.00	*	52.04	*	42.04
300.00	*	55.00	*	45.00

Note: \* means the emission level 6dB lower than the relevant limit.

At auxiliary leads: NA

Frequency (MHz)	Quasi-peak		Average	
	Disturbance level dB(pW)	Permitted limit dB(pW)	Disturbance level dB(pW)	Permitted limit dB(pW)
30.00	-	-	-	-
45.00	-	-	-	-
65.00	-	-	-	-
90.00	-	-	-	-
150.00	-	-	-	-
180.00	-	-	-	-
220.00	-	-	-	-
300.00	-	-	-	-

Note: \* means the emission level 6dB lower than the relevant limit.

#### **4.5 Emission Waveform**

#### **4.6 Measurement Uncertainty**

The measurement uncertainty describes the overall uncertainty of the given measured value during the operation of the EUT.

Measurement uncertainty of mains lead and auxiliary lead:  $\pm 3.69\text{dB}$

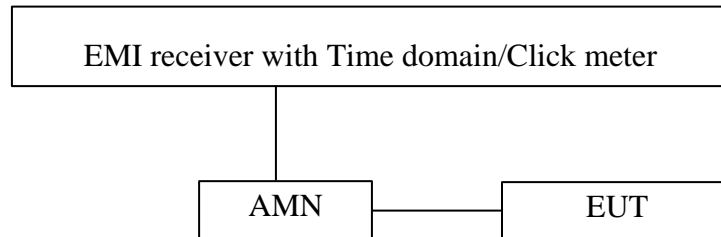
The measurement uncertainty is given with a confidence of 95%,  $k=2$

The measurement uncertainty is traceable to internal procedure TI-036.

## 5. Mains Terminal Discontinuous Disturbance Voltage

Test result: NA

### 5.1 Block Diagram of Test Setup



### 5.2 Test Set-up and Test Procedure

Measurement was performed in shielded room.

EMI receiver compliance to CISPR 16-1-1 with time domain function used during measurement.

EUT arrangement was follow EN 55014-1 clause 5.2.

Operation conditions were follow EN 55014-1 clause 7.

0.15MHz, 0.5MHz, 1.4MHz and 30MHz were spot checked, and upper quartile methods used during measurement.

The final judgment of test result was according to figure 9 of EN 55014-1.

### 5.3 Test Protocol

Temperature : °C Relative Humidity : %

Frequency (MHz)	0.15	0.5	1.4	30.0
Permitted limit for continuous interference (dB $\mu$ V)	66.0	56.0	56.0	60.0
Counted click/switch operation number				
Observed time (min)				
Click duration (ms)				
Click rate N				
Factor				
Permitted limits for clicks (dB $\mu$ v)				
Counted clicks exceeding the limits				
Test result	Pass	Pass	Pass	Pass
Any other descriptions:				

### 5.4 Measurement Uncertainty

The measurement uncertainty describes the overall uncertainty of the given measured value during the operation of the EUT.

Measurement uncertainty of mains lead and auxiliary lead:  $\pm 2.72$ dB

The measurement uncertainty is given with a confidence of 95%, k=2

The measurement uncertainty is traceable to internal procedure TI-036.

## 6. Radiated emission

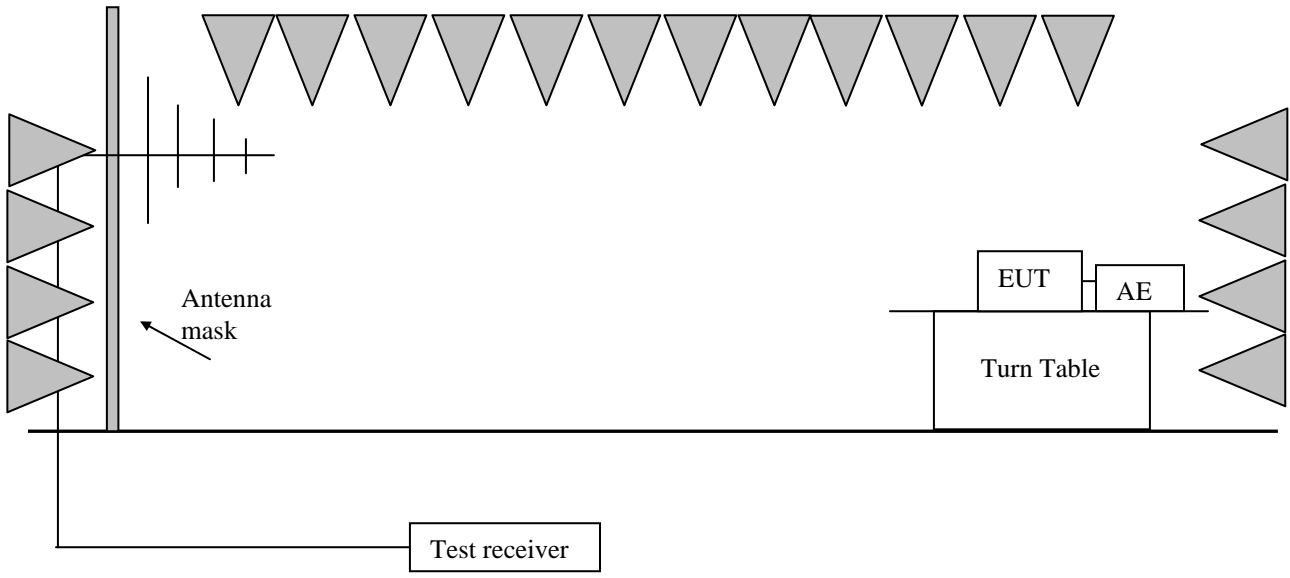
Test result: NA

### 6.1 Radiated emission limit from frequency range 30MHz – 1000MHz

Frequency (MHz)	Permitted limit in dB $\mu$ V/m (Quasi-peak) of Measurement Distance 3m	Permitted limit in dB $\mu$ V/m (Quasi-peak) of Measurement Distance 10M
30-230	40	30
230-1000	47	37

Note: for the measurement distance other than 3m and 10m, the limit is varied according to 20dB/10 decades.

### 6.2 Block diagram and test set up



The measurement was applied in an 3 m semi-anechoic chamber.  
 Measurement was performed according to CISPR 22.  
 Setting of EUT is according to EN 55014-1 clause 7.3.6  
 The bandwidth setting on R&S Test Receiver ESI26 was 120kHz.  
 The frequency range from 30MHz to 1000MHz was checked.

### 6.3 Test Protocol

Temperature: °C

Relative humidity: %

Polarization	Frequency (MHz)	Emission level (dB $\mu$ V/m)	Limits (dB $\mu$ V/m)	Margin (dB $\mu$ V/m)
Horizontal	30.00		40	
	60.00		40	
	100.00		40	
	200.00		40	
	300.00		47	
	500.00		47	
	1000.00		47	
Vertical	30.00		40	
	60.00		40	
	100.00		40	
	200.00		40	
	300.00		47	
	500.00		47	
	1000.00		47	

Note: \* means margin >20dB.

## 6.4 Emission Waveform

## 6.5 Measurement uncertainty

The measurement uncertainty describes the overall uncertainty of the given measured value during the operation of the EUT.

Measurement uncertainty of radiated emission is:  $\pm 5.30\text{dB}$

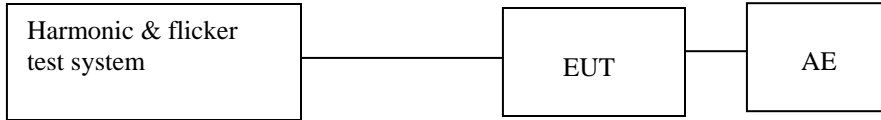
The measurement uncertainty is given with a confidence of 95%,  $k=2$ .

The measurement uncertainty is traceable to internal procedure TI-036.

## 7. Harmonics

**Test result:** **PASS**

### 7.1 Block Diagram of Test Setup



### 7.2 Test Setup and Test Procedure

Harmonics of the fundamental current were measured up to 40 order harmonics using a digital power meter with an analogue output and frequency analyser which was integrated in the harmonic & flicker test system. The measurements were carried out under steady conditions.



This product is not defined as lighting equipment, and has rated power less than 75W, therefore, no limit apply according to EN 61000-3-2



The EUT is kitchen machines as listed in the scope of IEC 60335-2-14, therefore, is deemed to conform to the harmonic current limits of this standard without further testing.

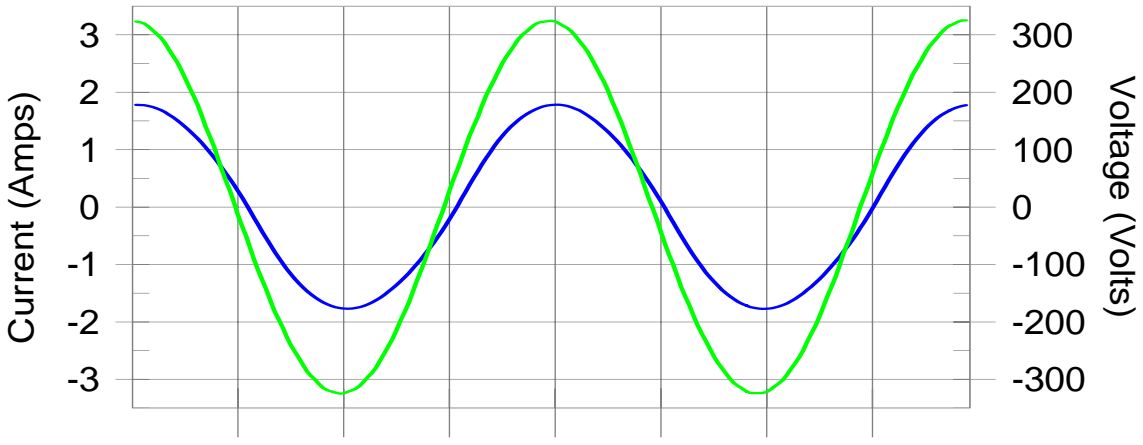
**7.3 Test Protocol**

Temperature : 20 °C Relative Humidity : 40 %

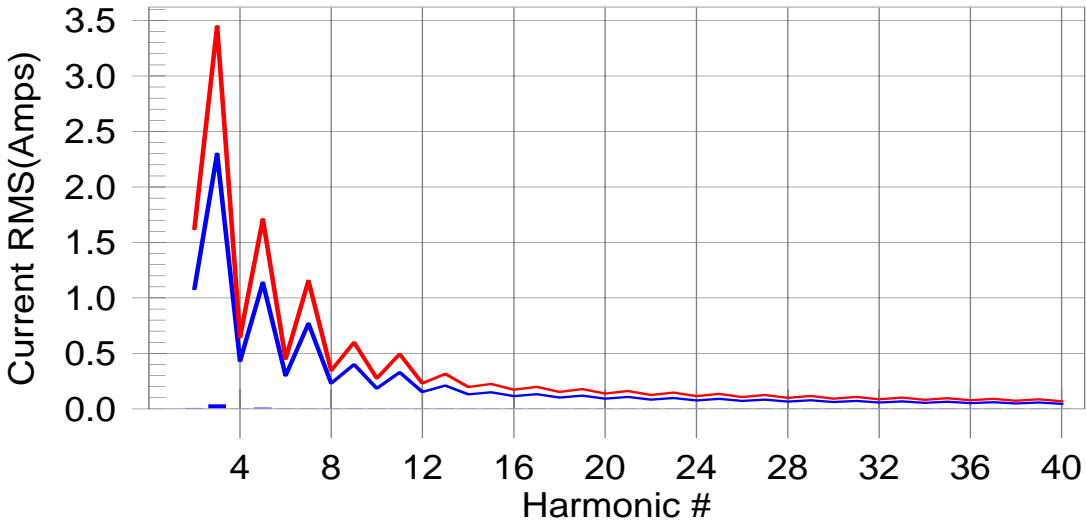
**Harmonics – Class-A per Ed. 2.1(Run time)**

Test Result: Pass Source qualification: Normal

Current & voltage waveforms



Harmonics and Class A limit line      European Limits



Test result: Pass Worst harmonic was #3 with 1.05% of the limit.

**Current Test Result Summary (Run time)**

Test Result: Pass Source qualification: Normal  
 THC(A): 0.04 I-THD(pk%): 3.58 POHC(A): 0.000 POHC Limit(A): 0.251  
 Highest parameter values during test:

V\_RMS (Volts): 229.76 Frequency(Hz): 50.00  
 I\_Peak (Amps): 1.788 I\_RMS (Amps): 1.272  
 I\_Fund (Amps): 1.272 Crest Factor: 1.421  
 Power (Watts): 287.7 Power Factor: 0.985

Harm#	Harms(avg)	100%Limit	%of Limit	Harms(max)	150%Limit	%of Limit	Status
2	0.005	1.080	0.5	0.006	1.620	0.34	Pass
3	0.035	2.300	1.5	0.036	3.450	1.05	Pass
4	0.001	0.430	0.3	0.002	0.645	0.28	Pass
5	0.009	1.140	0.8	0.009	1.710	0.52	Pass
6	0.000	0.300	0.1	0.001	0.450	0.14	Pass
7	0.002	0.770	0.2	0.002	1.155	0.18	Pass
8	0.000	0.230	0.1	0.000	0.345	0.13	Pass
9	0.001	0.400	0.3	0.001	0.600	0.24	Pass
10	0.000	0.184	0.1	0.000	0.276	0.10	Pass
11	0.001	0.330	0.2	0.001	0.495	0.17	Pass
12	0.000	0.153	0.1	0.000	0.230	0.13	Pass
13	0.000	0.210	0.1	0.000	0.315	0.10	Pass
14	0.000	0.131	0.1	0.000	0.197	0.10	Pass
15	0.000	0.150	0.1	0.000	0.225	0.12	Pass
16	0.000	0.115	0.1	0.000	0.173	0.10	Pass
17	0.000	0.132	0.1	0.000	0.199	0.13	Pass
18	0.000	0.102	0.1	0.000	0.153	0.08	Pass
19	0.000	0.118	0.1	0.000	0.178	0.11	Pass
20	0.000	0.092	0.1	0.000	0.138	0.09	Pass
21	0.000	0.107	0.1	0.000	0.161	0.07	Pass
22	0.000	0.084	0.1	0.000	0.125	0.08	Pass
23	0.000	0.098	0.1	0.000	0.147	0.06	Pass
24	0.000	0.077	0.1	0.000	0.115	0.09	Pass
25	0.000	0.090	0.1	0.000	0.135	0.07	Pass
26	0.000	0.071	0.1	0.000	0.106	0.10	Pass
27	0.000	0.083	0.1	0.000	0.125	0.07	Pass
28	0.000	0.066	0.1	0.000	0.099	0.10	Pass
29	0.000	0.078	0.1	0.000	0.116	0.09	Pass
30	0.000	0.061	0.1	0.000	0.092	0.10	Pass
31	0.000	0.073	0.1	0.000	0.109	0.11	Pass
32	0.000	0.058	0.1	0.000	0.086	0.11	Pass
33	0.000	0.068	0.1	0.000	0.102	0.09	Pass
34	0.000	0.054	0.1	0.000	0.081	0.09	Pass
35	0.000	0.064	0.1	0.000	0.096	0.10	Pass
36	0.000	0.051	0.1	0.000	0.077	0.10	Pass
37	0.000	0.061	0.1	0.000	0.091	0.14	Pass
38	0.000	0.048	0.1	0.000	0.073	0.11	Pass
39	0.000	0.058	0.1	0.000	0.087	0.11	Pass
40	0.000	0.046	0.1	0.000	0.069	0.11	Pass

**7.4 Measurement Uncertainty**

The measurement uncertainty describes the overall uncertainty of the given measured value during the operation of the EUT.

Measurement uncertainty of harmonic test is:  $\pm 4.03\%$

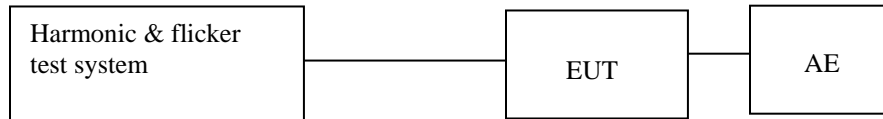
The measurement uncertainty is given with a confidence of 95%, k=2.

The measurement uncertainty is traceable to internal procedure TI-036.

## 8. Voltage Fluctuations-Flicker

**Test result**                      **PASS**

### 8.1 Block Diagram of Test Setup



### 8.2 Test Setup and Test Procedure

#### 8.2.1 Definition

**Flicker:** impression of unsteadiness of visual sensation induced by a lighting stimulus whose luminance or spectral distribution fluctuates with time.

**Pst:** Short-term flicker indicator The flicker severity evaluated over a short period (in minutes); Pst=1 is the conventional threshold of irritability

**Plt:** long-term flicker indicator; the flicker severity evaluated over a long period (a few hours). Using successive Pst values.

**dc:** the relative steady-state voltage change

**dmax:** the maximum relative voltage change

**d(t):** the value during a voltage change

#### 8.2.2 Test condition

The EUT was set to produce the most unfavorable sequence of voltage changes.

### 8.3 Test Protocol

The tested object operated under the operating condition specified in EN 61000-3-3  
The following limits apply

- “Plt” shall not exceed 0.65.
- “Pst” shall not exceed 1.0.
- “dc” shall not exceed 3.3%.
- d(t) shall not exceed 3.3% for more than 500ms.
- “dmax” shall not exceed:
  - 4% without additional conditions,
  - 6% switched manually or automatically more than twice per day
  - 7% attended whilst in use or switched automatically for no more than twice per day or attended while in use
  - for manual switch, dmax is measured in accordance with Annex B of standard, average dmax is calculated from 24 times measurement.

Temperature : 20 °C Relative Humidity : 40 %

#### Parameter values recorded during the test:

<b>Vrms at the end of test (Volt):</b>	<b>229.71</b>			
<b>Highest dt (%):</b>	<b>-1.48</b>	<b>Test limit (%):</b>	<b>3.30</b>	<b>Pass</b>
<b>Time(mS) &gt; dt:</b>	<b>0.0</b>	<b>Test limit (mS):</b>	<b>500.0</b>	<b>Pass</b>
<b>Highest dc (%):</b>	<b>0.18</b>	<b>Test limit (%):</b>	<b>3.30</b>	<b>Pass</b>
<b>Highest dmax (%):</b>	<b>-1.49</b>	<b>Test limit (%):</b>	<b>4.00</b>	<b>Pass</b>

### 8.4 Measurement Uncertainty

The measurement uncertainty describes the overall uncertainty of the given measured value during the operation of the EUT.

Measurement uncertainty of voltage fluctuation and flicker is:  $\pm 11.66\%$

The measurement uncertainty is given with a confidence of 95%, k=2.

The measurement uncertainty is traceable to internal procedure TI-036.

## **Immunity Test**

### **Performance criteria**

The performance criteria are based on the general criteria of the standard and derived from the product specification

**Criterion A:** Normal Performance within limits specified by the manufacturer, request or purchaser.

**Criterion B:** Continue to operate as intended after the test .No degradation of performance or loss of function. During the test degradation of performance is allowed, however no change of actual operating state or stored date.

**Criterion C:** Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls.

### **Conclusion**

The EUT contains no electronic control circuitry. It is classified to Category I of the standard and is therefore deemed to fulfill the relevant immunity requirements without testing.

### Appendix I: Models and Ratings

<b>AC-AC for Indoor Use Only</b>			
<b>MODEL</b>	<b>IP RATED</b>	<b>INPUT RATED</b>	<b>OUTPUT RATED</b>
JT-6V1000	IP20	230-240V AC 50Hz	6V AC 1000mA 6VA
JT-6V1200	IP20	230-240V AC 50Hz	6V AC 1200mA 7.2VA
JT-6V2000	IP20	230-240V AC 50Hz	6V AC 2000mA 12VA
JT-6V2500	IP20	230-240V AC 50Hz	6V AC 2500mA 15VA
JT-12V500	IP20	230-240V AC 50Hz	12V AC 500mA 6VA
JT-12V600	IP20	230-240V AC 50Hz	12V AC 600mA 7.2VA
JT-12V830	IP20	230-240V AC 50Hz	12V AC 830mA 10VA
JT-12V1000	IP20	230-240V AC 50Hz	12V AC 1000mA 12VA
JT-12V1250	IP20	230-240V AC 50Hz	12V AC 1250mA 15VA
JT-12V1700	IP20	230-240V AC 50Hz	12V AC 1700mA 20.4VA
JT-12V2100	IP20	230-240V AC 50Hz	12V AC 2100mA 25.2VA
JT-12V2500	IP20	230-240V AC 50Hz	12V AC 2500mA 30VA
JT-12V3000	IP20	230-240V AC 50Hz	12V AC 3000mA 36VA
JT-12V3500	IP20	230-240V AC 50Hz	12V AC 3500mA 42VA
JT-12V4200	IP20	230-240V AC 50Hz	12V AC 4200mA 50.4VA
JT-12V5000	IP20	230-240V AC 50Hz	12V AC 5000mA 60VA
JT-12V6000	IP20	230-240V AC 50Hz	12V AC 6000mA 72VA
JT-12V7000	IP20	230-240V AC 50Hz	12V AC 7000mA 84VA
JT-12V8000	IP20	230-240V AC 50Hz	12V AC 8000mA 96VA
JT-12V9000	IP20	230-240V AC 50Hz	12V AC 9000mA 108VA

<b>AC-AC for Indoor Use Only</b>			
<b>MODEL</b>	<b>IP RATED</b>	<b>INPUT RATED</b>	<b>OUTPUT RATED</b>
JT-250	IP20	230-240V AC 50Hz	24V AC 250mA 6VA
JT-300	IP20	230-240V AC 50Hz	24V AC 300mA 7.2VA
JT-450	IP20	230-240V AC 50Hz	24V AC 450mA 10.8VA
JT-500	IP20	230-240V AC 50Hz	24V AC 500mA 12VA
JT-650	IP20	230-240V AC 50Hz	24V AC 650mA 15.6VA
JT-850	IP20	230-240V AC 50Hz	24V AC 850mA 20.4VA
JT-917	IP20	230-240V AC 50Hz	24V AC 917mA 22VA
JT-1000	IP20	230-240V AC 50Hz	24V AC 1000mA 24VA
JT-1200	IP20	230-240V AC 50Hz	24V AC 1200mA 28.8VA
JT-1270	IP20	230-240V AC 50Hz	24V AC 1270mA 30.5VA
JT-1500	IP20	230-240V AC 50Hz	24V AC 1500mA 36VA
JT-1875	IP20	230-240V AC 50Hz	24V AC 1875mA 45VA
JT-2000	IP20	230-240V AC 50Hz	24V AC 2000mA 48 VA
JT-2500	IP20	230-240V AC 50Hz	24V AC 2500mA 60 VA
JT-3000	IP20	230-240V AC 50Hz	24V AC 3000mA 72 VA
JT-3500	IP20	230-240V AC 50Hz	24V AC 3500mA 84 VA
JT-4000	IP20	230-240V AC 50Hz	24V AC 4000mA 96 VA
JT-4500	IP20	230-240V AC 50Hz	24V AC 4500mA 108VA
JT-5000	IP20	230-240V AC 50Hz	24V AC 5000mA 120VA
JT-6250	IP20	230-240V AC 50Hz	24V AC 6250mA 150VA
JT-6700	IP20	230-240V AC 50Hz	24V AC 6700mA 160VA
JT-7500	IP20	230-240V AC 50Hz	24V AC 7500mA 180VA

<b>AC-AC for Indoor Use Only</b>			
<b>MODEL</b>	<b>IP RATED</b>	<b>INPUT RATED</b>	<b>OUTPUT RATED</b>
JT-36V167	IP20	230-240V AC 50Hz	36V AC 167mA 6VA
JT-36V280	IP20	230-240V AC 50Hz	36V AC 280mA 10VA
JT-36V445	IP20	230-240V AC 50Hz	36V AC 445mA 16VA
JT-36V560	IP20	230-240V AC 50Hz	36V AC 560mA 20VA
JT-36V612	IP20	230-240V AC 50Hz	36V AC 612mA 22VA
JT-36V800	IP20	230-240V AC 50Hz	36V AC 800mA 28.8VA
JT-36V1000	IP20	230-240V AC 50Hz	36V AC 1000mA 36VA
JT-36V1250	IP20	230-240V AC 50Hz	36V AC 1250mA 45VA
JT-36V1670	IP20	230-240V AC 50Hz	36V AC 1670mA 60VA
JT-36V2000	IP20	230-240V AC 50Hz	36V AC 2000mA 72VA
JT-36V2660	IP20	230-240V AC 50Hz	36V AC 2660mA 96VA
JT-36V3000	IP20	230-240V AC 50Hz	36V AC 3000mA 108VA
JT-aaVbbbb ("aa" denote output voltage and "bbbb" denote output current.)	IP20	230-240V AC 50Hz	1-40VAC, 10-5000mA, Max.29VA
JT-***V**** ("****" denote the output voltage from 010 to 400, stand for 1,0V to 40,0V interval 0,1V. "*****" denote the output current form 0010 to 2000, stand for 10mA to 2000mA interval 1mA.)	IP20	230-240V AC 50Hz	1-40VAC,10-2000mA, Max.24VA

<b>AC-AC for Outdoor Use</b>			
<b>MODEL</b>	<b>IP RATED</b>	<b>INPUT RATED</b>	<b>OUTPUT RATED</b>
JT-3.5V7000 (IP64)	IP64	230-240V AC 50Hz	3.5V AC 7000mA 24.5VA
JT-6V2000-IP44	IP44	230-240V AC 50Hz	6V AC 2000mA 12VA
JT-6V2000-IP64	IP64	230-240V AC 50Hz	6V AC 2000mA 12VA
JT-12V500-IP44	IP44	230-240V AC 50Hz	12V AC 500mA 6VA
JT-12V500-IP64	IP64	230-240V AC 50Hz	12V AC 500mA 6VA
JT-12V830-IP44	IP44	230-240V AC 50Hz	12VAC 830mA 10VA
JT-12V830-IP64	IP64	230-240V AC 50Hz	12VAC 830mA 10VA
JT-12V1000-IP44	IP44	230-240V AC 50Hz	12V AC 1000mA 12VA
JT-12V1000-IP64	IP64	230-240V AC 50Hz	12V AC 1000mA 12VA
JT-12V1250-IP44	IP44	230-240V AC 50Hz	12VAC 1250mA 15VA
JT-12V1250-IP64	IP64	230-240V AC 50Hz	12VAC 1250mA 15VA
JT-12V1700-IP44	IP44	230-240V AC 50Hz	12V AC 1700mA 20.4VA
JT-12V1700-IP64	IP64	230-240V AC 50Hz	12V AC 1700mA 20.4VA
JT-12V2100-IP64	IP64	230-240V AC 50Hz	12V AC 2100mA 25VA
JT-12V2500-IP64	IP64	230-240V AC 50Hz	12V AC 2500mA 30VA
JT-12V3000-IP64	IP64	230-240V AC 50Hz	12V AC 3000mA 36VA
JT-12V3500-IP64	IP64	230-240V AC 50Hz	12V AC 3500mA 42VA
JT-12V3750-IP64	IP64	230-240V AC 50Hz	12V AC 3750mA 45VA
JT-12V4200-IP64	IP64	230-240V AC 50Hz	12V AC 4200mA 50VA
JT-12V5000-IP64	IP64	230-240V AC 50Hz	12V AC 5000mA 60VA
JT-12V6000-IP64	IP64	230-240V AC 50Hz	12V AC 6000mA 72VA
JT-12V7000-IP64	IP64	230-240V AC 50Hz	12V AC 7000mA 84VA
JT-12V8000-IP64	IP64	230-240V AC 50Hz	12V AC 8000mA 96VA
JT-12V9000-IP64	IP64	230-240V AC 50Hz	12V AC 9000mA 108VA
JT-12V10000-IP64	IP64	230-240V AC 50Hz	12V AC 10000mA 120VA
JT-12V12500-IP64	IP64	230-240V AC 50Hz	12V AC 12500mA 150VA
JT-12V15000-IP64	IP64	230-240V AC 50Hz	12V AC 15000mA 180VA

<b>AC-AC for Outdoor Use</b>			
<b>MODEL</b>	<b>IP RATED</b>	<b>INPUT RATED</b>	<b>OUTPUT RATED</b>
JT-250 (IP44)	IP44	230-240V AC 50Hz	24V AC 250mA 6VA
JT-250(IP64)	IP64	230-240V AC 50Hz	24V AC 250mA 6VA
JT-300 (IP44)	IP44	230-240V AC 50Hz	24V AC 300mA 7.2VA
JT-300(IP64)	IP64	230-240V AC 50Hz	24V AC 300mA 7.2VA
JT-450 (IP44)	IP44	230-240V AC 50Hz	24V AC 450mA 10.8VA
JT-450 (IP64)	IP64	230-240V AC 50Hz	24V AC 450mA 10.8VA
JT-650 (IP44)	IP44	230-240V AC 50Hz	24V AC 650mA 15.6VA
JT-650 (IP64)	IP64	230-240V AC 50Hz	24V AC 650mA 15.6VA
JT-850 (IP44)	IP44	230-240V AC 50Hz	24V AC 850mA 20.4VA
JT-850 (IP64)	IP64	230-240V AC 50Hz	24V AC 850mA 20.4VA
JT-1000 (IP44)	IP44	230-240V AC 50Hz	24V AC 1000mA 24VA
JT-1000 (IP64)	IP64	230-240V AC 50Hz	24V AC 1000mA 24VA
JT-1200 (IP64)	IP64	230-240V AC 50Hz	24V AC 1200mA 28.8VA
JT-1500 (IP64)	IP64	230-240V AC 50Hz	24V AC1500mA 36VA
JT-1500-IP68	IP68	230-240V AC 50Hz	24V AC1500mA 36VA
JT-24V1660-IP64	IP64	230-240V AC 50Hz	24V AC 1660mA 40VA
JT-24V1875-IP64	IP64	230-240V AC 50Hz	24V AC 1875mA 45VA

<b>AC-AC for Outdoor Use</b>			
<b>MODEL</b>	<b>IP RATED</b>	<b>INPUT RATED</b>	<b>OUTPUT RATED</b>
JT-2000 (IP64)	IP64	230-240V AC 50Hz	24V AC 2000mA 48VA
JT-2500 (IP64)	IP64	230-240V AC 50Hz	24V AC 2500mA 60VA
JT-2500-IP68	IP68	230-240V AC 50Hz	24V AC 2500mA 60VA
JT-3000 (IP64)	IP64	230-240V AC 50Hz	24V AC 3000mA 72VA
JT-3500-IP64	IP64	230-240V AC 50Hz	24V AC 3500mA 84VA
JT-3500-IP68	IP68	230-240V AC 50Hz	24V AC 3500mA 84VA
JT-4000-IP64	IP64	230-240V AC 50Hz	24V AC 4000mA 96VA
JT-4500-IP68	IP68	230-240V AC 50Hz	24V AC 4500mA 108VA
JT-4500-IP64	IP64	230-240V AC 50Hz	24V AC 4500mA 108VA
JT-5000-IP64	IP64	230-240V AC 50Hz	24V AC 5000mA 120VA
JT-6250-IP64	IP64	230-240V AC 50Hz	24V AC 6250mA 150VA
JT-6250-IP68	IP68	230-240V AC 50Hz	24V AC 6250mA 150VA
JT-6700-IP64	IP64	230-240V AC 50Hz	24V AC 6700mA 160VA
JT-7500-IP64	IP64	230-240V AC 50Hz	24V AC 7500mA 180VA
JT-8350-IP64	IP64	230-240V AC 50Hz	24V AC 8350mA 200VA
JT-***V****-IP44 (The former three "****", from 010 to 400, stand for output voltage from 1,0V to 40,0V, interval 0,1V. The latter four "*****", from 0010 to 1700, stand for output current from 10mA to 1700mA, interval 10mA)	IP44	230-240V AC 50Hz	1-40V AC, 10-1700mA, Max. 20,4VA

<b>AC-DC for Indoor Use Only</b>			
<b>MODEL</b>	<b>IP RATED</b>	<b>INPUT RATED</b>	<b>OUTPUT RATED</b>
JT-DC3V150	IP20	230-240V AC 50Hz	3V DC 150mA 0.45W
JT-DC3V500	IP20	230-240V AC 50Hz	3V DC 500mA 1.5W
JT-DC4.5V100	IP20	230-240V AC 50Hz	4.5V DC 100mA 0.45W
JT-DC4.5V300	IP20	230-240V AC 50Hz	4.5V DC 300mA 1.35W
JT-DC4.5V450	IP20	230-240V AC 50Hz	4.5V DC 450mA 2W
JT-DC4.5V1000	IP20	230-240V AC 50Hz	4.5V DC 1000mA 4.5W
JT-DC6V150	IP20	230-240V AC 50Hz	6V DC 150mA 0.9W
JT-DC6V400	IP20	230-240V AC 50Hz	6V DC 400mA 2.4W
JT-DC6V500	IP20	230-240V AC 50Hz	6V DC 500mA 3W
JT-DC6V1000	IP20	230-240V AC 50Hz	6V DC 1000mA 6W
JT-DC6V2000	IP20	230-240V AC 50Hz	6V DC 2000mA 12W
JT-DC7.5V450	IP20	230-240V AC 50Hz	7.5V DC 450mA 3.4W
JT-DC8V400	IP20	230-240V AC 50Hz	8V DC 400mA 3.2W
JT-DC9V450	IP20	230-240V AC 50Hz	9V DC 450mA 4W
JT-DC9V1000	IP20	230-240V AC 50Hz	9V DC 1000mA 9W
JT-DC12V200	IP20	230-240V AC 50Hz	12V DC 200mA 2.4W
JT-DC12V300	IP20	230-240V AC 50Hz	12V DC 300mA 3.6W
JT-DC12V400	IP20	230-240V AC 50Hz	12V DC 400mA 4.8W
JT-DC12V500	IP20	230-240V AC 50Hz	12V DC 500mA 6W
JT-DC12V1000	IP20	230-240V AC 50Hz	12V DC 1000mA 12W
JT-DC12V2000	IP20	230-240V AC 50Hz	12V DC 2000mA 24W
JT-DC12V3000	IP20	230-240V AC 50Hz	12V DC 3000mA 36W
JT-DC12V4000	IP20	230-240V AC 50Hz	12V DC 4000mA 48W
JT-DC12V5000	IP20	230-240V AC 50Hz	12V DC 5000mA 60W

<b>AC-DC for Indoor Use Only</b>			
<b>MODEL</b>	<b>IP RATED</b>	<b>INPUT RATED</b>	<b>OUTPUT RATED</b>
JT-DC15V200	IP20	230-240V AC 50Hz	15V DC 200mA 3W
JT-DC15V400	IP20	230-240V AC 50Hz	15V DC 400mA 6W
JT-DC15V500	IP20	230-240V AC 50Hz	15V DC 500mA 7.5W
JT-DC15V600	IP20	230-240V AC 50Hz	15V DC 600mA 9W
JT-DC15V800	IP20	230-240V AC 50Hz	15V DC 800mA 12W
JT-DC15V1400	IP20	230-240V AC 50Hz	15V DC 1400mA 21W
JT-DC18V400	IP20	230-240V AC 50Hz	18V DC 400mA 7.2W
JT-DC18V500	IP20	230-240V AC 50Hz	18V DC 500mA 9W
JT-DC18V1000	IP20	230-240V AC 50Hz	18V DC 1000mA 18W
JT-DC20V400	IP20	230-240V AC 50Hz	20V DC 400mA 8W
JT-DC20V500	IP20	230-240V AC 50Hz	20V DC 500mA 10W
JT-DC24V200	IP20	230-240V AC 50Hz	24V DC 200mA 4.8W
JT-DC24V300	IP20	230-240V AC 50Hz	24V DC 300mA 7.2W
JT-DC24V400	IP20	230-240V AC 50Hz	24V DC 400mA 9.6W
JT-DC24V500	IP20	230-240V AC 50Hz	24V DC 500mA 12W
JT-DC28V400	IP20	230-240V AC 50Hz	28V DC 400mA 11.2W
JT-DCaaVbbbb ("aa" denote output voltage and "bbbb" denote output current.)	IP20	230-240V AC 50Hz	1-40V DC, 10-2000mA, Max.15W

<b>AC-DC for Outdoor Use</b>			
<b>MODEL</b>	<b>IP RATED</b>	<b>INPUT RATED</b>	<b>OUTPUT RATED</b>
JT-DC12V200-IP44	IP44	230-240V AC 50Hz	12V DC 200mA 2.4W
JT-DC12V200-IP64	IP64	230-240V AC 50Hz	12V DC 200mA 2.4W
JT-DC12V300-IP44	IP44	230-240V AC 50Hz	12V DC 300mA 3.6W
JT-DC12V300-IP64	IP64	230-240V AC 50Hz	12V DC 300mA 3.6W
JT-DC12V400-IP44	IP44	230-240V AC 50Hz	12V DC 400mA 4.8W
JT-DC12V400-IP64	IP64	230-240V AC 50Hz	12V DC 400mA 4.8W
JT-DC12V500-IP44	IP44	230-240V AC 50Hz	12V DC 500mA 6W
JT-DC12V500-IP64	IP64	230-240V AC 50Hz	12V DC 500mA 6W
JT-DC12V600-IP44	IP44	230-240V AC 50Hz	12V DC 600mA 7.2W
JT-DC12V600-IP64	IP64	230-240V AC 50Hz	12V DC 600mA 7.2W
JT-DC24V50-IP44	IP44	230-240V AC 50Hz	24V DC 50mA 1.2W
JT-DC24V200-IP44	IP44	230-240V AC 50Hz	24V DC 200mA 4.8W
JT-DC24V300-IP44	IP44	230-240V AC 50Hz	24V DC 300mA 7.2W
JT-DC24V400-IP44	IP44	230-240V AC 50Hz	24V DC 400mA 9.6W
JT-DC24V500-IP44	IP44	230-240V AC 50Hz	24V DC 500mA 12W
JT-DC24V600-IP44	IP44	230-240V AC 50Hz	24V DC 600mA 14.4W
JT-DC24V850-IP44	IP44	230-240V AC 50Hz	24V DC 850mA 20.4W
JT-DC***V****-IP44 (The former three"***", from 010 to 400,stand for output voltage from 1,0V to 40,0V, interval 0,1V.The latter four "****", from 0010 to 1000, stand for output current from 10mA to 1000mA, interval 10mA)	IP44	230-240V AC 50Hz	1-40V DC, 10-1000mA, Max.20,4W