HomeTek Technology Inc.

ADDRESS: No. 67-9, Shir Men Road, Tu Cheng City,
Taipei Hsien, Taiwan
PHONE : 886-2-22608375 FAX : 886-2-22748013
E - mail : hometek@ms15.hinet.net

CE TEST REPORT
FOR

APPLICANT	:	Smart Home Engineering Corp.
ADDRESS	:	10F., No. 493, Chung-Cheng Rd.,
		Hsin-Tien City, Taipei 231, Taiwan, R. O. C.
Receipt Date	:	05/15/2007 Final Test Date: 05/31/2007
EUT	:	VGA Keyboard Mouse CAT5 Extender
MODEL NO.	:	VKMXXTX, VKMXXRX

MEASUREMENT PROCEDURE USED

EN55022 CLASS B / EN61000-3-2 / EN61000-3-3 / EN55024 GIVEN IN
EUROPEAN COUNCIL DIRECTIVE 2004/108/EC

This test result of this report applies to above tested sample only.

PREPARED BY :

HomeTek Technology Inc.

No. 67-9, Shir Men Road, Tu Cheng City,

Taipei Hsien. Taiwan

Report # : EB6K039

HomeTek Technology Inc.

ADDRESS: No. 67-9, Shir Men Road, Tu Cheng City,
Taipei Hsien
PHONE : 886-2-22608375 FAX : 886-2-22748013
E - mail : hometek@ms15.hinet.net

CERTIFICATE OF COMPLIANCE

EUT	: VGA Keyboard Mouse CAT5 Extender
MODEL NO.	: VKMXXTX, VKMXXRX
Receipt Date	: 05/15/2007 Final Test Date: 05/31/2007
REPORT #	: EB6K039
APPLICANT	: Smart Home Engineering Corp.
ADDRESS	: 10F., No. 493, Chung-Cheng Rd., Hsin-Tien City, Taipei 231, Taiwan, R. O. C.

Measurement procedure used:

EMI: EN 55022 Class B (1998) + A1 (2000) + A2 (2003),
EN 61000-3-2 (2000), EN 61000-3-3 (1995) + A1 (2001)
EMS: EN 55024 (1998) + A1 (2001) + A2 (2003):
IEC 61000-4-2 (2001), IEC 61000-4-3 (2002), IEC 61000-4-4 (2004), IEC 61000-4-5 (2001),
IEC 61000-4-6 (2003) + A1 (2004), IEC 61000-4-8 (2001), IEC 61000-4-11 (2004)

We hereby show that:

The measurements shown in this test report were made in accordance with the procedures given in **EUROPEAN COUNCIL DIRECTIVE 2004/108/EC**, and the energy emitted by the equipment was found to be within the limits applicable. This product, which has been issued the test report listed as above in HomeTek Technology Inc., is based on single evaluation of one sample and confirmed to comply with the requirements of the above-mentioned EMC standard.

This test report is a duplicate of original one (report No. EB6E023, issued on 2007, 06, 01), applicant and model No. is modified.

APPROVED BY : 12/14/2007

ALAIN LIN / Assistant Manage

TEST REPORT CERTIFICATION

EMC of electrical appliances

Report reference No.	:	EB6K039
Date of issue	:	DEC., 14, 2007
Applicant	:	Smart Home Engineering Corp.
Address	:	10F., No. 493, Chung-Cheng Rd., Hsin-Tien City, Taipei 231, Taiwan, R. O. C.
Manufacturer	:	Smart Home Engineering Corp.
Type of test object	:	VGA Keyboard Mouse CAT5 Extender
Model/type reference	:	VKMXXTX, VKMXXRX
Rated Voltage	:	N/A
EUT Voltage	:	N/A
Test Result	:	Complied
Testing laboratory	:	HomeTek Technology Inc.
Address	:	No. 67-9, Shir Men Road, Tu Cheng City, Taipei Hsien, Taiwan, R. O. C.
TEL / FAX	:	+886-2-22608375 / +886-2-22748013
E-mail	:	hometek@ms15.hinet.net
Standard	:	*EN 55022 Class B (1998) + A1 (2000) + A2 (2003), EN 61000-3-2 (2000), EN 61000-3-3 (1995) + A1 (2001), EN 55024 (1998) + A1 (2001) + A2 (2003): IEC 61000-4-2 (2001), IEC 61000-4-3 (2002), IEC 61000-4-4 (2004), IEC 61000-4-5 (2001), IEC 61000-4-6 (2003) + A1 (2004), IEC 61000-4-8 (2001), IEC 61000-4-11 (2004)*

Tested by (+ signature) : *Jason Lin / Engineer* Jason Lin

Approved by (+ signature) : *Alain Lin / Assistant Manager*

GENERAL INFORMATION

1 APPLICANT : Smart Home Engineering Corp.

2 ADDRESS : 10F., No. 493, Chung-Cheng Rd.,
Hsin-Tien City, Taipei 231, Taiwan, R. O. C.

3 MANUFACTURER : Smart Home Engineering Corp.

4 ADDRESS : 10F., No. 493, Chung-Cheng Rd.,
Hsin-Tien City, Taipei 231, Taiwan, R. O. C.

5 DESCRIPTION OF EUT :

EUT : VGA Keyboard Mouse CAT5 Extender

Model : VKMXXTX, VKMXXRX

Serial # : N/A

5.1 The difference between series of models VKMXXTX and VKMXXRX are as shown below:

Difference / Mode No.	PSII	USB	Remark
VKMXXTX	Yes	No	(1) The first and second "X" represents different system input. (2) The third "X" represent different accessory.
VKMXXRX	No	Yes	

The PCB layout is similar. The worst case of EMC test data were shown in this test report.

6 FEATURES OF EUT :

Please refer to user manual or product specification.

MODIFICATION LIST

THE FOLLOWING ACCESSORIES WERE ADDED TO THE EUT DURING TESTING :

NO MODIFICATION BY HOMETEK TECHNOLOGY INC.

CONDUCTED POWER LINE TEST

1 TEST PROCEDURE

According to **EN55022 Class B**.

2 RESULT OF CONDUCTED EMISSION TEST

N/A (Conducted Power Line Test is not applicable to this EUT (Model : VKM01)).

RADIATED EMISSION TEST

1 TEST INSTRUMENTS & FACILITIES

The following test Instruments was used during the radiated emission test :

Item	Instruments /facilities	Specification	Manufacturer	Model # / S/N#	Date of Cal.
1	OPEN AREA TEST SITE	☑ OATS 3			JUL/2006
2	EMI TEST RECEIVER	20Hz ~ 26.5GHz	ROHDE & SCHWARZ	ESMI 845442/006	FEB/2007
3	PRE-AMPLIFIER	9KHz ~ 3000MHz	ADVANTEST	BB525C 90081001	OCT/2006
4	ANTENNA (BI-LOG)	25MHz ~ 2GHz	SCHAFFNER	CBL6112B S/N : 2614	JUN/2006
5	Attenuation	50Ω/6dB	JYE BAO	FAT-N (M-F) 001	JUL/2006
6	Ferrite Clamp	30 ~ 1000MHz	ADT	FC18 910030	DEC/2006
7	Ferrite Clamp	30 ~ 1000MHz	HomeTek	HFC 001	DEC/2006
8	Cable	10m	SUHNER	RG214/U OS3-003	DEC/2006
9	Cable	14m	BELDEN	9913 OS3-001	DEC/2006
10	EMI 32 (software)	N/A	AUDIX	19991013-0923	N/A

Note : Items 1 ~ 9 were calibrated within period of 1 year.

2 TEST PROCEDURE

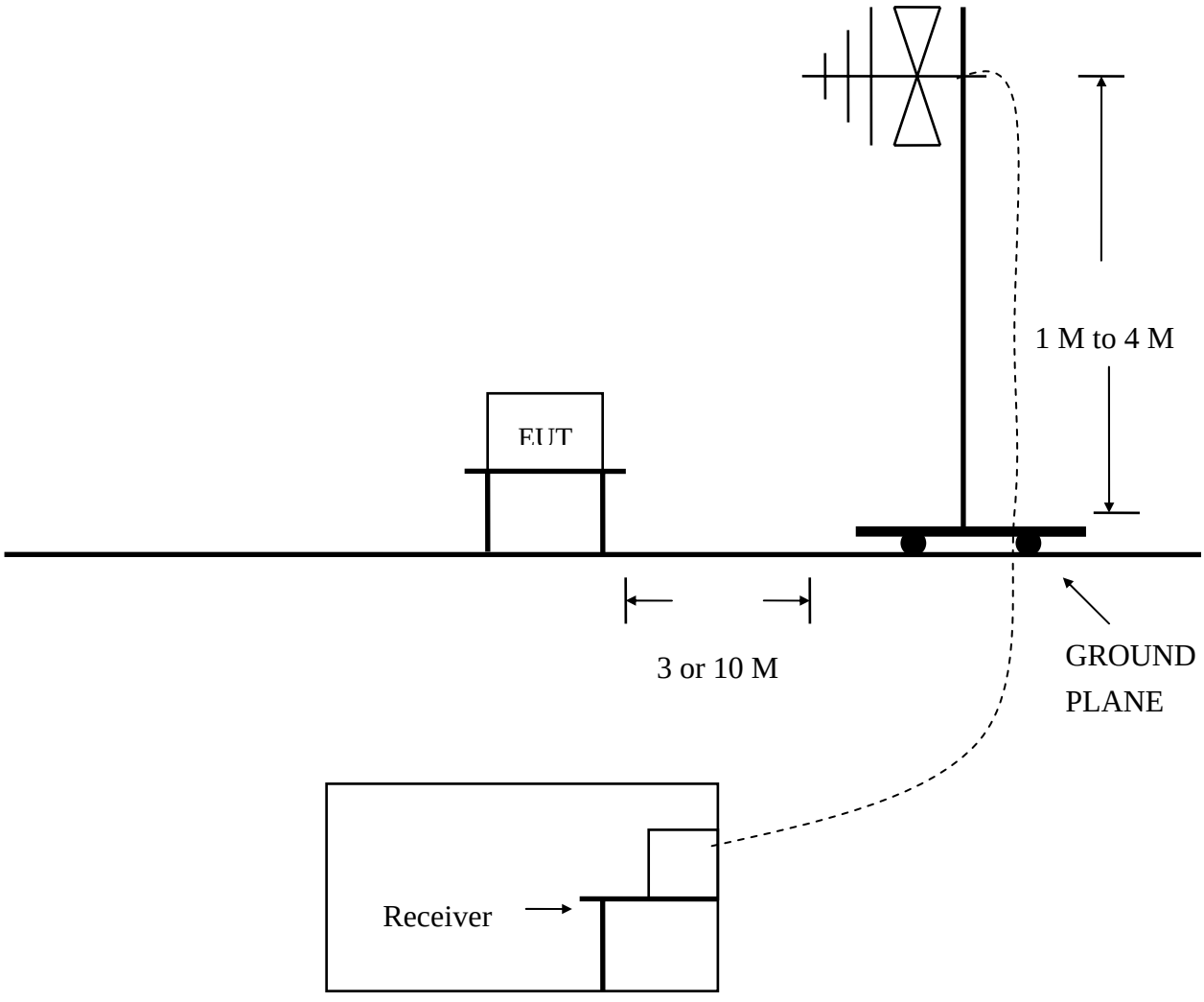
2.1 The EUT was test according to **EN55022**.

2.2 The radiated test was performed at HomeTek Lab's Open Site 3.

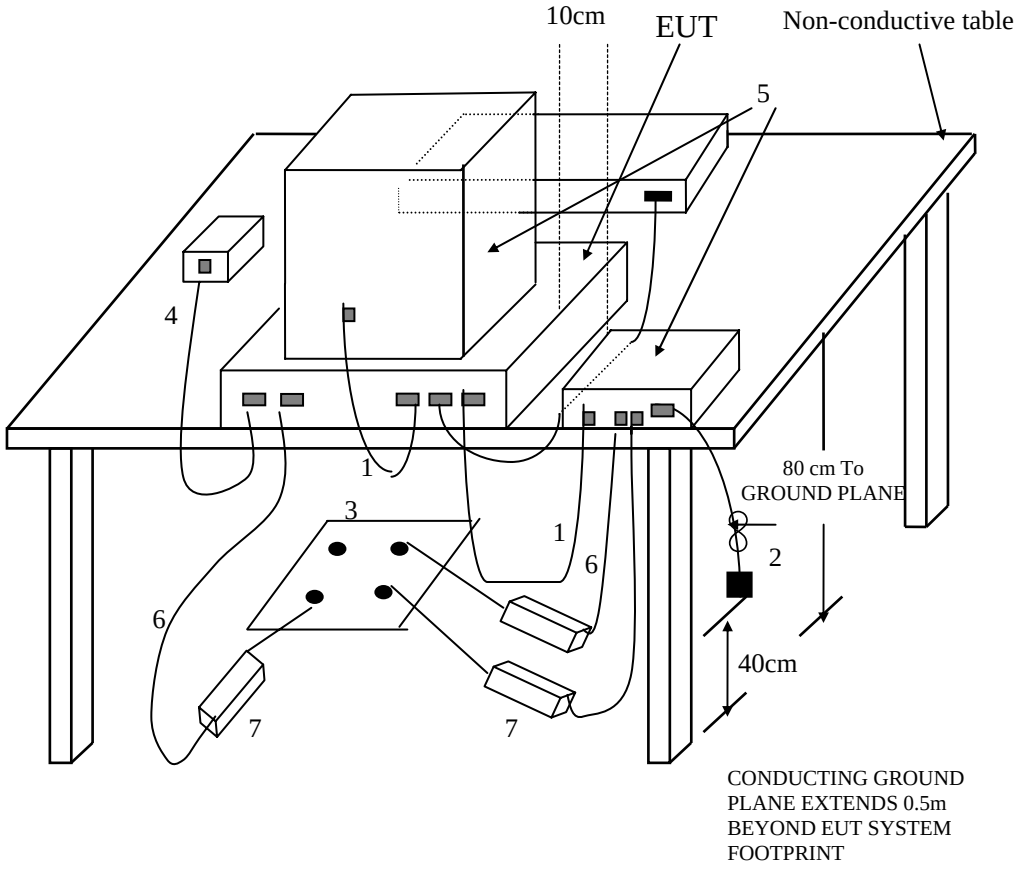
2.3 The frequency range from 30 MHz to 1 GHz, the measurement were made at 10 meters, with a BI-log antenna.

3 TEST SETUP

3.1 TEST SETUP OF OPEN SITE.



(Details for setup configuration, please refer to appendix A.)



(Details for setup configuration, please refer to appendix A.)

LEGEND:

1.If cables, which hang closer than 40 cm to the horizontal metal ground plane cannot be shortened to the appropriate length, the excess shall be folded back and forth forming a bundle 30 m to 40 cm long.

2.The end of I/O signal cables which are not connected to a peripheral may be terminated, if required for proper operation using correct terminating impedance.

3.Mains junction box(es) shall be flush with, and bonded directly to , the metal ground plane.
NOTE if used, the AMN shall be installed under the horizontal metal ground plane.

4.Cables of hand-operated devices such as keyboards, mouses, etc. shall be placed as for normal usage.

5.Peripherals shall be placed at a distance of 10 cm from each other and from the controller, except for the monitor which, if for an acceptable installation practice, shall be placed directly on top of the controller.

6.Mains cables, telephone lines or other connections to auxiliary equipment located outside the test area shall drape to the floor, be fitted with ferrite clamps or ferrite tubes placed on the floor at the point where the cable reaches the floor and then routed to the place where they leave the turntable. No extension cords shall be used to mains receptacle.

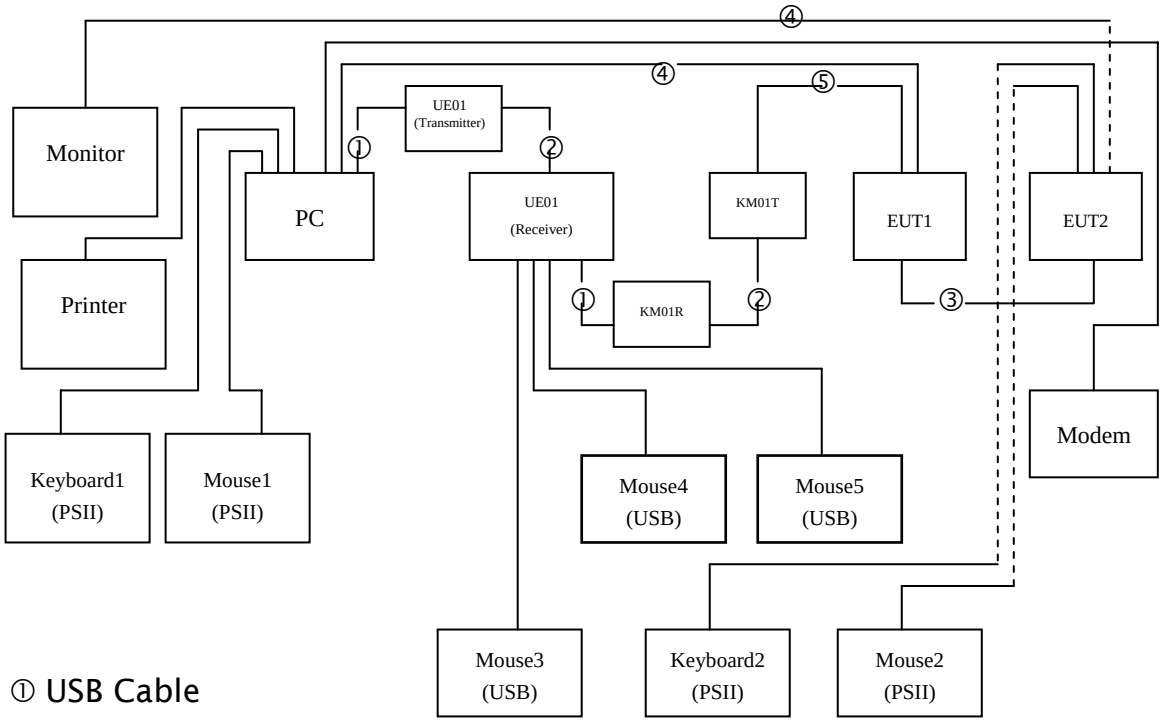
7.Ferrite clamps or ferrite tubes with similar characteristics (as defined in 10.4). No more than one cable per clamp.

Test Configuration

Tabletop Equipment Radiated Measurement

4 CONFIGURATION OF THE EUT

The EUT was configured according to **EN55022**. All I/O ports were connected to the appropriate peripherals. All peripherals and cables are listed below (including internal device) :



① USB Cable
② RJ-45 Cable
③ RJ-45Cable x 2
④ VGA Cable
⑤ Data Cable x 2

Figure 1

4.1 EUT

EUT Type	: ☐Proto Type ☑Engineer Type ☐Mass Production
Condition when received	: ☑Good ☐Damage : _____
Device	: VGA Keyboard Mouse CAT5 Extender
Applicant	: Smart Home Engineering Corp.
Manufacturer	: Smart Home Engineering Corp.
Model Number	: VKMXXTX, VKMXXRX
Serial Number	: N/A
FCC ID	: N/A

● VKM01 (EUT1)

Keyboard Port	: Metal Type Connector
Mouse Port	: Metal Type Connector
VGA In Port	: Metal Type Connector
RJ1 Port (Data Cable)	: Un-Shielded, 0.18 m, Metal Type Connector
RJ2 Port (Data Cable)	: Un-Shielded, 0.18 m, Metal Type Connector

● VKM01 (EUT2)

Keyboard Port	: Metal Type Connector
Mouse Port	: Metal Type Connector
VGA Out Port	: Metal Type Connector
RJ1 Port (Data Cable)	: Un-Shielded, 0.18 m, Metal Type Connector
RJ2 Port (Data Cable)	: Un-Shielded, 0.18 m, Metal Type Connector
Power Cord	: N/A
Power Supply Type	: N/A

4.2 PERIPHERALS

☑ Host Personal Computer

Manufacturer	: HP/COMPAQ
Model Number	: D330UT
Serial Number	: SGH40606Z1
FCC ID	: FCC DoC
Data Cable 1	: Un-Shielded, 0.18 m, Connect to the USB Port
Data Cable 2	: Shielded, 1.8 m, Connect to the VGA In Port
Power Cord	: Un-Shielded, 1.8 m

☑ VGA Card

Manufacturer	: ASUS
Model Number	: V9999LE/TD/N/128M/A
Serial Number	: 59CG018553
FCC ID	: N/A
Data Cable	: N/A
Power Cord	: N/A

☑ Monitor

Manufacturer	: SAMSUNG
Model Number	: GH19BS
Serial Number	: GH19H4JW103538B
FCC ID	: FCC DoC
Data Cable	: Shielded, 1.8 m, Connected to the VGA Out port
Power Cord	: Un-Shielded, 1.8 m

☑ Printer

Manufacturer	: HP
Model Number	: DJ400
Serial Number	: MY7781C1BB
FCC ID	: B94C2642X
Data Cable	: Shielded, 1.5 m, Connected to the Printer port
Power Cord & Adaptor	: Un-Shielded, 1.8 m

☑ Modem

Manufacturer	: ACEEX
Model Number	: 1414
Serial Number	: 9013524
FCC ID	: IFAXDM1414
Data Cable	: Shielded, 1.5 m, Connected to the COM port
Power Cord & Adaptor	: Un-Shielded, 1.8 m

☑ Mouse1 (PSII)

Manufacturer	: DELL
Model Number	: IntelliMouse 1.3A PS/2 Compatible
Serial Number	: 9028603-5
FCC ID	: FCC DoC
Data Cable	: Shielded, 1.8 m, Connected to the PSII port
Power Cord	: N/A

☑ Mouse2 (PSII)

Manufacturer	: Microsoft
Model Number	: KAZB1
Serial Number	: 0720670
FCC ID	: C3KAZB1
Data Cable	: Shielded, 1.8 m, Connected to the PSII port
Power Cord	: N/A

☑ Mouse3 (USB)

Manufacturer	: Genius
Model Number	: NetScorll
Serial Number	: N/A
FCC ID	: N/A
Data Cable	: Un-Shielded, 1.8 m, Connected to the USB port
Power Cord	: N/A

☑ Mouse4 (USB)

Manufacturer	: Memorex
Model Number	: MP23R-E
Serial Number	: N/A
FCC ID	: N/A
Data Cable	: Un-Shielded, 1.8 m, Connected to the USB port
Power Cord	: N/A

☑ Mouse5 (USB)

Manufacturer	: Memorex
Model Number	: MP23R-E
Serial Number	: N/A
FCC ID	: N/A
Data Cable	: Un-Shielded, 1.8 m, Connected to the USB port
Power Cord	: N/A

☑ KeyBoard1 (PSII)

Manufacturer	: Monterey
Model Number	: K371
Serial Number	: H0007057608
FCC ID	: FCC DoC
Data Cable	: Shielded, 1.5 m, Connected to the PSII port
Power Cord	: N/A

☑ KeyBoard2 (PSII)

Manufacturer	: ASUS
Model Number	: KS-613P
Serial Number	: N/A
FCC ID	: N/A
Data Cable	: Un-Shielded, 1.5 m, Connected to the PSII port
Power Cord	: N/A

☑ USB CAT5 extender with 4 port USB hub (Transmitter)

Manufacturer	: Smart Home Engineering Corp.
Model Number	: UE01
Serial Number	: N/A
FCC ID	: N/A
Data Cable 1	: Un-Shielded, 0.18 m, Connected to the USB port
Data Cable 2	: Un-Shielded, 0.07 m, Connected to the RJ-45 port
Power Cord	: N/A

☑ USB CAT5 extender with 4 port USB hub (Receiver)

Manufacturer	: Smart Home Engineering Corp.
Model Number	: UE01
Serial Number	: N/A
FCC ID	: N/A
Data Cable 1	: Un-Shielded, 0.07 m, Connected to the RJ-45 port
Data Cable 2 x 3	: Un-Shielded, 1.8 m, Connected to the USB port
Data Cable 3	: Un-Shielded, 0.18 m, Connected to the USB port
Power Cord	: N/A

☑ Keyboard Mouse CAT5 Extender

Manufacturer	: Smart Home Engineering Corp.
Model Number	: KM01T
Serial Number	: N/A
FCC ID	: N/A
Data Cable 1	: Un-Shielded, 0.07 m, Connected to the RJ-45 port
Data Cable 2	: Un-Shielded, 0.26 m, Connected to the Keyboard port
Data Cable 3	: Un-Shielded, 0.26 m, Connected to the Mouse port
Power Cord	: N/A

☑ Keyboard Mouse CAT5 Extender

Manufacturer	: Smart Home Engineering Corp.
Model Number	: KM01R
Serial Number	: N/A
FCC ID	: N/A
Data Cable 1	: Un-Shielded, 0.18 m, Connected to the USB port
Data Cable 2	: Un-Shielded, 0.07 m, Connected to the RJ-45 In port
Power Cord	: N/A

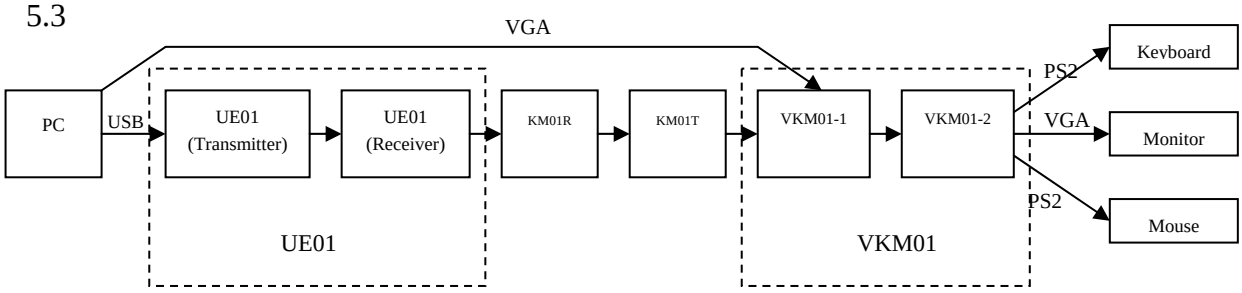
4.3 REMARK : N/A

5 EUT OPERATING CONDITION

5.1 The frequency of the EUT is none.

5.2 The radiated emission in the frequency range from 30 MHz - 1000 MHz was test in a horizontal and vertical polarization at HomeTek Lab's open site 3.

5.3



5.4 PC sends VGA signal to VKM01 and VKM01 change VGA signal.

5.5 During the test, the PC sends "H" patterns to each I/O port individually. (For 1280 x 1024)

5.6 Then has changed VGA signal send to monitor display.

5.7 The photos of radiated test configuration, please refer to appendix A.

6 LIMIT OF RADIATED EMISSION CLASS B

Frequency (MHz)	Measurement Distance	Limit (dBuV/m)
30 - 230	10 (M)	30
230 - 1000	10 (M)	37

7 RESULT OF RADIATED EMISSION TEST

7.1 The frequency range from 30 MHz to 1 GHz was investigated.

7.2 All readings below or equal 1 GHz are quasi-peak or peak values with resolution bandwidth of 120 KHz.

7.3 The measurements were made at 10 meters of HomeTek Lab's open site 3.

7.4 Temperature : 25 ℃, Humidity : 49 % RH.

7.5 Deviation form the test standards and rules : None.

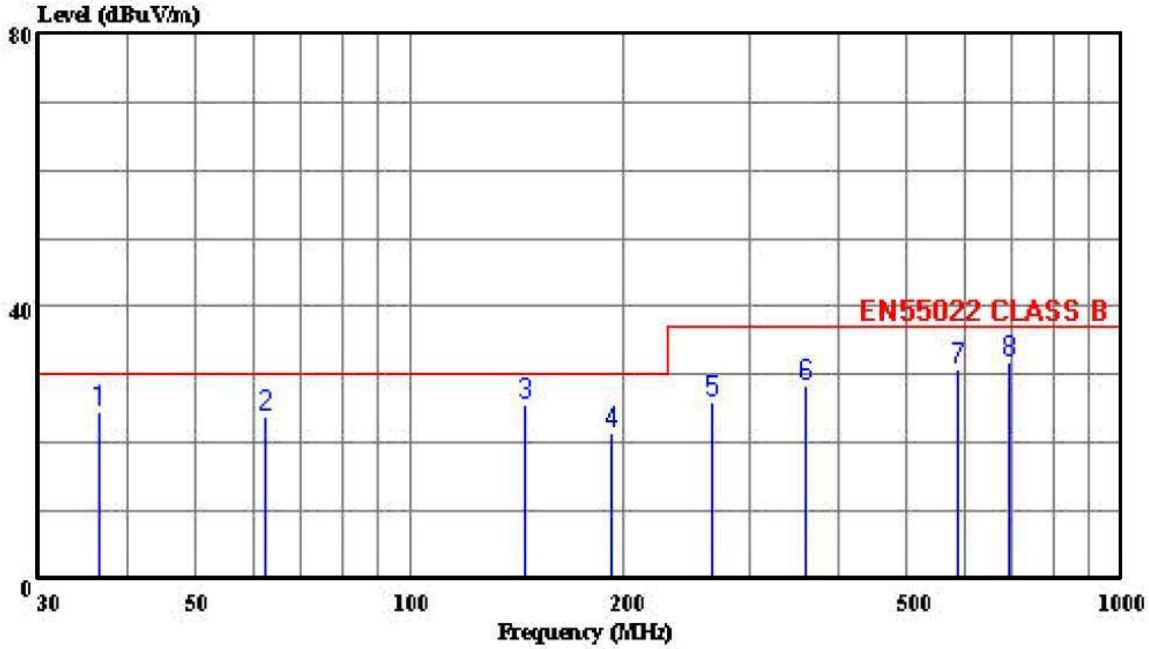
7.6 The radiated emission result were gained by the following method :
Level = Reading Level + Probe Factor (Antenna Factor) + Cable Loss – Preamp Factor
Over Limit = Level – Limit Line

7.7 Result : **PASSED**

8 RADIATED EMISSION TEST DATA (PAGE 1)

HomeTek Technology Inc.
No 67-9,Shi-Men Rd;,Tu-Chen City,
Taipei County, Taiwan R.O.C.
Tel:02-22608375
Fax:02-22748013

Data#: 6 File#: 6e023.emi Date: 2007-05-31 Time: 09:59:28



Trace: Ref Trace:

Condition: EN55022 CLASS B 10m CHASE 2614 060506 HORIZONTAL
eut : VGA Keyboard Mouse CAT5 Extender
power: N/A
memo : VKM01

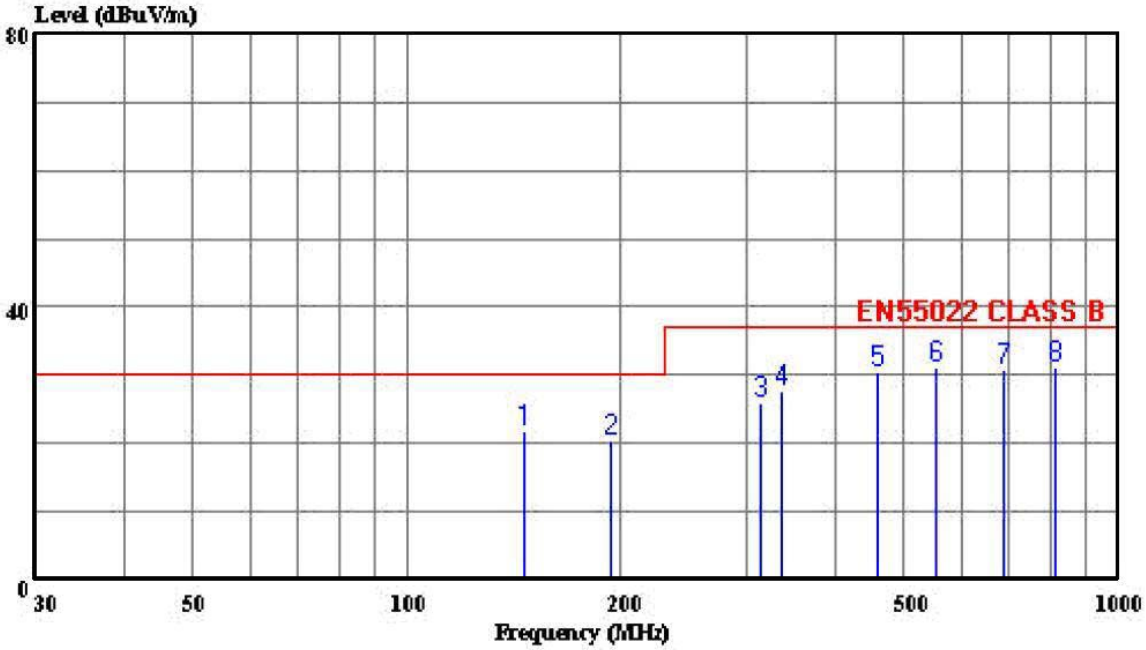
Page: 1

	Freq	Level	Limit Line	Over Limit	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	
1	36.540	24.62	30.00	-5.38	34.00	15.94	0.68	26.00	Peak
2	62.540	23.79	30.00	-6.21	42.00	6.76	0.98	25.95	Peak
3	145.230	25.68	30.00	-4.32	39.00	10.68	1.81	25.81	Peak
4	192.500	21.32	30.00	-8.68	36.00	8.97	2.07	25.72	Peak
5	265.300	26.12	37.00	-10.88	36.00	13.12	2.57	25.57	Peak
6	360.490	28.49	37.00	-8.51	36.00	14.68	3.14	25.33	Peak
7	589.120	30.74	37.00	-6.26	31.00	18.54	5.71	24.51	Peak
8	697.530	31.91	37.00	-5.09	32.00	18.82	5.15	24.05	Peak

9 RADIATED EMISSION TEST DATA (PAGE 2)

HomeTek Technology Inc.
No 67-9,Shi-Men Rd;,Tu-Chen City,
Taipei County, Taiwan R.O.C.
Tel:02-22608375
Fax:02-22748013

Data#: 5 File#: 6e023.emi Date: 2007-05-31 Time: 09:26:18



Trace: Ref Trace:

Condition: EN55022 CLASS B 10m CHASE 2614 060506 VERTICAL
eut : VGA Keyboard Mouse CAT5 Extender
power: N/A
memo : VKM01

Page: 1

	Freq	Level	Limit Line	Over Limit	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	
1	145.600	21.68	30.00	-8.32	35.00	10.68	1.81	25.81	Peak
2	193.800	20.35	30.00	-9.65	35.00	8.99	2.08	25.72	Peak
3	314.500	25.89	37.00	-11.11	35.00	13.49	2.86	25.46	Peak
4	337.200	27.69	37.00	-9.31	36.00	14.09	3.00	25.39	Peak
5	458.120	30.42	37.00	-6.58	35.00	16.72	3.69	24.99	Peak
6	552.120	31.05	37.00	-5.95	32.00	18.69	4.99	24.63	Peak
7	690.100	30.95	37.00	-6.05	31.00	18.84	5.19	24.08	Peak
8	816.500	31.28	37.00	-5.72	30.00	19.89	5.11	23.72	Peak

HARMONICS TEST

1 TEST PROCEDURE

According to **EN 61000-3-2 (2000)**.

2 RESULT OF HARMONICS TEST

N/A (This standard is not applicable to this EUT (Model : VKM01)).

VOLTAGE FLUCTUATIONS TEST

1 TEST PROCEDURE

According to **EN 61000-3-3 (1995) + A1 (2001)**.

2 RESULT OF VOLTAGE FLUCTUATIONS TEST

N/A (This standard is not applicable to this EUT (Model : VKM01)).

ELECTROSTATIC DISCHARGE IMMUNITY TEST (ESD)

1 TEST INSTRUMENTS & FACILITIES

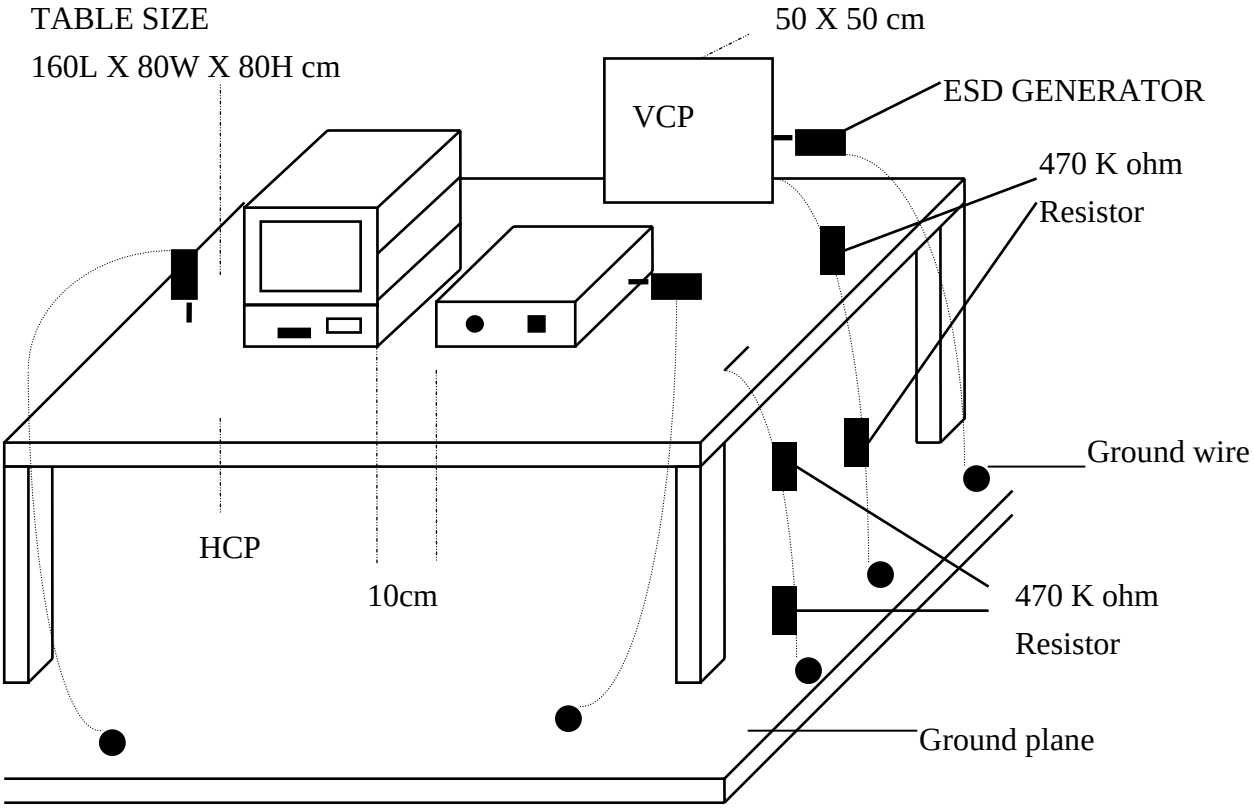
Instruments/ Facilities	Manufacturer	Model # Serial #	Data Of Cal.
ESD TESTER	HAEFELY	PESD 1610	NOV/2006
VCP	HOMETEK	--	--

2 TEST PROCEDURE

According to **IEC 61000-4-2 (2001)**

According to **EN 55024 (1998) + A1 (2001) + A2 (2003)**

3 TEST SETUP



(Details for setup configuration, please refer to appendix A.)

4 CONFIGURATION OF THE EUT

Same as “Radiated Emission test”, section 4

5 EUT OPERATION CONDITION

Same as “Radiated Emission test”, section 5

6 TEST CONDITION

6.1 Test Level :

(A) ±2, ±4, ±8KV for air discharge.

(B) ±2, ±4KV for contact discharge.

6.2 Number of test : 10 Discharges / Test point / Polarity / Level

Particular requirements : at least 200 discharges, 100 each at negative and positive polarity, at a minimum of four test points.

6.3 Time between test : 1 sec.

6.4 Temperature : 21 ℃

6.5 Humidity : 45 % RH.

7 PERFORMANCE CRITERIA

A. The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended.

B. The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.

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

8 TEST RESULT

Test Point	Air Discharge	Contact Discharge	Performance Criteria	Result
HCP	---	±2, ±4KV	B	**PASSED**
VCP	---	±2, ±4KV	B	**PASSED**
CASE	±2, ±4, ±8KV	±2, ±4KV	B	**PASSED**
I/O PORTS	±2, ±4, ±8KV	±2, ±4KV	B	**PASSED**
SCREWS	±2, ±4, ±8KV	±2, ±4KV	B	**PASSED**

※ The screen was flash during the test. After the test, EUT resume automatically.

9 Photos of test configuration please refer to appendix A.

RADIO FREQUENCY ELECTROMAGNETIC FILE IMMUNITY TEST (RS)

1 TEST INSTRUMENTS & FACILITIES

Item	Instruments Facilities	Manufacturer	Model # Serial #	Data Of Cal.
1	SIGNAL GENERATOR	ROHDE & SCHWARZ	SMY02 845181/025	MAR/2007
2	AMPLIFIER	AMPLIFIER RESEARCH	100W1000M1A	N/A
3	FIELD SENSOR	AMPLIFIER RESEARCH	FP2000	AUG/2006
4	FIELD MONITOR	AMPLIFIER RESEARCH	FM2000	AUG/2006
5	RF VOLTMETER	BOONTON	9200C 361701AA	MAR/2007
6	RF PROBE	BOONTON	952001B 37082	MAR/2007
7	DIRECTION COUPLER	AMPLIFIER RESEARCH	DC6180 20521	N/A
8	ANTENNA	EMCO	3142B S/N: 1789	N/A
9	CONTROL PC	KB TECH	KB P586/133	--

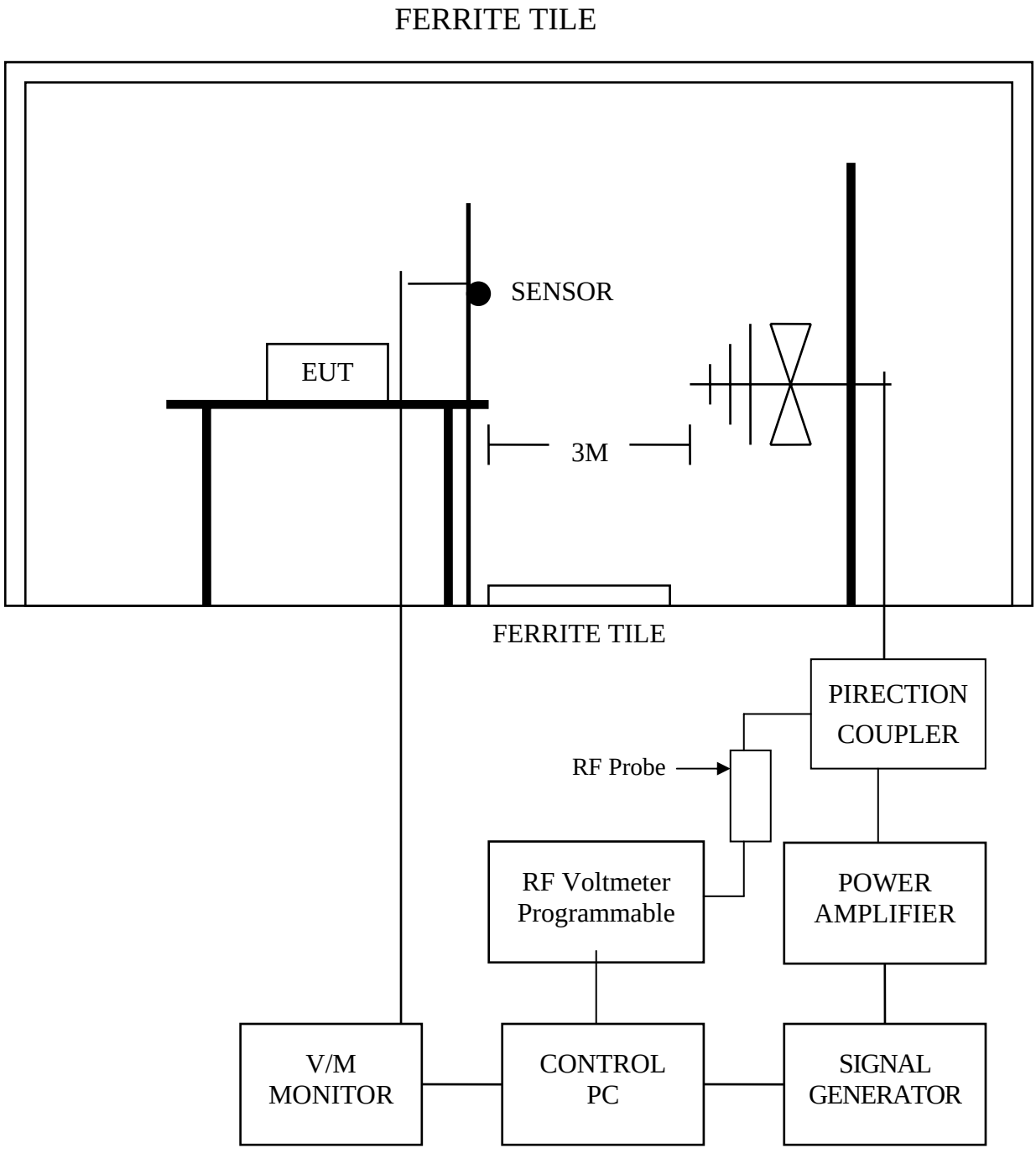
Note : Items 3 ~ 4 were calibrated with two years and verified before testing.

2 TEST PROCEDURE

According to **IEC 61000-4-3 (2002)**

According to **EN 55024 (1998) + A1 (2001) + A2 (2003)**

3 TEST SETUP



3.1 Chamber Size :

12M x 5M x 5M

(Details for setup configuration, please refer to appendix A.)

4 CONFIGURATION OF THE EUT

Same as “Radiated Emission test”, section 4

5 OPERATION CONDITION OF EUT

Same as “Radiated Emission test”, section 5

6 TEST CONDITION

6.1 Frequency Range : 80 MHz ~ 1000 MHz

(Frequency Range : 1.4 GHz ~ 2.0 GHz is not applicable for EN55024:1998+A1:2001+A2:2003)

6.2 Filed Strength : 3 V / M (1KHz 80% Modulation)

6.3 Frequency Step : 1 %, 3 sec. / each step size

6.4 Antenna Polarity : HORIZONTAL & VERTICAL

6.5 The four sides of EUT are tested
(FRONT, REAR, RIGHT, LEFT)

6.6 Temperature : 23 ℃

6.7 Humidity : 50 % RH

7 PERFORMANCE CRITERIA

A. The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended.

B. The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.

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

8 TEST RESULT

ANT / SIDE	HORIZONTAL	VERTICAL	RESULT
FRONT	A	A	PASSED
REAR	A	A	PASSED
RIGHT	A	A	PASSED
LEFT	A	A	PASSED

9 Photos of test configuration please refer to appendix A.

ELECTRICAL FAST TRANSIENT/BURST IMMUNITY TEST (EFT)

1 TEST PROCEDURE

According to **IEC 61000-4-4 (2004)**

According To **EN 55024 (1998) + A1 (2001) + A2 (2003)**

2 RESULT OF ELECTRICAL FAST TRANSIENT/BURST IMMUNITY TEST (EFT)

N/A (This standard is not applicable to this EUT (Model : VKM01)).

SURGE IMMUNITY TEST

1 TEST PROCEDURE

According To **IEC 61000-4-5 (2001)**

According To **EN 55024 (1998) + A1 (2001) + A2 (2003)**

2 RESULT OF SURGE IMMUNITY TEST

N/A (This standard is not applicable to this EUT (Model : VKM01)).

IMMUNITY TEST TO CS CONDUCTED DISTURBANCE

1 TEST PROCEDURE

According To **IEC 61000-4-6 (2003) + A1 (2004)**

According To **EN 55024 (1998) + A1 (2001) + A2 (2003)**

2 RESULT OF SURGE IMMUNITY TEST

N/A (This standard is not applicable to this EUT (Model : VKM01)).

POWER FREQUENCY MAGNETIC FIELD IMMUNITY TEST

1 TEST INSTRUMENTS & FACILITIES

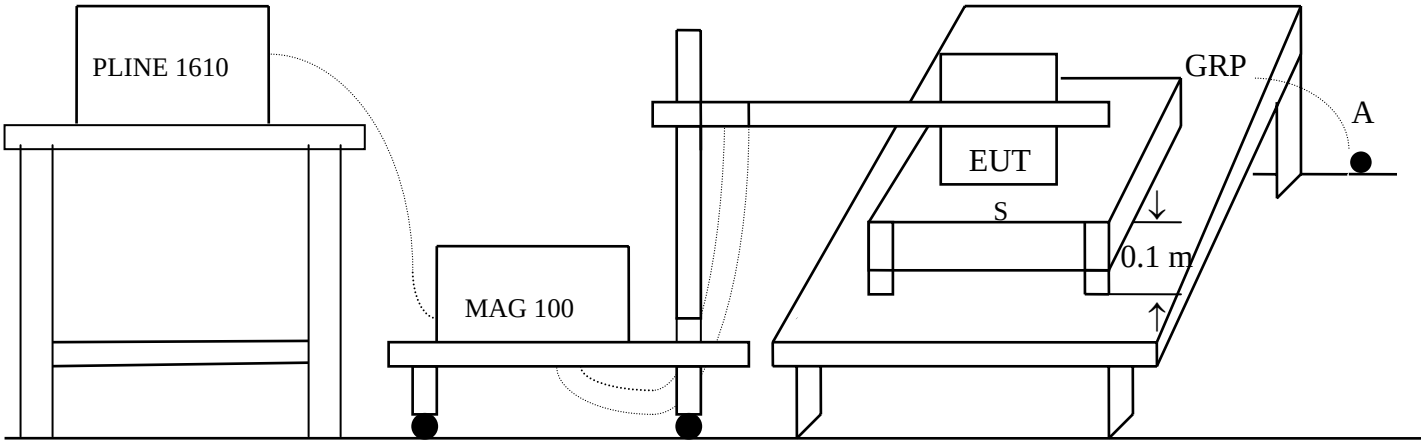
Instruments/ Facilities	Manufacturer	Model # Serial #	Data Of Cal.
LINE INTERFERENCE TESTER	HAEFELY	PLINE 1610 080166-10	FEB/2007
MAGNETIC FIELD TESTER	HAEFELY	MAG 100.1 080206-01	N/A
TRIAXIAL ELF MAGNETIC FIELD METER	F.W.BELL	4080 9645	AUG/2006
CONTROL PC	KB TECH	KB P586/133	--

2 TEST STANDARD

According To **IEC 61000-4-8 (2001)**

According To **EN 55024 (1998) + A1 (2001) + A2 (2003)**

3 TEST SETUP



S: Insulating support
A: Safety earth
GRP: Ground plane

(Details for setup configuration, please refer to appendix A.)

4 TEST LEVELS

Environmental Phenomena	Test Specification	Units	Performance Criteria
Power Frequency	50	HZ	
Magnetic Field	1	A/m	B

5 CONFIGURATION OF THE EUT

Same as “Radiated Emission test”, section 4

6 OPERATION CONDITION OF EUT

Same as “Radiated Emission test”, section 5

7 CONDITIONS DURING TESTING

7.1 Temperature : 24 ℃ (15℃ ~ 35℃)

Humidity : 54 % RH.(25 % ~ 75%)

7.2 The induction coil shall be rotated by 90°

8 PERFORMANCE CRITERIA

A. The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended.

B. The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed.

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

9 TEST RESULTS

Environmental Phenomena	Test Specification	Units	Performance Criteria
Magnetic Field	1	A/m	A

9.1 Model : VKM01

9.2 Final Result : PASSED

9.3 Remark :

10 Photos of test configuration please refer to appendix A.

VOLTAGE DIPS, SHORT INTERRUPTIONS IMMUNITY TEST

1 TEST PROCEDURE

According To **IEC 61000-4-11 (2004)**

According To **EN 55024 (1998) + A1 (2001) + A2 (2003)**

2 RESULT OF VOLTAGE DIPS, SHORT INTERRUPTIONS IMMUNITY TEST

N/A (This standard is not applicable to this EUT (Model : VKM01)).

Appendix A

PHOTOS OF TEST CONFIGURATION

PHOTO OF RADIATED EMISSION TEST

Model : VKM01

Front View

Rear View

PHOTO OF RADIO FREQUENCY ELECTROMAGNETIC FILE IMMUNITY TEST (RS)

Model : VKM01

PHOTO OF ELECTROSTATIC DISCHARGE IMMUNITY TEST (ESD)

PHOTO OF POWER FREQUENCY MAGNETIC FIELD IMMUNITY TEST

Model : VKM01

Appendix B

PHOTOS OF EUT

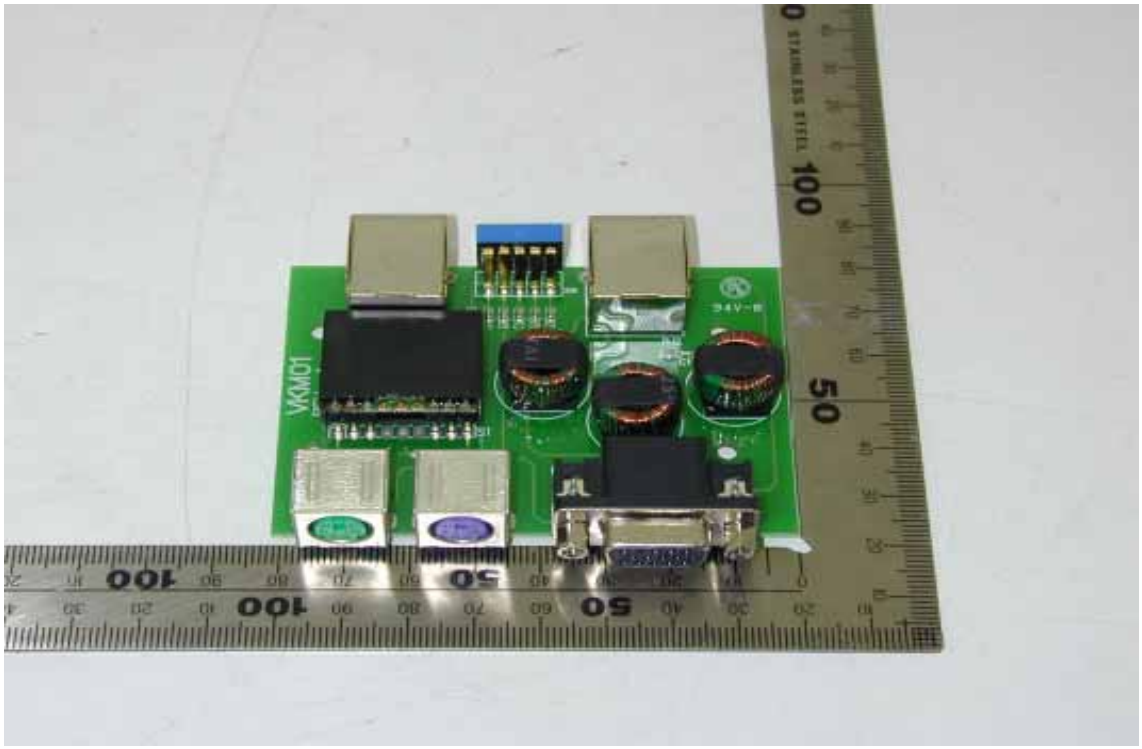
PHOTO OF EUT

Model : VKM01

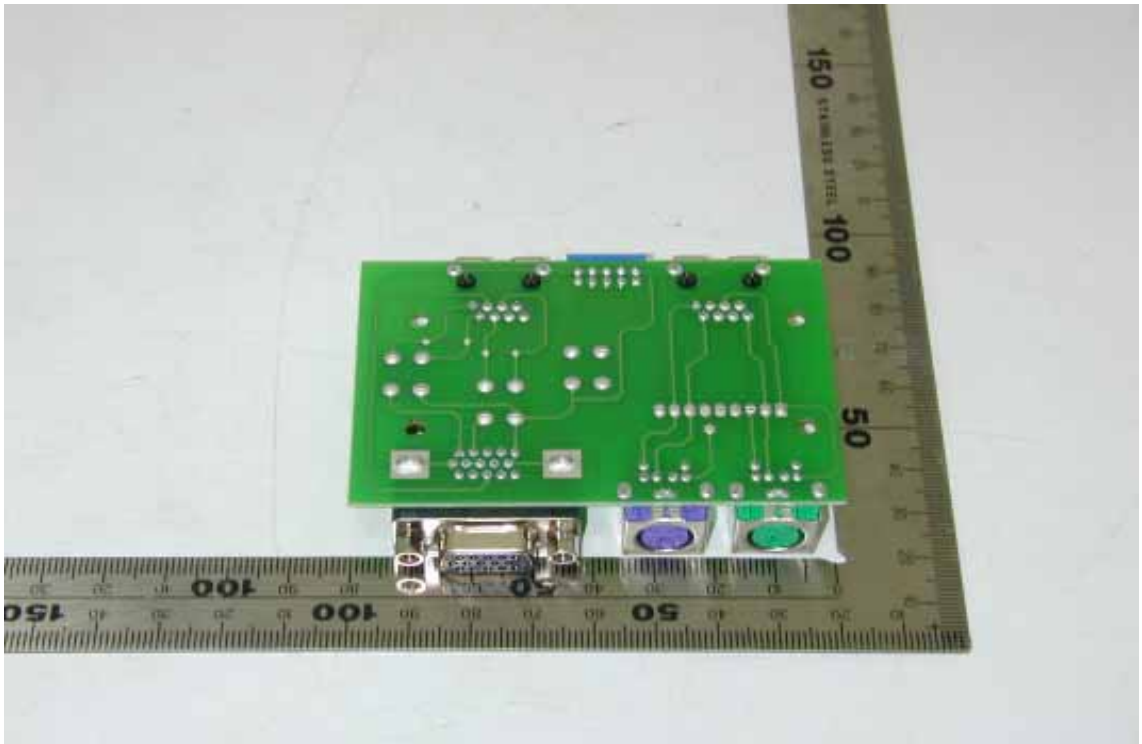
Full View of EUT

PHOTO OF EUT

Model : VKMXXTX



Component Side of Main Board



Solder Side of Main Board

Declaration of Conformity

We(Manufacturer/Importer)

(company name)

(address)

declares under our sole responsibility that the product

Product name : VGA Keyboard Mouse CAT5 Extender

Model No. : VKMXXTX, VKMXXRX

to which this declaration relates is in conformity with the following standard(s) or other normative document(s)

☑	EN 55022 Class B	(1998)	☑	EN 55024	(1998)
	+ A1	(2000)		+ A1	(2001)
	+ A2	(2003)		+ A2	(2003)
☑	EN 61000-3-2	(2000)	☑	IEC 61000-4-2	(2001)
☑	EN 61000-3-3	(1995)	☑	IEC 61000-4-3	(2002)
	+ A1	(2001)	☑	IEC 61000-4-4	(2004)
			☑	IEC 61000-4-5	(2001)
			☑	IEC 61000-4-6	(2003)
				+ A1	(2004)
			☑	IEC 61000-4-8	(2001)
			☑	IEC 61000-4-11	(2004)

following the provisions of 2004/108/EC Directive

Place: _____ Signature: _____

Date : _____ Full name: _____

CE Title: _____

EB6K039

TÜV Rheinland Taiwan Ltd.

TÜV

Certificate

of

Appointment

for the applicant:

Hometek Technology Inc.
No. 67-9, Shir Men Rd., Tu-Cheng City,
Taipei Hsien 236, Taiwan, R.O.C.

has been authorized to carry out EMC tests by order and under supervision of TÜV Rheinland. It has successfully demonstrated capability to conduct measurement and to process test data according to:

European and International EMC Standards as listed in the Scope of Authorization on the attachment to this certificate

An assessment of the facility was conducted by TÜV Rheinland auditors according to the TÜV Rheinland requirements for "Test Site Approval" with reference to

ISO 17 025:1999

Certificate No. : 10012161-2006 **Valid until : June 14, 2007**

TÜV Rheinland Taiwan Ltd.
Taipei, April 13, 2006

Dipl.-Ing. Andreas Klinker
Certification Body

Dipl.-Ing. Bodo Kretzschmar
Product Safety and Quality

TÜV

Attachment to

Certificate

of Appointment

SCOPE OF AUTHORIZATION

Hometek Technology Inc.
No. 67-9, Shir Men Rd., Tu-Cheng City,
Taipei Hsien 236, Taiwan, R.O.C.

European Standards

EN 50081-1	EN 61000-3-2	ENV 50140
EN 50081-2	EN 61000-3-3	ENV 50141
EN 50082-1	EN 61000-6-1	ENV 50204
EN 50130-4	EN 61000-6-2	
EN 50091-2	EN 61000-6-3	
EN 55011	EN 61000-6-4	
EN 55013	EN 61000-3-11	
EN 55014-1	EN 61000-4-2	
EN 55014-2	EN 61000-4-3	
EN 55022	EN 61000-4-4	
EN 55024	EN 61000-4-5	
EN 60601-1-2	EN 61000-4-6	
EN 60801	EN 61000-4-8	
EN 60945	EN 61000-4-11	
	EN 61204-3	

International Standards

CISPR 11	IEC 61000-4-2	IEC 61000-3-2
CISPR 13	IEC 61000-4-3	IEC 61000-3-3
CISPR 14-1	IEC 61000-4-4	IEC 61000-3-11
CISPR 14-2	IEC 61000-4-5	IEC 61000-6-1
CISPR 22	IEC 61000-4-6	IEC 61000-6-2
CISPR 24	IEC 61000-4-8	IEC 61000-6-3
	IEC 61000-4-11	IEC 61000-6-4
IEC 801.2	IEC 61000-4-12	IEC 60945
IEC 801.3		
IEC 801.4		

Certificate No. : 10012161-2006

Taipei, April 13, 2006

Dipl.-Ing. Bodo Kretzschmar
Product Safety and Quality

TÜV Rheinland Taiwan Ltd.

TÜV

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An assessment of the facility was conducted by TÜV Rheinland auditors according to the TÜV Rheinland requirements for "Test Site Approval" with reference to

ISO 17025: 2005

Certificate No. : 10012161-2007 **Valid until : Sept. 7, 2008**

TÜV Rheinland Taiwan Ltd.
Taipei, June 20, 2007

i. V. F.
Dipl.-Ing. Andreas Klinker
Certification Body

Dipl.-Ing. Bodo Kretzschmar
Product Safety and Quality

TÜV

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EN 55014-1	EN 61000-4-3	
EN 55014-2	EN 61000-4-4	
EN 55022	EN 61000-4-5	
EN 55024	EN 61000-4-6	
EN 60601-1-2	EN 61000-4-8	
EN 60801	EN 61000-4-11	
EN 60945	EN 61204-3	
EN 61000-3-2	EN 62040-2	

International Standards

CISPR 11	IEC 61000-4-2	IEC 61000-3-2
CISPR 13	IEC 61000-4-3	IEC 61000-3-3
CISPR 14-1	IEC 61000-4-4	IEC 61000-3-11
CISPR 14-2	IEC 61000-4-5	IEC 61000-6-1
CISPR 22	IEC 61000-4-6	IEC 61000-6-2
CISPR 24	IEC 61000-4-8	IEC 61000-6-3
	IEC 61000-4-11	IEC 61000-6-4
IEC 801.2	IEC 61000-4-12	IEC 60945
IEC 801.3		IEC 62040-2
IEC 801.4		

Certificate No. : 10012161-2007

Taipei, June 20, 2007

Dipl.-Ing. Bodo Kretzschmar
Product Safety and Quality