



# International Approvals (IA)

**South Korea**

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**TÜV Rheinland of N.A. Inc.**

# Safety

This approval is MANDATORY.

- Safety and EMC Scheme was separated in year 2012.
- This scheme is for preparing and submitting product based on a CB report or TRBB report (w/ country deviation).

***\*\*TUV Rheinland can assist in MoU Procedure  
( without sample requirement)***

***\*\* Authorized for FI in USA, Japan, Germany, Hungary,  
Brazil ( with KTL)***

# Product in Scope

- Electrical appliances used in AC 50V up to 1,000V and regulated under 11 product categories.

1)Cables and cords 2)Switches 3)Capacitors or filters  
4)Installation accessories and connection devices  
5)Installation protective equipment 6)Safety transformer and similar equipment 7)Safety of household and similar electrical appliances 8)Motor tools 9) Audio/Video and similar electronic appliances 10)IT and office appliances 11)Lightings

Note :More products are planned to be gradually transferred to self regulatory confirmation scheme each year by KATS (Korean Agency for Testing and Standards).

# Certification Body

Name of Authority :

(MKE) Minister of Knowledge Economy

( KATS) Korean Agency for Technology & Standards – Accreditation Body.

Governs ( certification bodies):

- KTL
- KTC
- KTR



**Manufacturers ( non MoU) & MoU Partners**

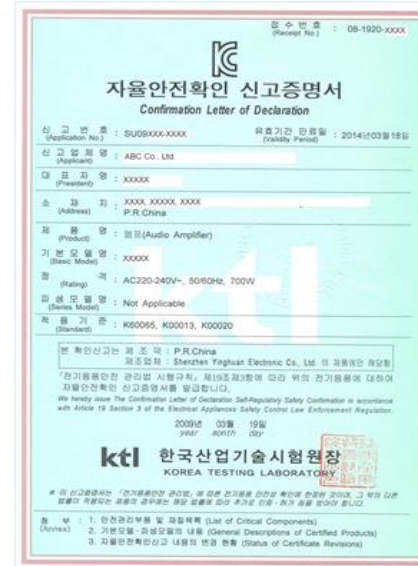
**\*\* *TUV Rheinland is one of the MoU partner.***

# Certificate Validity

- KC certification: none
- KC self regulatory confirmation and declaration: 5 years



KC Certificate

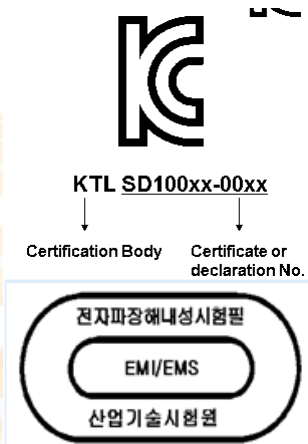


Confirmation Letter of Declaration

# Certification Mark



- Marking Merged into KC Mark since year 2010
- Marking Requirement need to be in either both label and packaging :
  - KC Mark and Number, Product Name (in Korean), Model Name, Rated input/output, Factory Name, Country of origin, Double insulation mark, if applicable, Manufacturing date, Customer service info ( phone or Address).
  - Additional marking requirement starting January 2012



# Standards and Report Acceptance

- Certification with CB, EMC Test Report (MoU)
  - ***CB Report deviations – 220 VAC, 60 Hz***
  - ***Plug according to KSC 8305***
  - ***IEC or Korean Approval information of critical components in CB report***
- Factory Inspection

Factory inspection is required for certification required products. Certification bodies have designated partners in each countries.

TUV Rheinland Group has an MOU with KTL

TUV Rheinland Group is designated for :  
Japan, Germany, Brazil, Hungary and US.

# Additional products regulated effective from 7/1/2013

- KC self regulatory confirmation scheme:
  1. Printer: Any printer without limitation of power consumption (except plotter, graphic use only printer.)
  2. Power supply used for PC (ex: power module built in PC)
  3. Radio equipment for location based services (ex: Bus info sys)
  4. Notebook PC (including Tablet PC)
- Supplier conformity scheme:
  1. Radio equipment for citizen band radio services  
(both AC and DC, including portable, built in type and none professional use)
  2. Radio equipment for voice and sound signal transmitter (including wireless microphone, wireless speaker system)
  3. Portable radio telecommunication equipment powered by external power supply or charger (ex: Mobile phone, smart phone, TRS mobile phone.).



# Additional Requirements

- Local Representative is NOT required
  - Lead time :
  - \*2-3 weeks
- \*depends/ based on CB Report

# Documents Required ( General MoU Scheme)

1. CB Report with National deviation (less than 3 years)
2. Signed KTL summary report Technical
3. Circuit Diagram
4. Block Diagram
5. Label/Manual (Korean/Safety Warnings)
6. Additional Photos/Cord and Plug info might be required
7. FI Questionnaire ( for KC certification Scheme) signed by Manufacturing Facility for applicant

# Documents Required ( General non-MoU Scheme)

1. CB Report with National deviation (less than 3 years)
2. Sample for testing
3. Circuit Diagram
4. Block Diagram
5. Label/Manual (Korean/Safety Warnings)
6. Additional Photos/Cord and Plug info might be required
7. FI Questionnaire ( for KC certification Scheme) signed by Manufacturing Facility for applicant
8. Authorization form signed by Manufacturing Facility for applicant.

# Sample Requirements

- MoU: No testing sample is required
- Non MoU: 2 samples and some components are required for testing.

# Plugs and Ratings

- Household supply rated : AC 110V, 220V and 380V.
- Free Voltage type is acceptable
- Supply rated frequency : 60 Hz

Components :

KC. KS. IEC or tested separately at CB is acceptable

Plug :

Shall comply with KSC8305 ( Korean Industrial Standard)



# Additional Approvals/Information

- Additional model is regulated by rated input, rated current, insulation class, IP class and critical components etc. Model grouping could be different from CB scheme.
- Approvals for Radiocom/EMC might be required – see KC/RRA
- Lithium Battery requires approval – Portable lithium secondary cells, which energy density per volume is exceeding 400Wh/L)- Battery pack assembled with cell.- Lithium secondary cell used or battery for portable appliances with navigation function regardless to volume energy density. - Button cell type, motor vehicle use, medical use (including portable medical equipment use) is excluded) Testing required : Cell: 25 ea /Battery: 10 ea /(Battery for navigation: + 3 ea)  
Test Report accepted : from KTL, KERI, KTR Testlabs.

# EMC/Radio/Telecom

This approval is MANDATORY.

Products in Scope:

Any products connected to PC or network, enable wired, wireless communication and electric, electronic equipment exceeding 9 kHz.

Previously known as KCC-RRA – Now, MSIP.

MSIP has 4 different approval types:

1. Type approval
2. Type registration:
3. Self Test and Product registration with RRA
4. Potential Approval

# Product in Scope

(KCC) MSIP has 4 different approval types:

1. Type approval: Radio equipment except weak power radio EUT, Telecom equipment, etc.

Testing at designated lab and certification by RRA

2. Type registration: IT equipment, Weak Power Equipment and Industrial equipment.

Test at designated lab and register the product with RRA

3. Self Test and Product registration with RRA

4. Potential Approval: Products with new technology which does not have requirement or under review/new law( that is under preparation).



# Certification Body

It is no longer : \*KCC but MSIP and RRA

- Certification body: The NATIONAL RADIO RESEARCH AGENCY (RRA)
- Name of ministry: Ministry of Science, ICT & Future Planning (MSIP).

\* Korea Communications Commission

# Certificate Validity

Valid permanently until there are changes in components/radio or antenna.

*Any hardware changes falls under technical modification scope and in order to modify the certificate, we will require testing.*

**\*\*Technical modification scope of EMC conformity confirmation according to MSIP as of September 2013.**

**OLD:** most cases of component change were subjected for additional testing.

**NEW:** modification due to relatively casual component change(refer to examples below) can be done with documentation without additional testing.

*For example:*

- replacement of resistor, Inductor, Capacitor.
- replacement of diode (including LED).
- reduction of wattage value without any circuit change.

**정보통신기기 인증서**  
Certificate of Information and Communication Equipment

인증종류	형식등록(Type Registration)
Certification Type	
성명 또는 상호	XXXX Co., Ltd.
Trade Name or Applicant	
기기의 명칭	무선데이터통신시스템용 무선기기
Equipment Name	
기기의 모델명	XXX-XXXX
Model Number of Equipment	
인증번호	XXX-XXXXXX
Certification No.	
제조자 및 제조국가	XXXX Co., Ltd./Japan
Manufacturer and Country of Origin	
형식기호	UAR98-I02F2402/2479TR.006F1078
Type Identification	
인증년월일	2009년(Year) 01월(Month) 11일(Date)
Date of Certification	
기타	
Others	

이 기기는 정보통신기기 인증규칙에 의해 인증되었으며 증명합니다  
It is certified that foregoing equipment has been certified under the provisions of the Regulations on Certification of Information and Communication Equipment.

2009년(Year) 01월(Month) 11일(Date)  
**전파연구소장**  
Director General of Radio Research Laboratory  
Ministry of Information and Communication  
Republic of Korea

# Certification Mark

- Marking Requirement need to be in either both label and packaging :

**OLD:** Logo and Number, Product Name (in Korean), Model Name, Rated input/output, Factory Name, Country of origin, Double insulation mark, if applicable, Manufacturing date, Customer service info ( phone or Address).

**NEW:** In case of model name applied for certification and used for actual sales are the same, certification mark and model name(should be placed replacing certificate no. which is under the logo) only can be placed on product and package while rest of mandatory marking requirement should be placed on user manual.

- Name change of the ministry KCC to MSIP because of an organization change of the new government.
- Certificate no. on label should be changed with the new name.

OLD: KCC-CRM-ABC-XXXXXXXXXXXXXXXXXX

NEW: MSIP-CRM-ABC-XXXXXXXXXXXXXXXXXX

***Transition period: until 30.Sep.2013 (refer to page 26. in RRA notice no. 2013-5)***

# Certification Mark ( cont'd)

- Mandatory Notice – Required in User manuals ( for EMC registration only)

Class	Notification
A 급 기기 (업무용 방송통신기기)	이 기기는 업무용(A 급)으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.
B 급 기기 (가정용 방송통신기기)	이 기기는 가정용(B 급)으로 전자파적합등록을 한 기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

- Translation :

Class	Notification
CLASS A	EMC registration is done on this equipment for a business use only (Class A). Product seller and user should notice that this equipment is purposed to be used expect for house use.
CLASS B	EMC registration is done on this equipment mainly for a house use (Class B) and also can be used in all areas.

# Certification Mark ( cont'd)

## Certification Mark Numbering System :

K	C	C	-	C	W	I	-	A	B	C	-	A	1	B	1
①		②			③	④	⑤			⑥					

- **1. Certification body: KCC**
- **2. Certification type:** C (Certification)  
R (Registration)  
I (Interim)
- **3. Tested field:** R (Radio)  
T (Telecommunication)  
E (Electromagnetic Wave)  
M (Multi Function)
- **4. Product type:** M (Manufacture)  
I (Import)  
S (Sale)
- **5. Licence holder's code no. : 3 digits registered with RRA.**
- **6. Product identification no. : 14 digits (combination of alphabet, numbers, hyphen)**

# Certification Mark ( cont'd)

## ID Registration

K	C	C	-	C	W	I	-	A	B	C	-	A	1	B	1
①				②	③	④		⑤					⑥		

ABC (3 digits): capital letter (A – Z) and/or number (0 – 9)

***Note: Online Registration is not available for Overseas (outside S. Korea) Applicant yet.***

# Certification Mark ( cont'd)

Marking requirement comparison for KC (Safety) and KC /MSIP( RRA)

KC(Safety)	KC(RRA)
1. Logo + Certificate no.	1. Logo + Certificate no.
2. Product name ( <i>In Korean</i> )	2. Product name
3. Model name	3. Model name
4. Manufacturing date	4. Manufacturing date
5. Factory Name	5. Manufacturer's name and <b>country name</b>
6. Rated Input/output	6. License holder name (if different from manufacturer's name)
7. <b>Country of origin</b>	7. Tel. no. or Address of Customer service (in manual)
8. Double insulation mark, if applicable	
9. Tel. no. or Address of Customer service	

**All required marking information regulated in both regulation should be placed on label and package if the product fall under both product scope.**

# Standards and Report Acceptance

- To enter Korean Market Products shall comply with :

**EMC are based on CISPR 22/24**

**Radio : Radio Regulation by RRA**

**Radio EMC: ETSI EN 301- 489 series.**

**Telecom requirements :PART 68 with national deviation**

**(and the safety requirements : IEC 60950 +national deviation)**

- Report should comes from Test report done by RRA \*\*designated laboratories accepted (except self test and conformity scheme).

*\*\*Designated labs. are located in Korea, EU and US, listed under agreement below :* a. **MRA listed lab.** (<http://rra.go.kr/eng/approval/mra/view.jsp?type=2>)

b. **FTA listed lab.** (<http://rra.go.kr/approval/mra/view.jsp?type=3>)



# Additional Requirements

- Local Representative is NOT required
- Company Registration is required : Normally takes about 2 weeks for registration

# Documents Required ( General Type Approval) For Radio and Telecom

1. Authorization form ( between test lab and license holder)
2. Circuit diagram
3. Part location number ( can be replaced by PCB photos depending on visibility)
4. Application information (Applicant and device info for certificate)
5. Manual ( in Korean)
6. Antenna Specification
7. RF Test program and instruction guide
8. CB certificate and Report ( Telecom)

# Documents Required ( General Type Registration) For Radio, IT and MRA

1. Authorization form ( between test lab and license holder)
2. Circuit diagram ( Radio only)
3. Part location number ( Radio only)
4. Application information (Applicant and device info for certificate)
5. Manual ( in Korean or English)
6. Antenna Specification ( Radio only)
7. RF Test program and instruction guide ( Radio only)
8. Confirmation of conformity ( RRA format) signed by license holder
9. Product Photos ( front, rear, left, right, cover opened, label, all boards used in the front/back unit with high resolution. ( MRA only)
10. MRA Report ( MRA only)

# Energy Efficiency Program

- This approval is MANDATORY (depending on the conditions/classification).
- Electrical products in the scope require to test at designated 3rd party test lab. and registration to KEMCO by local importer.
- There are 26 items including Refrigerator in the list of Target products for Energy Efficiency Label & Standard Program. The energy efficiency label program includes not only domestic goods but also imported goods.

# Certification Body

Registration to KEMCO :

(Korea Energy Management Corporation)

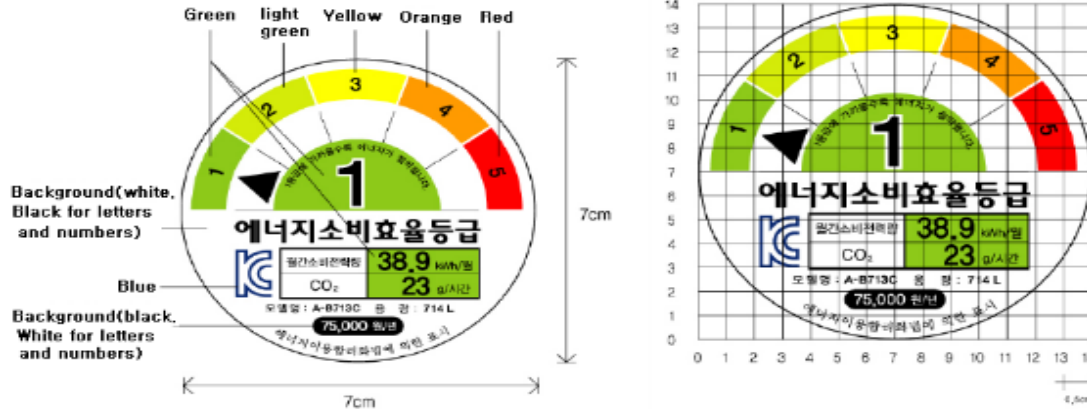
# Certification Validity

No Validity/Expiration date issued yet.

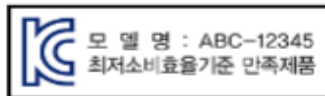
# Certification Mark

Marking requirement of each product is required to be complied according to the regulation.

Example:



<Marking with 5 grades>



(conformity mark)



(non-conformity warning mark)

<Battery charger and AC/DC adaptor>

# Standards and Report Acceptance

Testing will need to be done in country  
(TUV R Korea will assist)

Sample requirements :

- 2 each except items specified below.
- (Fluorescent lamp: 10 ea, Self ballasted lamp: 6 ea, 3 phase motor: 1 ea, Adaptor, charger: 3 ea)

*(Regulation on Energy Efficiency Label and standards will be included in your packet)*

# Additional Requirement

- e-standby testing and registration is required starting July 2009 for 7 items below: **Computer, Printer, Multifunction equipment, TV, Set Top Box, Microwave Oven, Monitor.**
- **Scope:**
  - **AC-DC/AC-AC : external power supplies**
  - **Battery Charger for lithium batteries**



# Documents Required

- 1) Local importer information.
- 2) Product specification
- 3) Product label
- 4) Operation and users' manual
- 5) Circuit diagram
- 6) Specific product information required depending on products.
  - Ex) a. Refrigerator: storage volume, load plan, M-load location
  - b. Dish washer: capacity of detergent and conditioner
  - c. Electric cooker: heating method, pressure method

# References


- Korean Agency for Technology and Standards :  
[www.kats.go.kr](http://www.kats.go.kr)
- Law, Decree, Directive :
- KATS:[http://www.kats.go.kr/english/im\\_05/im\\_05\\_02.asp?OlapCode=ATSU2902](http://www.kats.go.kr/english/im_05/im_05_02.asp?OlapCode=ATSU2902)
- RRL: <http://rra.go.kr/eng2/index.jsp>
- MSIP :  
[http://www.msip.go.kr/english/MainMiddle\\_main.action](http://www.msip.go.kr/english/MainMiddle_main.action)
- MRA listed lab. list  
(<http://rra.go.kr/eng/approval/mra/view.jsp?type=2>)
- FTA listed lab. list  
(<http://rra.go.kr/approval/mra/view.jsp?type=3>)

# Questions???









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