

국제공인시험기관 인정서

(주)한국기술연구소

인 정 번 호 : KT160
법 인 등 록 번 호 : 110111-0814172
(또는 고유번호)
사 업 장 소 재 지 : 경기도 광주시 도척면 사기소길 58-10
최 초 인 정 일 자 : 2002년 4월 11일
인 정 유효 기 간 : 2016년 5월 9일 ~ 2020년 5월 8일
인정분야 및 범위 : 별첨
발 행 일 : 2017년 11월 17일

상기 기관을 국가표준기본법 제 23 조 및 KS Q ISO/IEC 17025:2006 에 의거하여 국제공인시험기관으로 인정합니다. 또한 ISO-ILAC-IAF 공동성명 (2009.1.8)에 언급된 바와 같이 인정된 분야 및 범위에 대한 기술적 능력과 시험기관의 품질경영시스템이 적절함을 인정합니다.



한국인정기구장
(Korea Laboratory Accreditation Scheme)



Korea Laboratory Accreditation Scheme

제 KT160호

03. 전기사험

03.011 전자기적합성

규격번호	규격명	시험범위
KN 11:2011	산업, 과학, 의료용 기기 (ISM)류 장애방지 시험 방법	CE : 150 kHz ~ 30 MHz RE : 9 kHz ~ 6 GHz
KN 13:2008	방송수신기 및 관련기기류의 장애방지 시험	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 6 GHz DP : 30 MHz ~ 300 MHz
KN 14-1:2011	가정용 전기기기 및 전동기기류의 장애방지시험	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 1 GHz DP : 30 MHz ~ 300 MHz
KN 14-2:2008	가정용 전기기기 및 전동기기류의 내성시험	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz V-DIP : max 16A (각 상당)
KN 15:2011	조명기기류의 장애방지시험	CE : 9 kHz ~ 30 MHz MF : 9 kHz ~ 30 MHz RE : 30 MHz ~ 1 GHz
KN 19:2008	전자렌지로부터 방사되는 주파수 1 GHz 이상의 장애방지시험	RE : 1 GHz ~ 6 GHz
KN 22:2009	정보기기류 장애방지시험방법	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 6 GHz
KN 24:2011	정보기기류 내성 시험방법	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4kV CS : 150 kHz ~ 230 MHz V-DIP : max 16A (각 상당)

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
KN 50:2010	전기철도 전자파 장애방지 시험방법	RE : 9 kHz ~ 1 GHz
KN 61000-4-2:2013	정전기 방전 내성시험방법	ESD : 8 kV
KN 61000-4-3:2011	방사성 RF 전자기장 내성시험방법	RS : 80 MHz ~ 3 GHz
KN 61000-4-4:2011	전기적 빠른 과도현상/버스트 내성시험방법	EFT : 4 kV
KN 61000-4-5:2008	서지 내성시험방법	Surge : 4 kV
KN 61000-4-6:2013	전도성 RF 전자기장 내성시험방법	CS : 150 kHz ~ 230 MHz
KN 61000-4-8:2013	전원 주파수 자기장 내성시험방법	M/F : 125 A/m
KN 61000-4-11:2008	전압강하 및 순간정전 내성시험방법	V-DIP : max 16A (각상당)
KN 61000-6-3:2012	주거, 상업 및 경공업 환경에서의 장애방지 시험방법	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 6 GHz
KN 61000-6-4:2012	산업 환경에서의 장애방지 시험방법	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 6 GHz
KN 62040-2:2012	무정전 전원장치(UPS)류 전자파적합성 시험방법	CE : 150 kHz ~ 30 MHz RE : 10 kHz ~ 6 GHz ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각상당)

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
KN 60947:2012	저압 개폐장치 및 제어장치 시험방법	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 6 GHz ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각상당)
KN 60601-1-2:2008	의료기기에 대한 내성시험방법	CE : 150 kHz ~ 30 MHz RE : 9 kHz ~ 6 GHz ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각상당)
KN 61547:2012	조명기기 내성기준 및 시험방법	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각상당)

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
KN 60974-10:2012	아크 용접기에 대한 내성 시험방법	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 6 GHz ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
KN 61000-6-1:2012	주거, 상업 및 경공업 환경에서의 일반 내성시험방법	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
KN 61000-6-2:2012	산업환경에서의 일반 내성 시험방법	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
KN 301 489-1:2012	무선설비 기기류의 공통 전자파적합성 시험방법 (제외사항)차량용 서지시험	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
KN 301 489-2:2009	무선호출용 무선설비에 대한 전자파적합성 시험방법	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
KN 301 489-3:2008	특정소출력 무선기기 전자파적합성 시험방법	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
KN 301 489-6:2008	디지털 코드 없는 전화기 전자파적합성 시험방법	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
KN 301 489-13:2008	생활무전기 전자파적합성 시험방법	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
KN 301 489-15:2009	이머추어 무선국용 무선설비 전자파적합성 시험방법	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
KN 301 489-17:2013	무선 데이터 통신시스템용 특정 소출력 무선기기 전자파적합성 시험방법	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
KN 301 489-18:2009	주파수공용 무선전화장치에 대한 전자파적합성 시험방법	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
KN 301 489-24:2008	이동통신용 무선설비의 기기에 대한 전자파적합성 시험방법	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
KN 301 489-27:2009	체내 이식 무선의료기기 전자파적합성 시험방법	CE : 150 kHz ~ 30 MHz RE : 9 kHz ~ 6 GHz ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
KN 301 489-32:2009	지반 탐사 및 벽면 탐사 레이더에 전자파적합성 시험방법	CE : 150 kHz ~ 30 MHz RE : 9 kHz ~ 6 GHz ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
CISPR 11:2010	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	CE : 150 kHz ~ 30 MHz RE : 9 kHz ~ 6 GHz
CISPR 14-1:2011	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 1 GHz DP : 30 MHz ~ 300 MHz
CISPR 14-2:2008	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 2: Immunity - Product family standard	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4kV Surge : 4kV CS : 150 kHz ~ 230 MHz V-DIP : max 16A (각 상당)

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
CISPR 22:2008	Information technology equipment-Radio disturbance characteristics-Limit and methods of measurement	CE : 150 KHz ~ 30 MHz RE : 30 MHz ~ 6 GHz
CISPR 24:2010	Information technology equipment - Immunity characteristics - Limits and methods of measurement	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz V-DIP : max 16A (각 상당)
EN 55011:2010	Industrial, scientific and medical equipment -Radio-frequency disturbance characteristics -Limits and methods of measurement	CE : 150 kHz ~ 30 MHz RE : 9 kHz ~ 6 GHz
EN 55022:2010	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 6 GHz
EN 55024:2010	Information technology equipment - Immunity characteristics - Limits and methods of measurement	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz V-DIP : max 16A (각 상당)

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
EN 55014-1:2011	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 1 GHz DP : 30 MHz ~ 300 MHz
EN 55014-2:2008	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 2: Immunity - Product family standard	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz V-DIP : max 16A (각 상당)
EN 60601-1-2:2007	Medical electrical equipment Part 1-2: General requirements for basic safety and essential performance — Collateral Standard: Electromagnetic disturbances — Requirements and tests	CE : 150 kHz ~ 30 MHz RE : 9 kHz ~ 6 GHz ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4kV Surge : 4kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
EN 61000-3-2:2009	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)	정격전류 16A 이하
EN 61000-3-3:2013	Electromagnetic compatibility (EMC) Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection	정격전류 16A 이하

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
EN 61000-6-1:2007	Electromagnetic compatibility (EMC) — Part 6-1: Generic standards — Immunity for residential, commercial and light-industrial environments	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
EN 61000-6-2:2007	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments	ESD : 8 kV RS : 80 MHz ~ 3 GHz EFT : 4 kV Surge : 4 kV CS : 150 kHz ~ 230 MHz M/F : 125 A/m V-DIP : max 16A (각 상당)
EN 61000-6-3:2011	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 6 GHz
EN 61000-6-4:2011	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 6 GHz
EN 61000-4-2:2009	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	ESD : 8 kV
EN 61000-4-3:2010	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	RS : 80 MHz ~ 3 GHz
EN 61000-4-4:2012	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EFT : 4 kV

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
EN 61000-4-5:2006	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	Surge : 4 kV
EN 61000-4-6:2009	Electromagnetic compatibility (EMC) -Part 4-6: Testing and measurement techniques -Immunity to conducted disturbances, induced by radio-frequency fields	CS : 150 kHz ~ 230 MHz
EN 61000-4-8:2010	Electromagnetic compatibility (EMC) -Part 4-8: Testing and measurement techniques -Power frequency magnetic field immunity test	M/F : 125 A/m
EN 61000-4-11:2004	Electromagnetic compatibility (EMC). -Part 4-11: Testing and measurement techniques. Voltage dips, short interruptions and voltage variations immunity tests	V-DIP : max 16A (각상당)
FCC Part 18:2008	General Specification for Electrical/Electronic Components and Subsystems, Electromagnetic Compatibility	CE : 150 kHz ~ 30 MHz RE : 9 kHz ~ 18 GHz
FCC Part 15:2013	Radio Frequency Device Subpart B - Unintentional Device	CE : 150 kHz ~ 30 MHz RE : 9 kHz ~ 6 GHz
IEC 61000-4-2:2008	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	ESD : 8 kV
IEC 61000-4-3:2010	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	RS : 80 MHz ~ 3 GHz
IEC 61000-4-4:2012	Electromagnetic compatibility (EMC) Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EFT : 4 kV
IEC 61000-4-5:2009	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	Surge : 4 kV

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
IEC 61000-4-6:2013	Electromagnetic compatibility (EMC) Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	CS : 150 kHz ~ 230 MHz
IEC 61000-4-8:2009	Electromagnetic compatibility (EMC) Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	M/F : 125 A/m
IEC 61000-4-11:2004	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests	V-DIP : max 16A (각 상당)
ML STD 188 125 1 :2005	High - Altitude Electromagnetic Pulse(HEMP) protection for ground-based C4I facilities performing critical time-urgent missions ; Part 1 - Fixed facilities	SE : 10 kHz ~ 1 GHz PCI : Short pulse (5 kA), Intermediate pulse (250 A)
ML STD 220C:2009	DEPARTMENT OF DEFENSE TEST METHOD STANDARD METHOD OF INSERTION LOSS MEASUREMENT	주파수범위 : max. 10 GHz

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
MIL STD 461D:1993	Department of Defense Interface Standard Requirements for the control of electromagnetic interference emissions and susceptibility	
	5.3.1 CE101 (Conducted Emissions, Power Leads)	CE101, 30 Hz to 10 kHz
	5.3.2 CE102 (Conducted Emissions, Power Leads)	CE102, 10 kHz to 10 MHz
	5.3.3 CE106 (Conducted Emissions, Antenna Terminal)	CE106, 10 kHz to 40 GHz
	5.3.4 CS101 (Conducted Susceptibility, Power Leads)	CS101, 30 Hz to 50 kHz
	5.3.5 CS103 (Conducted Susceptibility, Antenna Port, Intermodulation)	CS103, 15 kHz to 10 GHz
	5.3.6 CS104 (Conducted Susceptibility, Antenna Port, Rejection of Undesired signals)	CS104, 30 Hz to 20 GHz
	5.3.9 CS114 (Conducted Susceptibility, Bulk Cable Injection)	CS114, 10 kHz to 400 MHz
	5.3.10 CS115 (Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation)	CS115, 30 Hz rate, 10 A
	5.3.11 CS116 (Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads)	CS116, 10 kHz, 100 kHz, 1 MHz, 10 MHz, 30 MHz, 100 MHz
	5.3.12 RE101 (Radiated Emissions, Magnetic Field)	RE101, 30 Hz to 100 kHz
	5.3.13 RE102 (Radiated Emissions, Electric Field)	RE102, 10 kHz to 18 GHz
	5.3.15 RS101 (Radiated Susceptibility, Magnetic Field)	RS101, 30 Hz to 100 kHz
	5.3.16 RS103 (Radiated Susceptibility, Electric Field)	RS103, 2 MHz to 18 GHz, Max : 50 V/m,
	<Exception> 5.3.16(RS103) Frequency above 18 GHz	

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
MIL STD 461E:1999	Department of Defense Interface Standard Requirements for the control of electromagnetic interference characteristics of subsystems and equipment	
	5.4 CE101 (Conducted Emissions, Power Leads)	CE101, 30 Hz to 10 kHz
	5.5 CE102 (Conducted Emissions, Power Leads)	CE102, 10 kHz to 10 MHz
	5.6 CE106 (Conducted Emissions, Antenna Terminal)	CE106, 10 kHz to 40 GHz
	5.7 CS101 (Conducted Susceptibility, Power Leads)	CS101, 30 Hz to 150 kHz
	5.8 CS103 (Conducted Susceptibility, Antenna Port, Intermodulation)	CS103, 15 kHz to 10 GHz
	5.9 CS104 (Susceptibility, Antenna Port, Rejection of Undesired Signals)	CS104, 30 Hz to 20 GHz
	5.12 CS114 (Conducted Susceptibility, Bulk Cable Injection)	CS114, 10 kHz to 200 MHz
	5.13 CS115 (Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation)	CS115, 30 Hz rate, 10 A
	5.14 CS116 (Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads)	CS116, 10 kHz, 100 kHz, 1 MHz, 10 MHz, 30 MHz, 100 MHz
	5.15 RE101 (Radiated Emissions, Magnetic Field)	RE101, 30 Hz to 100 kHz
	5.16 RE102 (Radiated Emissions, Electric Field)	RE102, 10 kHz to 18 GHz
	5.18 RS101 (Radiated Susceptibility, Magnetic Field)	RS101, 30 Hz to 100 kHz
	5.19 RS103 (Radiated Susceptibility, Electric Field)	RS103, 2 MHz to 18 GHz, Max : 50 V/m,
	<Exception> 5.19(RS103) Frequency above 18 GHz	

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
MIL STD 461F:2007	Department of Defense Interface Standard Requirements for the control of electromagnetic interference characteristics of subsystem and equipment	
	5.4 CE101 (Conducted Emissions, Power Leads)	CE101, 30 Hz to 10 kHz
	5.5 CE102 (Conducted Emissions, Power Leads)	CE102, 10 kHz to 10 MHz
	5.6 CE106 (Conducted Emissions, Antenna Terminal)	CE106, 10 kHz to 40 GHz
	5.7 CS101 (Conducted Susceptibility, Power Leads)	CS101, 30 Hz to 150 kHz
	5.8 CS103 (Conducted Susceptibility, Antenna Port, Intermodulation)	CS103, 15 kHz to 10 GHz
	5.9 CS104 (Conducted Susceptibility, Antenna Port, Rejection of Undesired Signals)	CS104, 30 Hz to 20 GHz
	5.11 CS106 (Conducted Susceptibility, Transients, Power Leads)	CS106, 400 V 5.13 CS114 10 kHz to 200 MHz
	5.13 CS114 (Conducted Susceptibility, Bulk Cable Injection)	CS114 10 kHz to 200 MHz
	5.14 CS115 (Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation)	CS115, 30 Hz rate, 10 A
	5.15 CS116 (Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads)	CS116, 10 kHz, 100 kHz, 1 MHz, 10 MHz, 30 MHz, 100 MHz
	5.16 RE101 (Radiated Emissions, Magnetic Field)	RE101, 30 Hz to 100 kHz
	5.17 RE102 (Radiated Emissions, Electric Field)	RE102, 10 kHz to 18 GHz
	5.19 RS101 (Radiated Susceptibility, Magnetic Field)	RS101, 30 Hz to 100 kHz
	5.20 RS103 (Radiated Susceptibility, Electric Field)	RS103, 2 MHz to 18 GHz Max : 50 V/m,
	<Exception> 5.20(RS103) Frequency above 18 GHz	

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
MIL-STD-461G:2015	Department of defense interface standard requirements for the control of electromagnetic interference characteristics of subsystem and equipment	
	5.4 CE101, conducted emissions, power leads	CE101, 30 Hz to 10 kHz
	5.5 CE102, conducted emissions, power leads	CE102, 10 kHz to 10 MHz
	5.6 CE106, conducted emissions, antenna terminal	CE106, 10 kHz to 40 GHz
	5.7 CS101, conducted susceptibility, power leads	CS101, 30 Hz to 150 kHz, Max : 136 dB μ V
	5.8 CS103, conducted susceptibility, antenna port, intermodulation	CS103, 15 kHz to 10 GHz
	5.9 CS104, conducted susceptibility, antenna port, rejection of undesired signals	CS104, 30 Hz to 20 GHz
	5.11 CS109, conducted susceptibility, structure current	CS109, 60 Hz to 100 kHz, Max : 126 dB μ A
	5.12 CS114, conducted susceptibility, bulk cable injection	CS114, 4 kHz to 200 MHz, Max : 109 dB μ A
	5.13 CS115, conducted susceptibility, bulk cable injection, impulse excitation	CS115, 30 Hz, 5 A
	5.14 CS116, conducted susceptibility, damped sinusoidal transients, cables and power leads	CS116, 10 kHz to 100 MHz, Max : 10 A
	5.16 CS118, personnel borne electrostatic discharge	CS118, Max : Contact \pm 8 kV, Air \pm 15 kV
	5.17 RE101, radiated emissions, magnetic field	RE101, 30 Hz to 100 kHz
	5.18 RE102, radiated emissions, electric field	RE102, 10 kHz to 18 GHz
	5.20 RS101, radiated susceptibility, magnetic field	RS101, 30 Hz to 100 kHz, Max : 180 dBpT
	5.21 RS103, radiated susceptibility, electric field MAX 50 V/m	RS103, 2 MHz to 18 GHz, Max : 50 V/m,
<Exception>		
5.21 RS103 Frequency above 18 GHz		

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
MIL-STD-188-125-2:1999 (Notice 1:2005)	High-Altitude Electromagnetic Pulse(HEMP) protection for ground-based C4I facilities performing critical time-urgent missions Part 2 TRANSPORTABLE SYSTEMS SE PCI	SE : 10 kHz ~ 1 GHz PCI : Short pulse (5 kA), Intermediate pulse (250 A)
IEEE STD 299:2006	IEEE Standard Method for measuring the Effectiveness of Electromagnetic Shielding Enclosures SE	SE : 9 kHz ~ 18 GHz
MIL-STD-464C:2010	ELECTROMAGNETIC ENVIRONMENTAL EFFECTS REQUIREMENTS FOR SYSTEM 5.1 Margins 5.2 Intra-system electromagnetic compatibility(EMC) 5.3 External RF EME (Max : 50 V/m) 5.6 Electromagnetic pulse(EMP) 5.7 Subsystems and equipment electromagnetic interference(EMI) 5.8 Electrostatic charge control. 5.9 Electromagnetic radiation hazards (EMRADHAZ) 5.11 Electrical bonding 5.12 External grounds	5.1 10 kHz ~ 18 GHz 5.2 10 kHz ~ 18 GHz 5.3 2 MHz ~ 18 GHz 5.6 SE:10 kHz ~ 1 GHz, PCI: Short Pulse (5 kA) Intermediate Pulse:(250 A) 5.7 30 Hz ~ 18 GHz 5.8 Contact discharge ± 8 kV, Air discharge ± 15 kV 5.9 10 kHz ~ 18 GHz 5.11 Min 0.01 mΩ 5.12 Min 0.01 mΩ

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
IEC60533:2015	Electrical and electronic installations in ships - Electromagnetic compatibility (EMC) 6. Emission requirements 7. Immunity requirements	6. RE :150 kHz ~ 2 GHz, CE : 10 kHz ~ 30 MHz 7. Conducted radio frequency interference : 150 kHz ~ 80 MHz, 3 Vrms Conducted low frequency interference : AC Power 10 % AC supply voltage 50 Hz to 900 Hz; 10 % to 1 % 900 Hz to 6 000 Hz; 1 % 6 kHz to 10 kHz, DC Power;10 % DC supply voltage 50 Hz to 10 kHz Power supply variation : Voltage: ± 20 % for 1.5 s Freq : ± 10 % for 5 s Power supply failure : 100 %, 60 s EFT : ± 2 kV Surge Voltage : ± 1 kV Electrostatic discharge : ± 6 kV contact and ± 8 kV air Electromagnetic field : 80 MHz ~ 2 GHz, 10 V/m

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
IEC60945:2002	Maritime navigation and radiocommunication equipment and systems — General requirements — Methods of testing and required test results 9. Electromagnetic emission 10. Immunity to electromagnetic environment - Methods of testing and required test results	9. CE : 10 kHz ~ 30 MHz RE : 150 kHz ~ 2 GHz 10. CS : 150 kHz ~ 80 MHz, 10 Vrms RS : 80 MHz ~ 2 GHz, 10 V/m Bursts : ± 2 kV Surges : ± 1 kV Power supply short term variation : ±20 % for 1.5 s ±10 % for 5 s Power supply failure : Interruption : 100 % for 60 s ESD : ± 6 kV Contact, ± 8 kV Air
KN32:2015	멀티미디어 기기 전자파 장애방지 시험방법	CE : 150 kHz ~ 30 MHz RE : 30 MHz ~ 6 GHz
KN35:2015	멀티미디어 기기 전자파 내성 시험 방법	MF : 125 A/m ESD : ± 8 kV RS : 80 MHz ~ 6 GHz EFT : ± 4 kV Surge : ± 4kV CS : 150 kHz ~ 230 MHz V-DIP : max 16A (각 상당)

Korea Laboratory Accreditation Scheme

제 KT160호

03.011 전자기적합성

규격번호	규격명	시험범위
IACS:(Rev.6)2014	E10 Test Specification For Type Approval	
	3. External power supply failure	3. Interruption for 5 minutes, switching-off for 30 s
	4. Power supply variations	4. Voltage : $\pm 20\%$, Freq : $\pm 10\%$
	13. Electrostatic discharge	13. Contact discharge: $\pm 6\text{kV}$ Air discharge: $\pm 2\text{kV}, \pm 4\text{kV}, \pm 8\text{kV}$
	14. Electromagnetic field	14. RS : 80 MHz ~ 2 GHz, 10 V/m
	15. Conducted low Frequency	15. DC ~ 12 kHz, 3 Vrms
	16. Conducted Radio Frequency	16. CS : 150 kHz ~ 80 MHz, 3 Vrms
	17. Burst/Fast Transients	17. Bust : $\pm 2\text{kV}$
	18. Surge/voltage	18. Surge/Voltage : $\pm 1\text{kV}$
	19. Radiated Emission	19. RE : 150 kHz ~ 2 GHz
	20. Conducted Emission	20. CE : 10 kHz ~ 30 MHz