



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

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TESTING

Valid to: March 30, 2012

Certificate Number: AT - 1445

I. Electrical

Table with 3 columns: FIELD OF TEST, SPECIFIC TESTS OR PROPERTIES MEASURED, SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED. Rows include Emissions Standards with sub-rows for Radiated and Conducted, Harmonics, Flicker, Generic / Product Specific, ESD, and RF.



FIELD OF TEST	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED
Immunity Standards	EFT	IEC 61000-4-4, EN 61000-4-4, KN 61000-4-4*
	Surge	IEC 61000-4-5, EN 61000-4-5, KN 61000-4-5*
	Conducted	IEC 61000-4-6, EN 61000-4-6, KN 61000-4-6*
	Low Frequency Magnetic	IEC 61000-4-8, EN 61000-4-8, KN 61000-4-8*
	Power Drop	IEC 61000-4-11, EN 61000-4-11, KN 61000-4-11*
	Generic / Product Specific	CISPR 24, EN 55024 and AS/NZS CISPR 24; EN 61000-6-1; EN 61000-6-2; AS/NZS 4254.1; KN 24 with Conformity Assessment Procedure for Electromagnetic Susceptibility (RRA Announce 2009-10, Dec 21, 2009), Technical Requirements for Electromagnetic Susceptibility (KCC Public Notification 2008-38, May 19, 2008)*(these RRA and KCC references apply to all the KN 61000-4-X basic standards above)
Emissions and Immunity Standards	Combined Generic / Product Specific	IEC 60601-1-2; EN 60601-1-2; IEC 61326; EN 61326
Radio Testing	Europe	ETSI EN 300 086-2, 300 113-2, 300 219-2, 300 220-2, 300 328, 300 330-2, 300 390-2, 300 440-2, 301 489-1, 301 489-3, 301 489-4, 301 489-5, 301 489-7, 301 489-8, 301 489-15, 301 489-17
	USA	47 CFR Parts 2, 15, 22, 24, 25, 26, 27, 74, 80, 87, 90, 95, 97 and 101, ANSI/TIA-603-C and ANSI/TIA/EIA-382-A
	Canada	RSS-Gen, RSS-102, RSS-111, RSS-112, RSS-117, RSS-118, RSS-119, RSS-123, RSS-125, RSS-129, RSS-131, RSS-132, RSS-133, RSS-134, RSS-135, RSS-136, RSS-137, RSS-138, RSS-139, RSS-141, RSS-142, RSS-170, RSS-181, RSS-182, RSS-188, RSS-191, RSS-192, RSS-193, RSS-194, RSS-210, RSS-213, RSS-215, RSS-243, RSS-287, RSS-310

FIELD OF TEST	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED
Radio Testing	Japan (Items as listed in the US/Japan MRA)	<p>Citizen radio (Item 3 of Article 2 Paragraph 1 of Certification Ordinance)</p> <p>Cordless telephone (Item 7 of Article 2 Paragraph 1 of Certification Ordinance)</p> <p>(From Item 8 of Article 2 Paragraph 1 of Certification Ordinance) -- Radio equipment in the 2.4GHz band for use in identification of moving objects</p> <p>Detection sensor of moving objects (10.525 GHz and 24.15 GHz band)</p> <p>Radio equipment for millimeter wave visual transmission or data transmission in the (59 to 66) GHz band</p> <p>Millimeter wave radar (60.5 GHz and 76.5 GHz)</p> <p>Radio microphones in the (70 to 300) and 800 MHz band</p> <p>75 MHz Voice assist radiotelephone</p> <p>315 MHz Telemeter, telecontrol or data transmission</p> <p>400 MHz Radiotelephone</p> <p>400 MHz band Data transmission radio equipment</p> <p>(420 to 450) MHz Medical telemeter Type D and F , plus Type A, B, and C</p> <p>429 MHz Radio pager</p> <p>950 MHz Band identification of moving objects</p> <p>1 200 MHz band Data transmission radio equipment</p> <p>75 MHz Radio microphone for hearing aid</p> <p>433 MHz Data transmission used for international transportation</p> <p>(402 to 405) MHz Data transmission for self-contained medical instruments</p>



FIELD OF TEST	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED
Radio Testing	Japan (Items as listed in the US/Japan MRA)	<p>426 MHz Low-power security radio (Item 13 of Article 2 Paragraph 1 of Certification Ordinance)</p> <p>2.4 GHz band wide-band low-power data communication system (Item 19 of Article 2 Paragraph 1)</p> <p>(From Item 19-2 of Article 2 Paragraph 1) -- 2.4 GHz band low-power data communication system</p> <p>Low power data communications system in the 2.4GHz band (for radio control model aircraft, (2471 to 2497) MHz)</p> <p>2.4 GHz band low-power data communication system</p> <p>(From Item 19-3 of Article 2 Paragraph 1) -- 5 GHz band low-power data communication system (1) (5.2 GHz band, plus 5.3 and 5.6 GHz bands)</p> <p>Quasi-millimeter band low-power data communication system (Item 19-4 of Article 2 Paragraph 1 of Certification Ordinance)</p> <p>Land mobile station for 5 GHz band wireless access system (3) (Item 19-11 of Article 2 paragraph 1 of Certification Ordinance)</p> <p>1 900 MHz Digital cordless telephone (Item 21 of Article 2 Paragraph 1 of Certification Ordinance)</p> <p>PHS land mobile station (Item 22 of Article 2 Paragraph 1 of Certification Ordinance)</p> <p>Mobile station for dedicated short-range communications system (Item 32 of Article 2 paragraph 1 of Certification Ordinance)</p> <p>Station for testing radio equipment for dedicated short-range communications system (Item 33-2 of Article 2 Paragraph 1 of Certification Ordinance)</p> <p>Ultra Wideband Wireless System (Item 47 of Article 2 Paragraph 1)</p>



FIELD OF TEST	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED
Military/Aviation	Conducted Emissions	MIL-STD -461F: Methods CE101, CE102, CE106; MIL-STD -461E: Methods CE101, CE102, CE106; MIL-STD -461D/462D: Methods CE101, CE102, CE106; MIL-STD -461C/462: Methods CE01, CE03; DO-160D/E/F: Section 21
	Radiated Emissions	MIL-STD -461F: Methods RE101, RE102; MIL-STD -461E: Methods RE101, RE102; MIL-STD -461D/462D: Methods RE101, RE102; MIL-STD -461C/462: Methods RE01, RE02; DO-160D/E/F: Section 21
	Conducted Susceptibility	MIL-STD -461F: Methods CS101, CS106, CS114, CS115, CS116; MIL-STD -461E: Methods CS101, CS114, CS115, CS116; MIL-STD -461D/462D: Methods CS101, CS114, CS115, CS116; MIL-STD-704 LDC103, LDC 104; DO-160D/E/F: Section 18, 19, 20
	Radiated Susceptibility	MIL-STD -461F: Methods RS101, RS103; MIL-STD -461E: Methods RS101, RS103; MIL-STD -461D/462D: Methods RS101, RS103; MIL-STD -461C/462: Methods RS01, RS02, RS03; DO-160D/E/F: Section 19, 20
Military/Aviation	Magnetic Effect	DO-160D/E/F: Section 15
	Power Input	MIL-STD-704 LDC101, LDC102, LDC105, LDC201, LDC301, LDC302, LDC401, LDC501, LDC601; DO-160D/E/F: Section 16
	Voltage Spike	DO-160D/E/F: Section 17
	Phase Reversal	MIL-STD-704 LDC 602
RF Exposure	MPE	IEEE STD C95.1; IEEE STD C95.3; OET Bulletin 65; EN 50371; RSS-102

Notes:

1. This scope is part of and must be included with the Certificate of Accreditation No. AT- 1445



Vice President

