

Deutsche Akkreditierungsstelle GmbH

Entrusted according to Section 8 subsection 1 AkkStelleG in connection with Section 1 subsection 1 AkkStelleGBV

Signatory to the Multilateral Agreements of EA, ILAC and IAF for Mutual Recognition

Accreditation



The Deutsche Akkreditierungsstelle GmbH attests that the testing laboratory

CTC advanced GmbH

Untertürkheimer Straße 6-10, 66117 Saarbrücken

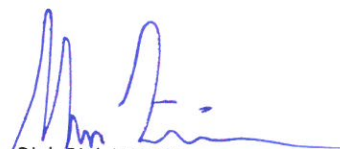
is competent under the terms of DIN EN ISO/IEC 17025:2005 to carry out tests in the following fields:

Telecommunication (TC) and Electromagnetic Compatibility (EMC) for Canadian Standards

The accreditation certificate shall only apply in connection with the notice of accreditation of 11.01.2019 with the accreditation number D-PL-12076-01 and is valid until 21.04.2021. It comprises the cover sheet, the reverse side of the cover sheet and the following annex with a total of 7 pages.

Registration number of the certificate: **D-PL-12076-01-04**

Frankfurt am Main, 11.01.2019



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The publication of extracts of the accreditation certificate is subject to the prior written approval by Deutsche Akkreditierungsstelle GmbH (DAkKS). Exempted is the unchanged form of separate disseminations of the cover sheet by the conformity assessment body mentioned overleaf.

No impression shall be made that the accreditation also extends to fields beyond the scope of accreditation attested by DAkKS.

The accreditation was granted pursuant to the Act on the Accreditation Body (AkkStelleG) of 31 July 2009 (Federal Law Gazette I p. 2625) and the Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products (Official Journal of the European Union L 218 of 9 July 2008, p. 30). DAkKS is a signatory to the Multilateral Agreements for Mutual Recognition of the European co-operation for Accreditation (EA), International Accreditation Forum (IAF) and International Laboratory Accreditation Cooperation (ILAC). The signatories to these agreements recognise each other's accreditations.

The up-to-date state of membership can be retrieved from the following websites:

EA: www.european-accreditation.org

ILAC: www.ilac.org

IAF: www.iaf.nu

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-12076-01-04 according to DIN EN ISO/IEC 17025:2005

Period of validity: 11.01.2019 to 21.04.2021 Date of issue: 31.01.2019

Holder of certificate:

CTC advanced GmbH
Untertürkheimer Straße 6-10, 66117 Saarbrücken

Tests in the fields:

Telecommunication (TC) and Electromagnetic Compatibility (EMC) for Canadian Standards

Abbreviations used: see last page

Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
Electromagnetic Compatibility (EMC)			
EMC	ICES – 001, Issue 4, June 2006 Updated in Nov 2014	Industrial, Scientific and Medical (ISM) Radio Frequency Generators	
EMC	ICES – 002, Issue 5, August 2009 Updated in Nov 2014	Spark Ignition Systems of Vehicles and Other Devices Equipped with Internal Combustion Engines	
EMC	ICES – 002, Issue 6, March 2013, Updated in Nov 2014, Updated in Feb 2017	Vehicles, Boats and other Devices Propelled by an internal Combustion Engine, Electrical Means or Both	
EMC	ICES – 003, Issue 6, January 2016 Updated in April 2017	Information Technology Equipment (Including Digital Apparatus) — Limits and Methods of Measurement	
EMC	ICES – 004, Issue 4, June 2013	Alternating Current High Voltage Power Systems	

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Technical field	Standard / in house procedure / Version	Title of standard or in house procedure (deviations / modifications of standard)	Test area / reductions
EMC	ICES – 005, Issue 3, May 2009 Issue 4, (Lighting Equipment), December 2015	Radio Frequency Lighting Devices	
EMC	ICES – 006, Issue 3, July 2018	AC Wire Carrier Current Devices (Unintentional Radiators)	
EMC	ICES-008, Issue 1, June 2015	Cable Distribution Networks	
Radio Equipment and Systems			
TC	BETS-1, Issue 1, November 1996	Technical Standards and Requirements for Low Power Announce Transmitters in the Frequency Bands 525 – 1,705 kHz and 88-107.5 MHz	
TC	BETS-3, Issue 1, November 1996	Technical Standards and Requirements for Radio Apparatus that Form Part of a Master Antenna Television (MATV) Broadcasting Undertaking	
TC	BETS-4, Issue 1, November 1996	Technical Standards and Requirements for Television Broadcasting Transmitters	
TC	BETS-5, Issue 1, November 1996	Technical Standards and Requirements for AM Broadcasting Transmitters	
TC	BETS-6, Issue 2, August 2005	Technical Standards and Requirements for FM Broadcasting Transmitters	
TC	BETS-7, Issue 3, March 2015	Technical Standards and Requirements for Radio Apparatus Capable of Receiving Broadcasting	
TC	BETS-8, Issue 1, November 1996	Technical Standards and Requirements for FM Transmitters Operating in Small Remote Communities	
TC	BETS-9, Issue 1, November 1996	Technical Standards and Requirements for Television Transmitters Operating in Small Remote Communities	
TC	BETS-11, Issue 1, November 1996	Technical Requirements Respecting the Identification of Broadcasting Stations	

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TC	CS-03, Issue 09, Amendment 5 March 2016	Compliance Specification for Terminal Equipment, Terminal Systems, Network Protection Devices, Connection Arrangements and Hearing Aids Compatibility	
TC	RSS-Gen, Issue 5, April 2018	General Requirements for Compliance of radio apparatus	
TC	RSS – 102, Issue5, March 2015 SPR-002, Issue 1, September 2016	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) Supplementary Procedure for Assessing Compliance with RSS-102 Nerve Stimulation Exposure Limits	
TC	RSS-111, Issue 5, September 2014	Broadband Public Safety Equipment Operating in the Band 4940-4990 MHz	
TC	RSS - 112, Issue 1, February 2008	Land Mobile and Fixed Equipment Operating in the Band 1670-1675 MHz	
TC	RSS – 117, Issue 3, January 2016	Land and Coast Station Transmitters Operating in the 200 – 535 kHz Band	
TC	RSS – 119, Issue 12, May 2015	Land Mobile and Fixed Equipment Operating in the Frequency Range 27.41 – 960 MHz	
TC	RSS – 123, Issue 3, February 2015	Licensed Low-Power Radio Apparatus	
TC	RSS – 125, Issue 2, Revision 1, March 2000	Land Mobile and Fixed Radio Transmitters and Receivers, 1.705 to 50.0 MHz, Primarily Amplitude Modulated	
TC	RSS-127, Issue 1, August 2009	Air-Ground Equipment Operating in the Bands 849-851 MHz and 894-896 MHz	
TC	RSS-130, Issue 1, October 2013	Mobile Broadband Services (MBS) Equipment Operating in the Frequency Bands 698-756 MHz and 777-787 MHz	

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TC	RSS – 131, Issue 3, January 2017	Zone Enhancers for the Land Mobile Service	
TC	RSS – 132, Issue 3, January 2013	Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz	
TC	RSS – 133, Issue 6, Issue 6, January 2013 Updated January 2018 Amendment 2018	2 GHz Personal Communications Services	
TC	RSS – 134, Issue 2, February 2016	900 MHz Narrowband Personal Communications Services	
TC	RSS – 135, Issue 2, June 2009	Digital Scanner Receivers	
TC	RSS – 137, Issue 2, February 2009	Location and Monitoring Service in the band 902-928 MHz	
TC	RSS – 139, Issue 3, July 2015	Advanced Wireless Services Equipment operating in the Bands 1710 – 1780 MHz and 2110 – 2180 MHz	
TC	RSS – 140, Issue 1, April 2018	Equipment Operating in the Public Safety Broadband Frequency Bands 758-768 MHz and 788-798 MHz	
TC	RSS – 141, Issue 2, June 2010	Aeronautical Radio communication Equipment in the Frequency Band 117.975-137 MHz	
TC	RSS-142, Issue 5, April 2013	Narrowband Multipoint Communication Systems in the Bands 1429.5- 1432 MHz	
TC	RSS-170, Issue 3, July 2015	Mobile Earth Stations (MESs) and Ancillary Terrestrial Component (ATC) Equipment Operating in the Mobile-Satellite Service (MSS) Bands	

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TC	RSS – 181, Issue 1, April 1971, Amendment July 1987	Coast and Ship Station Single Sideband Radiotelephone Transmitters and Receivers Operating in the 1605 – 28000 kHz Band	
TC	RSS – 182, Issue 5, January 2012	Maritime Radio Transmitters and Receivers in the Band 156 – 162.5 MHz	
TC	RSS-191, Issue 3, April 2008	Local Multipoint Communication Systems in the Band 25.35-28.35 GHz; Point-to-Point and Point-to-Multipoint Broadband Communication Systems in the Bands 24.25-24.45 GHz and 25.05-25.25 GHz; and Point-to-Multipoint Broadband Communications in the Band 38.6-40.0 GHz	
TC	RSS-192, Issue 3, January 2008	Fixed Wireless Access Equipment Operating in the Band 3450-3650 MHz	
TC	RSS – 194, Issue 1, October 2007	Fixed Wireless Access Equipment Operating in the Band 953-960 MHz	
TC	RSS – 195, Issue 2, April 2014	Wireless Communications Service Equipment Operating in the Bands 2305-2320 MHz and 2345-2360 MHz	
TC	RSS - 196, Issue 1, March 2010	Point-to-Multipoint Broadband Equipment Operating in the Bands 512-608 MHz and 614-698 MHz for Rural Remote Broadband Systems (RRBS) (TV Channels 21 to 51)	
TC	RSS -197, Issue 1, February 2010	Wireless Broadband Access Equipment Operating in the Band 3650-3700 MHz	
TC	RSS-199, Issue 3, December 2016	Broadband Radio Service (BRS) Equipment Operating in the Band 2500–2690 MHz	
TC	RSS – 210, Issue 9, August 2016 Amendment November 2017	Licence-exempt Radio Apparatus(All Frequency Bands): Category I Equipment	

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TC	RSS-211, Issue 1, March 2015	Level Probing Radar Equipment	
TC	RSS – 213, Issue 3, March 2015	2 GHz Licence-Exempt Personal Communications Services (LE-PCS) Devices	
TC	RSS – 215, Issue 2, June 2009	Analogue Scanner Receivers	
TC	RSS-216, Issue 2, January 2016	Wireless Power Transfer Devices	
TC	RSS – 220, Issue 1, March 2009 Amendment July 2018	Devices Using Ultra – Wideband (UWB) Technology	
TC	RSS – 222, Issue 1, February 2015	White Space Devices (WSDs)	
TC	RSS – 236, Issue 1, September 2012	General Radio Service Equipment Operating in the Band 26.960 to 27.410 MHz (Citizens Band)	
TC	RSS 238, Issue 1, July 2013	Shipborne Radar in the 2900-3100 MHz and 9225-9500 MHz Bands	
TC	RSS – 243, Issue 3, February 2010	Active Medical Implants Operating in the 401-406 MHz Band	
TC	RSS 244, Issue 1, June 2013	Medical Devices Operating in the Band 413-457 MHz	
TC	RSS-247, Issue 2, February 2017	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices	
TC	RSS -251 Issue 2, July 2018	Field Disturbance Sensors in the Bands 46.7-46.9 GHz (Vehicular Radar) and 76-77 GHz (Vehicular and Airport Fixed Radar)	

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TC	RSS-252 — Issue 1 September 2017	Intelligent Transportation Systems — Dedicated Short Range Communications (DSRC) — On-Board Unit (OBU)	
TC	RSS-287, Issue 2, March 2014	Emergency Position Indicating Radio Beacons (EPIRB), Emergency Locator Transmitters (ELT), Personal Locator Beacons (PLB), and Maritime Survivor Locator Devices (MSLD)	
TC	RSS – 288, Issue 1, January 2012	Global Maritime Distress and Safety System (GMDSS)	
TC	RSS – 310, Issue 4, July 2015	Licence-exempt Radio Apparatus (All Frequency Bands): Category II Equipment	
Causing Equipment Standards			
TC	ICES – GEN, Issue 1, July 2018	General Requirements for Compliance of Interference-Causing Equipment	

Abbreviations used:

- RSS Radio Standards Specification
- IEC International Electrotechnical Commission
- EMC Electromagnetic Compatibility
- TC Telecommunication