

Accreditation



The Deutsche Akkreditierungsstelle attests with this **Partial Accreditation Certificate** that the testing laboratory

cetecom advanced GmbH
Untertürkheimer Straße 6-10, 66117 Saarbrücken

with Locations:

Im Teelbruch 116, 45219 Essen Untertürkheimer Straße 6-10, 66117 Saarbrücken

meets the requirements according to DIN EN ISO/IEC 17025:2018 for the conformity assessment activities listed in the annex to this certificate. This includes additional existing legal and normative requirements for the testing laboratory, including those in relevant sectoral schemes, provided they are explicitly confirmed in the annex to this certificate.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and confirm generally with the principles of DIN EN ISO 9001.

This accreditation was issued in accordance with Art. 5 Para. 1 Sentence 2 of Regulation (EC) 765/2008, after an accreditation procedure was carried out in compliance with the minimum requirements of DIN EN ISO/IEC 17011 and on the basis of a review and decision of the appointed accreditation committees.

This partial accreditation certificate only applies in connection with the notice of 10.10.2023 with accreditation number D-PL-12047-01.

It consists of this cover sheet, the reverse side of the cover sheet and the following annex with a total of 10 pages.

Registration number of the partial accreditation certificate: **D-PL-12047-01-03** It is a part of the accreditation certificate: D-PL-12047-01-00.

Berlin, 10.10.2023

Florian Burkart Head of Technical Unit

The certificate together with the annex reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH (www.dakks.de).

Deutsche Akkreditierungsstelle GmbH

Office Berlin Spittelmarkt 10 10117 Berlin Office Frankfurt am Main Europa-Allee 52 60327 Frankfurt am Main Office Braunschweig Bundesallee 100 38116 Braunschweig

The Deutsche Akkreditierungsstelle GmbH (DAkkS) is the entrusted national accreditation body of the Federal Republic of Germany according to § 8 section 1 AkkStelleG in conjunction with § 1 section 1 AkkStelleGBV. DAkkS is designated as the national accreditation authority by Germany according to Art. 4 Para. 4 of Regulation (EC) 765/2008 and clause 4.7 of DIN EN ISO/IEC 17000.

Pursuant to Art. 11 section 2 of Regulation (EC) 765/2008, the accreditation certificate shall be recognised as equivalent by the national authorities within the scope of this Regulation as well as by the WTO member states that have committed themselves in bilateral or multilateral mutual agreements to recognise the certificates of accreditation bodies that are members of ILAC or IAF as equivalent.

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 Co-operation (ILAC).

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

Annex to the Partial Accreditation Certificate D-PL-12047-01-03 according to DIN EN ISO/IEC 17025:2018

Valid from: 10.10.2023Date of issue: 10.10.2023

This annex is a part of the accreditation certificate D-PL-12047-01-00.

Holder of partial accreditation certificate:

cetecom advanced GmbH
Untertürkheimer Straße 6-10, 66117 Saarbrücken

with Locations:

Im Teelbruch 116, 45219 Essen Untertürkheimer Straße 6-10, 66117 Saarbrücken

The testing laboratory meets the requirements of DIN EN ISO/IEC 17025:2018 to carry out the conformity assessment activities listed in this annex. The testing laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed below.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and confirm generally with the principles of DIN EN ISO 9001.

Tests in the fields:

Electromagnetic Compatibility and Telecommunication (FCC Requirements)

This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at https://www.dakks.de.



Accreditation scope for location Essen:

Section	Scope	Test Method(s)	Frequency (max. assessed)
	Electromagnetic Com	patibility (EMC) and Radio Equipment and System	S
USA	Unintentional Radiators (FCC Part 15, Subpart B)	ANSI C63.4: 2014 American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	500 GHz
USA	Industrial, Scientific, and Medical Equipment (FCC Part 18) • Consumer ISM equipment	FCC MP-5: 1986-02 FCC Methods of Measurements of Radio Noise Emissions from Industrial, Scientific, and Medical Equipment	500 GHz
USA	Intentional Radiators (FCC Part 15 Subpart C)	ANSI C 63.10: 2013 American National Standard for Testing of Unlicensed Wireless Devices	500 GHz
USA	U-NII without DFS Intentional Radiators (FCC Part 15, Subpart E) • Unlicensed National Information Infra- structure Devices (U-NII Devices without DFS)	ANSI C 63.10: 2013 American National Standard for Testing of Unlicensed Wireless Devices in combination with KDB Publication 789033 D02	40 GHz
USA	UPCS (Part 15, Subpart D) ■ Unlicensed Personal Communication Systems devices	ANSI C 63.17: 2013 American National Standard for Testing of Unlicensed Wireless Devices	40 GHz



Section	Scope	Test Method(s)	Frequency (max. assessed)
USA	U-NII with DFS Intentional Radiators (FCC Part 15, Subpart E) • Unlicensed National Information Infra- structure (U-NII) Devices with Dynamic Frequency Selection (DFS)	FCC KDB Publication 905462 D02/D03/D04/D06/D07 UNII DFS Compliance Procedures New Rules v02 (April 8, 2016)	40 GHz
USA	UWB Intentional Radiators (FCC Part 15, Subpart F) • Ultra-wideband Operation	ANSI C 63.10: 2013 American National Standard for Testing of Unlicensed Wireless Devices	500 GHz
USA	BPL Intentional Radiators (FCC Part 15, Subpart G) • Access Broadband Over Power Line (Access BPL)	ANSI C 63.10: 2013 American National Standard for Testing of Unlicensed Wireless Devices	40 GHz
USA	White Space Device Intentional Radiators (FCC Part 15, Subpart H) • White Space Devices	ANSI C 63.10: 2013 American National Standard for Testing of Unlicensed Wireless Devices	40 GHz
USA	Commercial Mobile Services (FCC Licensed Radio Service Equipment) Part 22 (Cellular) Part 24 Part 25 (below 3 GHz) Part 27	ANSI C 63.26: 2015 ANSI/TIA-603-E:2016 TIA-102.CAAA-E 2016 American National Standard for Testing of Unlicensed Wireless Devices in combination with KDB Publication 971168	500 GHz



Section	Scope	Test Method(s)	Frequency (max. assessed)
USA	General Mobile Radio Services (FCC Licensed Radio Service Equipment) Part 22 (non-cellular) Part 90 (below 3 GHz) Part 95 (below 3 GHz) Part 97 (below 3 GHz) Part 101 (below 3 GHz)	ANSI/TIA-603-E:2016 ANSI/TIA-102.CAAA-E:2016 ANSI C 63.26: 2015 American National Standard for Testing of Unlicensed Wireless Devices	500 GHz
USA	Citizens Broadband Radio Service (FCC Licensed Radio Service Equipment) • Part 96	ANSI/TIA-603-E:2016 ANSI/TIA-102.CAAA-E:2016 ANSI C 63.26: 2015 in combination with KDB Publication 971168 and 940660	500 GHz
USA	Maritime and Aviation Radio Services (FCC Licensed Radio Service Equipment) Part 80 Part 87	TIA-603-E:2016 ANSI C63.26: 2015	500 GHz
USA	Microwave and Millimeter Bands Radio Services (FCC Licensed Radio Service Equipment) Part 25 Part 30 Part 74 Part 90 (above 3 GHz) Part 95 (above 3 GHz) Part 97 (above 3 GHz) Part 101	TIA-603-E:2016 TIA-102.CAAA-E:2016 ANSI C63.26: 2015 in combination with KDB Publication 653005	500 GHz
USA	Broadcast Radio Services (FCC Licensed Radio Service Equipment) Part 73 Part 74 (below 3 GHz)	TIA-603-E:2016 TIA-102.CAAA-E:2016 ANSI C63.26: 2015	500 GHz



Section	Scope	Test Method(s)	Frequency (max. assessed)
USA	Signal Boosters (section 90.219) • Wideband Consumer signal boosters • Provider-specific signal boosters • Industrial signal boosters • Part 20.21	ANSI C63.26: 2015 in combination with KDB Publication 935210 D02, D03, D04 and D05	500 GHz
	Specific Absorption	on Rate (SAR) & Human Exposure to EM-Fields	
USA	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques – Description Devices subject to MPE or SAR requirements	in combination with KDB Publication 447498 D01, D02 and D03 KDB Publication 865664 D01 and D02	500 GHz Only Devices subject to MPE



Accreditation scope for location Saarbrücken:

Section	Scope	Test Method(s)	Frequency (max. assessed)
USA	Unintentional Radiators (FCC Part 15, Subpart B)	ANSI C 63.4-2014 American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	40 GHz
USA	Industrial, Scientific, and Medical Equipment (FCC Part 18) • Consumer ISM equipment	FCC MP-5:1986-02 FCC Methods of Measurements of Radio Noise Emissions from Industrial, Scientific, and Medical Equipment	325 GHz
USA	Intentional Radiators (FCC Part 15 Subpart C)	ANSI C 63.10-2013 American National Standard for Testing of Unlicensed Wireless Devices	500 GHz
USA	 UPCS (FCC Part 15, Subpart D) Unlicensed Personal Communication Systems devices 	ANSI C 63.17-2013 American National Standard - Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) Devices	40 GHz
USA	U-NII without DFS Intentional Radiators (FCC Part 15, Subpart E) • Unlicensed National Information Infra- structure Devices (U-NII Devices without DFS)	ANSI C 63.10-2013 American National Standard for Testing of Unlicensed Wireless Devices in combination with KDB Publication 789033	40 GHz



Section	Scope	Test Method(s)	Frequency (max. assessed)
USA	U-NII with DFS Intentional Radiators (FCC Part 15, Subpart E) • Unlicensed National Information Infra- structure (U-NII) Devices with Dynamic Frequency Selection (DFS)	FCC KDB Publication 905462 D02 UNII DFS Compliance Procedures New Rules v02 (April 8, 2016)	40 GHz
USA	UWB Intentional Radiators (FCC Part 15, Subpart F) • Ultra-wideband Operation	ANSI C 63.10-2013 American National Standard for Testing of Unlicensed Wireless Devices	200 GHz
USA	BPL Intentional Radiators (FCC Part 15, Subpart G) • Access Broadband over Power Line (Access BPL)	ANSI C 63.10-2013 American National Standard for Testing of Unlicensed Wireless Devices	40 GHz
USA	White Space Device Intentional Radiators (FCC Part 15, Subpart H) • White Space Devices	ANSI C 63.10-2013 American National Standard for Testing of Unlicensed Wireless Devices	40 GHz
USA	Commercial Mobile Services (FCC Licensed Radio Service Equipment) Part 22 (cellular) Part 24 Part 25 (below 3 GHz) Part 27	ANSI/TIA-603-E-2016 ANSI/TIA-102.CAAA-E-2016 ANSI C63.26-2015 in combination with KDB Publication 971168	200 GHz



Section	Scope	Test Method(s)	Frequency (max. assessed)
USA	General Mobile Radio Services (FCC Licensed Radio Service Equipment)	ANSI/TIA-603-E-2016 ANSI/TIA-102.CAAA-E-2016 ANSI C63.26-2015	200 GHz
	 Part 22 (non-cellular) Part 90 (below 3 GHz) Part 95 Part 97 (below 3 GHz) Part 101(below 3 GHz) 		
USA	Citizens Broadband Radio Services (FCC Licensed Radio Service Equipment)	ANSI/TIA-603-E-2016 ANSI/TIA-102.CAAA-E-2016 ANSI C63.26-2015	200 GHz
	• Part 96	in combination with KDB Publication 971168 and 940660	
USA	Maritime and Aviation Radio Services (FCC Licensed Radio Service Equipment)	ANSI/TIA-603-E-2016 ANSI C63.26-2015	200 GHz
	Part 80Part 87		
USA	Microwave and Millimeter Bands Radio Services (FCC Licensed Radio Service Equipment)	ANSI/TIA-603-E-2016 ANSI/TIA-102.CAAA-E-2016 ANSI C63.26-2015 in combination with KDB Publication 653005	500 GHz
	 Part 25 Part 30 Part 74 Part 90 (above 3 GHz) Part 95 (above 3 GHz) Part 97 (Above 3 GHz) Part 101 	The second control of	



Section	Scope	Test Method(s)	Frequency (max. assessed)
USA	Broadcast Radio Services (FCC Licensed Radio Service Equipment)	ANSI/TIA-603-E-2016 ANSI/TIA-102.CAAA-E-2016 ANSI C63.26-2015	200 GHz
	Part 73Part 74 (below 3 GHz)		
USA	RF Exposure	IEEE Std 1528™-2013	6 GHz
	Devices subject to SAR requirements	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques	
		in combination with KDB Publication 865664 and in combination with KDB Publication 447498	
USA	Hearing Aid Compatibility (Part 20)	ANSI C 63.19-2011	6 GHz
	HAC for Commercial mobile services	American National Standard for Methods of Measurement of Compatibility between Wireless Communication Devices and Hearing Aids	
USA	Signal Boosters (Part 20)	ANSI C63.26-2015	200 GHz
	 Wideband Consumer signal boosters Provider-specific signal boosters Industrial signal boosters 	in combination with KDB Publication 935210 D03, D04 and D05	
	Signal Boosters (Section 90.219)		



- [1] ANSI/TIA-603-D-2010 or ANSI/TIA-102.CAAA-D-2013 may continue to be used until the end of the transition period which is two years from the date of the publication of this KDB.
- [2] ANSI C63.19-2007, American National Standard for Methods of Measurement of Compatibility Between Wireless Communication Devices and Hearing Aids may be used for HAC testing until August 28, 2018 per FCC 17-135.
- [3] For Signal Boosters (Part 20) accreditation is required for Commercial Mobile Services (FCC Licensed Radio Service Equipment) and for Signal Boosters (Section 90.219) accreditation is required for General Mobile Radio Services (FCC Licensed Radio Service Equipment).