

TEST REPORT

of the accredited test laboratory

TÜV Nr.:INE-AT/FG-21/172

YUNEX GmbH

Otto-Hahn-Ring 6

D-81739 München

ITS Radiocommunications equipment 'RSU2X' **Product:**

with two antenna connectors

Manufacturer: see above

Applicant:

Output power Various (see page 6) power supply: See page 4

Various (see Frequency range: Various (see page 6) Channel

> separation: page 6)

Accredited Standards: FCC: 47 CFR Part 15 (eCFR 10.05.2021);

> FCC: 47 CFR Part 22 (eCFR 10.05.2021); FCC: 47 CFR Part 24 (eCFR 10.05.2021); FCC: 47 CFR Part 27 (eCFR 10.05.2021); FCC: 47 CFR Part 90 (eCFR 10.05.2021)

TÜV AUSTRIA SERVICES GMBH Test laboratory for EMC

examined by / Testing Laboratory TÜV AUSTRIA SERVICES **GMBH**

Ing. Andreas Malek

18.08.2021

Ing. Michael Emminger

approved by / Testing Laboratory **TÜV AUSTRIA SERVICES**

GMBH

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The results of this test report only refer to the provided equipment.



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Business Area Industry & Energy Austria

Technik

TÜV ®



Testing Laboratory, Inspection Body, Certification Body, Calibration Laboratory, Verifizierungsstelle

Notified Body 0408

Non-executive **Board of Directors:** KR DI Johann Marihart

Management: DI Dr. Stefan Haas Mag. Christoph Wenninger

Registered Office: Deutschstrasse 10 1230 Vienna/Austria

Branch Offices: www.tuv.at/standorte

Company Register Court / - Number: Vienna / FN 288476 f

Bank Details: IBAN AT131200052949001066 **BIC BKAUATWW**

VAT ATU63240488 DVR 3002476

Test Report Reference: INE-AT/FG-21/172 Date: 18.08.2021 Ambient temperature: 21°C

Relative humidity: 37%

Contents

	Designation	PAGE
1.	Applicant	3
2.	Description of EUT	4
3.	Standards / Final result	5
4.	Test results	
4.1	Test object data	6
4.2	Spurious Emissions	7-15
Appendix	Designation	PAGES
1	Test equipment used	5
2	Photodocumentation	17

Ambient temperature: 21°C Relative humidity: 37%



1. Applicant

Company: YUNEX GmbH

Department: ---

Address: Otto-Hahn-Ring 6; D- 81739 München

Contact person: Mr. Thomas Jatschka

EUT received on: 10.05.2021

Tests were performed on: 10.05. – 12.08.2021

Ambient temperature: 21°C Relative humidity: 37%



2. Description of EUT

EUT: ITS Radiocommunications equipment 'RSU2X'

with two antenna connectors

Manufacturer: Benchmark Electronics, Hermann Oberth nr.23, Hall 3, Ghimbav

507075, Brasov, Romania

YUNEX GmbH

Description: Otto-Hahn-Ring 6

D-81739 München

YUNEX GmbH provided the following configuration for the

measurements:

Prototype - PoE powered, case earthed

Operating mode:

Technical data EUT: The measurements were carried out at the following running states:

Communicating

Climatic conditions in

the emc laboratory:

Rated voltage: Rated current: 48 VDC

Rated frequency: DC

1,5A

Mains voltage during the tests: Power over Ethernet (PoE)

Ambient temperature: 21°C



3. Standards / Final result

Name	Title	Deviation	Result
FCC: 47 CFR Part 15 (eCFR 10.05.2021)	RADIO FREQUENCY DEVICES	*)	OK
FCC: 47 CFR Part 22 (eCFR 10.05.2021)	PUBLIC MOBILE SERVICES	*)	ОК
FCC: 47 CFR Part 24 (eCFR 10.05.2021)	PERSONAL COMMUNICATIONS SERVICES	*)	OK
FCC: 47 CFR Part 27 (eCFR 10.05.2021)	MISSCELLANEOUS WIRELESS COMMUNICATION SERVICES	*)	OK
FCC: 47 CFR Part 90 (eCFR 10.05.2021)	PRIVATE LAND MOBILE RADIO SERVICES	*)	ОК

Relative humidity: 37%

Result: Opinions and interpretation of testing laboratory

OK: EUT passed NOK: EUT failed

^{*)} Only measurements of spurious emissions were performed, to show compliance with the requirements during simultaneous transmission of the various transmitters.

Ambient temperature: 21°C

TUV

4. Test results

4.1 TEST OBJECT DATA

This Radio Equipment incorporates various transceiver modules.

All modules have FCC Certification and CE declaration of conformity. Additional V2X transceiver will be certified against FCC requirements. Following transmission techniques are in use:

Relative humidity: 37%

- 1. UMTS/LTE Module
- 2. WLan 2,4 GHz Module
- 3. V2X transceiver onboard

As these frequency bands are operated simultaneously, spurious emissions were checked under the following operating conditions:

Wlan 2,4 GHz continuously transmitting and:

LTE B2 continuously transmitting LTE B4 continuously transmitting LTE B5 continuously transmitting LTE B17 continuously transmitting LTE B13 continuously transmitting UMTS B2 continuously transmitting

UMTS B5 continuously transmitting

All configurations were tested with simultaneous WLAN transmission at 2,4 GHz with a duty cycle of more than 50 %,.The UMTS/LTE transmissions were provocated by a CMW500 set to 100% Duty cycle in UMTS and LTE-FDD mode and all transmissions operating at the highest available transmit power.

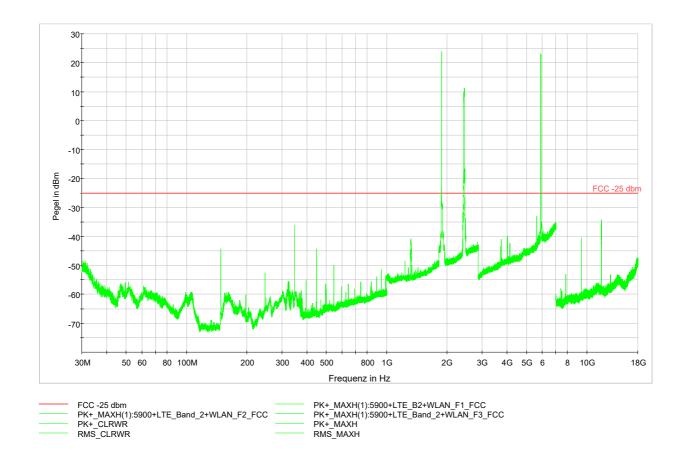
If no additional emissions due to simultaneous transmission were found, only center channel frequency of the mobile radio frequency band and one WLAN channel was used for the test. In case of additional emissions found or in case of doubt additional measurements were made at the corner frequencies of the mobile radio frequency bands and/or WLAN / V2X frequency bands.

Relative humidity: 37%



4.2 Spurious Emissions

Operating mode: LTE Band 2, WLan 2,4 GHz, V2X



LIMIT FCC §24.238 (a)

(a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

Test Equipment used:

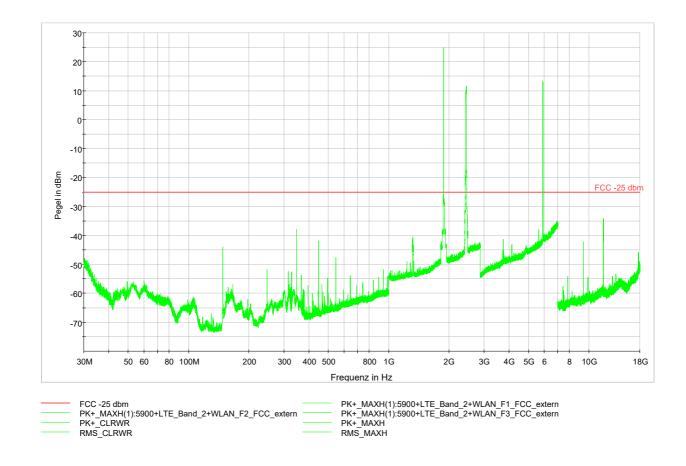
EMV-100; EMV-101; EMV-102; EMV103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-200/1;

Relative humidity: 37%



Spurious Emissions

Operating mode: LTE Band 2, WLan 2,4 GHz, V2X - external antennas used



LIMIT FCC §24.238 (a)

(a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

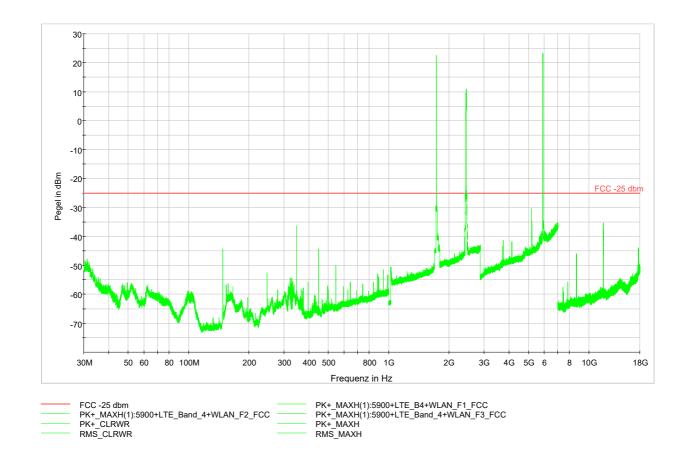
Test Equipment used:

EMV-100; EMV-101; EMV-102; EMV103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-200/1;



Spurious Emissions

Operating mode: LTE Band 4, WLan 2,4 GHz, V2X



LIMIT FCC §27.53 (h)

(1) General protection levels. Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) dB.

Test Equipment used:

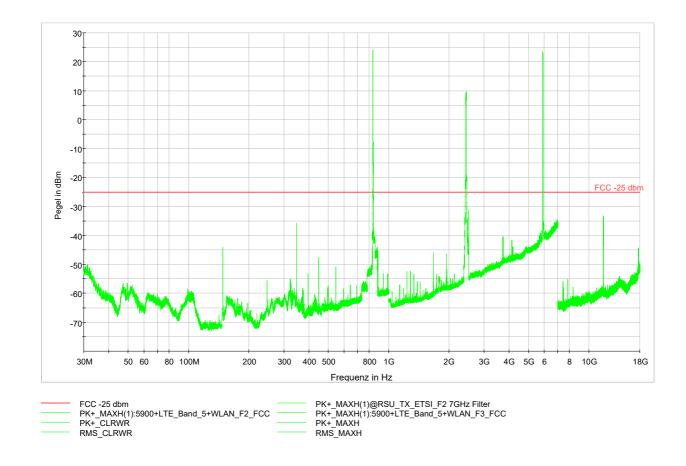
EMV-100; EMV-101; EMV-102; EMV103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-200/1;

Relative humidity: 37%



Spurious Emissions

Operating mode: LTE Band 5, WLan 2,4 GHz, V2X



LIMIT FCC §22.917 (a)

(a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

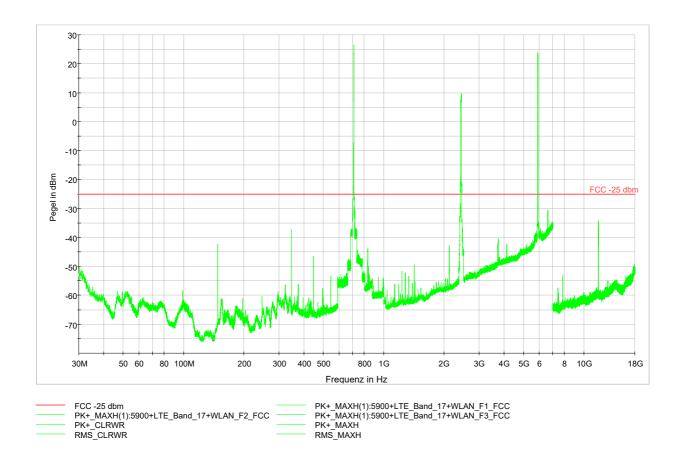
Test Equipment used:

EMV-100; EMV-101; EMV-102; EMV103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-200/1;



Spurious Emissions

Operating mode: LTE Band 17, WLan 2,4 GHz, V2X



LIMIT FCC §27.53 (m) (4)

(4) For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Test Equipment used:

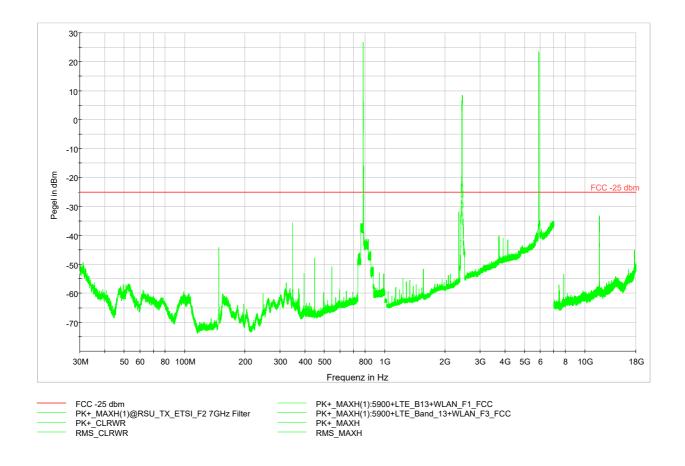
EMV-100; EMV-101; EMV-102; EMV103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-200/1;

Relative humidity: 37%



Spurious Emissions

Operating mode: LTE Band 13, WLan 2,4 GHz, V2X



Limit see page 12

Test Equipment used:

EMV-100; EMV-101; EMV-102; EMV103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-200/1;

Ambient temperature: 21°C Relative humidity: 37%



Limit FCC §27.53 (c)(f)

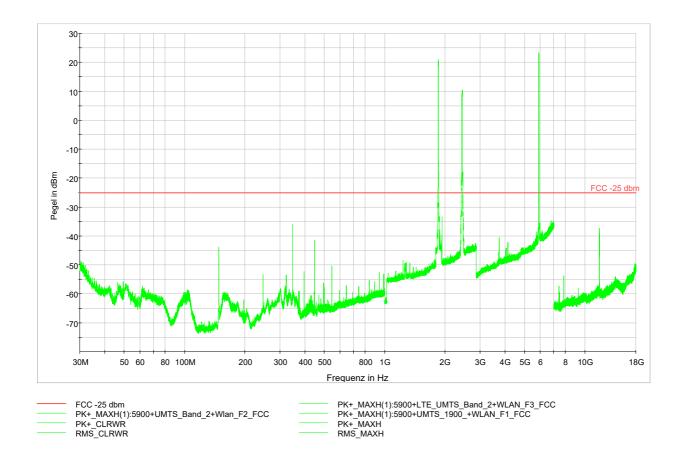
- (c) For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:
 - (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
 - (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
 - (3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;
 - (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;
 - (5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;
 - (6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.
- (f) For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

Relative humidity: 37%



Spurious Emissions

Operating mode: UMTS Band 2, WLan 2,4 GHz, V2X



LIMIT FCC §24.238 (a)

(a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

Test Equipment used:

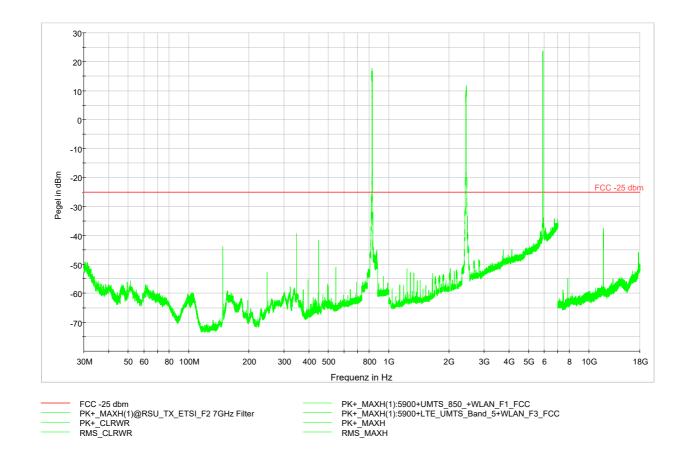
EMV-100; EMV-101; EMV-102; EMV103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-200/1;

Relative humidity: 37%



Spurious Emissions

Operating mode: UMTS Band 5, WLan 2,4 GHz, V2X



LIMIT §22.917 (a)

(a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

Test Equipment used:

EMV-100; EMV-101; EMV-102; EMV103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-200/1;

Appendix 1 Test equipment used

	Anechoic Chamber with 3m measurement distance	NT-100	Power quality analyzer Fluke 1760 (complete set)	NT-160 - NT-173	Division: Industry & Energy
	Stripline according to ISO 11452-5	NT-108	Spectrumanalyzer – FSP7 9 kHz – 7 GHz	NT-200	D
	MA4000 - Antenna mast 1 - 4 m height	NT-110/1	ESCI - Test receiver 9 kHz - 7 GHz	NT-203/1	Department: FG Test report number
	DS - Turntable 0 - 400 ° Azimuth	NT-111/1	ESR – Test receiver 20 Hz – 26,5 GHz	NT-207/1	INE-AT/FG-21/172
	CO3000 Controller Mast+Turntable	NT-112/1	Digital Radio Tester CMW500	NT-208/1	Page: 1 of 5 Date: 18.08.2021
	HUF-Z3 - Log. Per. Antenna 200 - 1000 MHz	NT-121	Noise-gen., ITU-R 559-2 20 Hz – 20 kHz	NT-209	
	FMZB1513 - Loop Antenna 9 kHz - 30 MHz	NT-122/1	CMTA - Radiocommunication analyzer ; 0,1 - 1000 MHz	NT-210	
	HFH-Z6 - Rod Antenna 9 kHz - 30 MHz	NT-123	3271 - Spectrum analyzer 100 Hz - 26,5 GHz	NT-211	
	3121C - Dipole Antenna 28 - 1000 MHz	NT-124	Digital Radio Tester Aeroflex 3920	NT-212/1	
	3115 - Horn Antenna 1 - 18 GHz (immunity)	NT-125	Mixer M28HW 26,5 GHz - 40 GHz	NT-214	
	3116 - Horn Antenna 18 - 40 GHz	NT-126	RubiSource T&M Timing reference	NT-216	
	SAS-200/543 - Bicon. Antenna 20 MHz - 300 MHz	NT-127	Radiocommunicationanalyzer SWR 1180 MD	NT-217	
	AT-1080 - Log. Per. Antenna 80 - 1000 MHz	NT-128	Mixer M19HWD 40 GHz – 60 GHz	NT-218	
	HK-116 - bicon. Antenna 20 MHz - 300 MHz	NT-129	Mixer M12HWD 60 GHz – 90 GHz	NT-219	
	HK-116 - bicon. Antenna 20 MHz - 300 MHz	NT-130	DSO9104 Digital scope	NT-220/1	
	3146 - Log. Per. Antenna 200 – 1000 MHz	NT-131	TPS 2014 Digital scope	NT-222	
	VULB 9163 Trilog Antenna 30 – 3000 MHz	NT-131/1	Artificial Ear according to IEC 60318	NT-224	
	Loop Antenna H-Field	NT-132	1 kHz Sound calibrator	NT-225	
	Horn Antenna 500 MHz - 2900 MHz	NT-133	SRM-3006 Spectrumanalyzer	NT-233/1a	
	Horn Antenna 500 MHz - 6000 MHz	NT-133/1	E-field probe SRM 75 MHz – 3 GHz	NT-234	
	Log. per. Antenna 800 MHz - 2500 MHz	NT-134	Field Meter NBM-500 incl. E- and H-Field probes	NT-240a-e	
	Log. per. Antenna 800 MHz - 2500 MHz	NT-135	Magnetometer HP-01	NT-241/1	
	BiConiLog Antenna 26 MHz – 2000 MHz	NT-137	EFA-3 H-field- / E-field probe	NT-243	
	Conical Dipol Antenna PCD8250	NT-138	EHP-50F H-field- / E-field probe	NT-243/1	
	HF 906 - Horn Antenna 1 - 18 GHz (emission)	NT-139	Field Meter EMR-200 100 kHz – 3 GHz	NT-244	
	HZ-1 Antenna tripod	NT-150	E-field probe 100 kHz – 3 GHz	NT-245	
	BN 1500 Antenna tripod	NT-151	H-field probe 300 kHz – 30 MHz	NT-246	
	Ant. tripod for EN61000-4-3 Model TP1000A	NT-156			

Appendix 1 (continued) Test equipment used



	E-field probe 3 MHz – 18 GHz	NT-247	500W1000M7 - RF-Amplifier 80 - 1000 MHz / 500 W	NT-332	Division: Industry & Energy
	H-field probe 27 MHz – 1 GHz	NT-248	AS0102-65R - RF-Amplifier 1 GHz - 2 GHz	NT-333	
	ELT-400 1 Hz – 400 kHz	NT-249	APA01 – RF-Amplifier 0,5 GHz – 2,5 GHz	NT-334	Department: FG Test report number:
	MDS 21 - Absorbing clamp 30 - 1000 MHz	NT-250	Preamplifier 1 GHz - 4 GHz	NT-335	INE-AT/FG-21/172
	FCC-203I EM Injection clamp	NT-251	Preamplifier for GPS MKU 152 A	NT-336	Page: 2 of 5 Date: 18.08.2021
	FCC-203I-DCN Ferrite decoupling network	NT-252	Preamplifier 1 GHz – 18 GHz	NT-337/1	
	PR50 Current Probe	NT-253	DC Block 10 MHz – 18 GHz Model 8048	NT-338	
	i310s Current Probe	NT-254/1	2-97201 Electronic load	NT-341	
	Fluke 87 V True RMS Multimeter	NT-260	TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-344	
	Model 2000 Digital Multimeter	NT-261	TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-345	
	Fluke 87 V Digital Multimeter	NT-262/1	VDS 200 Mobil-impuls-generator	NT-350	
	ESH2-Z5-U1 Artificial mains network 4x25A	NT-300	LD 200 Mobil-impuls-generator	NT-351	
	ESH3-Z5-U1 Artificial mains network 2x10A	NT-301	MPG 200 Mobil-Impuls-Generators	NT-352	
	ESH3-Z6-U1 Artificial mains network 1x100A	NT-302	EFT 200 Mobil-impuls-generator	NT-353	
	ESH3-Z6-U1 Artificial mains network 1x100A	NT-302a	AN 200 S1 Artificial Network	NT-354	
	EZ10 T-Artificial Network	NT-305	FP-EFT 32M 3 ph. Coupling filter (Burst)	NT-400/1	
	SMG - Signal generator 0,1 - 1000 MHz	NT-310	PHE 4500 - Mains impedance network	NT-401	
	SMA100A - Signal generator 9 kHz - 6 GHz	NT-310/1	IP 6.2 Coupling filter for data lines (Surge)	NT-403	
	RefRad Reference generator	NT-312	TK 9421 High Power Volt. Probe 150 kHz - 30 MHz	NT-409	
	SMP 02 Signal generator 10 MHz - 20 GHz	NT-313	ESH2-Z3 - Probe 9 kHz - 30 MHz	NT-410	
	40 MHz Arbitrary Generator TGA1241	NT-315	IP 4 - Capacitive clamp (Burst)	NT-411	
	Artificial mains network NSLK 8127-PLC	NT-316	Highpass-Filter 100 MHz – 3 GHz	NT-412	
	PSURGE 4.1 Surge generator	NT-324	Highpass-Filter 600 MHz – 4 GHz	NT-413	
	IMU4000 Immunity test system	NT-325/1	Highpass-Filter 1250 MHz – 4 GHz	NT-414	
	VCS 500-M6 Surge-Generator	NT-326	Highpass-Filter 1800 MHz – 16 GHz	NT-415	
	Oscillatory Wave Simulator incl. Coupling networks	NT- 328a+b+c			
	BTA-250 - RF-Amplifier 9 kHz - 220 MHz / 250 W	NT-330			
	T82-50 RF-Amplifier 2 GHz – 8 GHz	NT-331			

Appendix 1 (continued) Test equipment used



RF-Attenuator 10 dB DC – 18 GHz / 50 W	NT-417/1	FCC-801-T4 Coupling decoupling network	NT-463	Division: Industry & Energy
RF-Attenuator 6 dB DC – 18 GHz / 50 W	NT-418	FCC-801-C1 Coupling decoupling network	NT-464	Department: FC
RF-Attenuator 3 dB DC – 18 GHz / 50 W	NT-419	SW 9605 - Current probe 150 kHz – 30 MHz	NT-465/1	Department: FG Test report number:
RF-Attenuator 20 dB DC - 1000 MHz / 25 W	NT-421	95242-1 – Current probe 1 MHz – 400 MHz	NT-468	INE-AT/FG-21/172
RF-Attenuator 30 dB DC - 1000 MHz / 1 W	NT-423	94106-1L-1 – Current probe 100 kHz – 450 MHz	NT-471	Page: 3 of 5 Date: 18.08.2021
RF-Attenuator 30 dB	NT-424	WHKX12-2700-3000-18000 3 GHz Highpass filter	NT-472	
RF-Attenuator 6 dB DC - 1000 MHz / 1 W	NT-425	WHKX10-3870-4500-18000 4,5 GHz Highpass filter	NT-473	
RF-Attenuator 6 dB DC - 1000 MHz / 1 W	NT-426	GA 1240 Power amplifier according to EN 61000-4-16	NT-480	
RF-Attenuator 6 dB	NT-428	Coupling networks according to EN 61000-4-16	NT-481 - NT-483	
RF-Attenuator 0 dB - 81 dB	NT-429	Van der Hoofden Test Head	NT-484	
WRU 27 - Band blocking 27 MHz	NT-430	WRCJV12-5820-5850-5950-5980 5,9 GHz Band Reject Filter	NT-490	
WHJ450C9 AA - High pass 450 MHz	NT-431	WHKX10-5670-6300-18000 6 GHz Highpass filter	NT-491	
WHJ250C9 AA - High pass 250 MHz	NT-432	WHK12-935-1000-7000 1 GHz Highpass filter	NT-492	
RF-Load 150 W	NT-433	EMC Video/Audiosystem	NT-511/1	
Impedance transducer 1:4; 1:9; 1:16	NT-435	ES-K1 Version 1.71 SP2 Test software	NT-520	
RF-Attenuator DC – 18 GHz 6 dB	NT-436	EMC32 Version 10.60.20 Test software	NT-520/1	
RF-Attenuator DC – 18 GHz 6 dB	NT-437	SRM-TS Version 1.3 software for SRM-3000	NT-522	
RF-Attenuator DC – 18 GHz 10 dB	NT-438	SRM-TS Version 1.3.1 software for SRM-3006	NT-522/1	
RF-Attenuator DC – 18 GHz 20 dB	NT-439	Spitzenberger und Spies Test software V4.1	NT-525	
I+P 7780 Directional coupler 100 - 2000 MHz	NT-440	Vertical coupling plane (ESD)	NT-531	
ESH3-Z2 - Pulse limiter 9 kHz - 30 MHz	NT-441	Test cable #4 for EN 61000-4-6	NT-553	
Power Divider 6 dB/1 W/50 Ohm	NT-443	Test cable #3 for conducted emission	NT-554	
Directional coupler 0,1 MHz – 70 MHz	NT-444	Test cable #5+#6 ESD-cable (2x470k)	NT-555 + NT-556	
Directional coupler 0,1 MHz – 70 MHz	NT-445	Test cable #8 Sucoflex 104EA	NT-559	
Tube imitations according to EN 55015	NT-450	Test cable #9 (for outdoor measurements)	NT-580	
FCC-801-M3-16A Coupling decoupling network	NT-458	Test cable #10 (for outdoor measurements)	NT-581	
FCC-801-M2-50A Coupling decoupling network	NT-459	Test cable #13 Sucoflex 104PE	NT-584	
FCC-801-M5-25 Coupling decoupling network	NT-460	Test cable #21 for SRM-3000	NT-592	
FCC-801-AF10 Coupling decoupling network	NT-461	Shield chamber	NT-600	
FCC-801-S25 Coupling decoupling network	NT-462	Climatic chamber	M-1200	

TUV

Appendix 1 (continued) Test equipment used

П	Anechoic Chamber	EMV-100	П	HF- Ampflifier 9 kHz-225 MHz	EMV-300/1	Division: Industry & Energy
	3 m / 5 m measuring distance			BBL200		ilidustry & Ellergy
Ш	Turntabel 6 m diameter	EMV-101	Ш	HF- Amplifier 80 -1000 MHz BBA150	EMV-301	Department: FG
	Antenna mast + controller	EMV-102+ EMV-103		HF- Amplifier 0,8 - 6 GHz BBA150	EMV-302	Test report number: INE-AT/FG-21/172
	EMC Video/Audiosystem	EMV-104		High Power Ant. 20-200 MHz HPBA-2510	EMV-303/1	Page: 4 of 5
	EMC Software EMC32 Version 10.60.20	EMV-105		Log.per Antenna 80-2700 MHz STLP 9128 E special	EMV-304	Date: 18.08.2021
	Hornantenna 1 – 18 GHz HF 907	EMV-110		Log.per Antenna 0,7 – 9 GHz	EMV-305	
	Antennapre.amp. 1 – 18 GHz ERZ-LNA0200-1800-30-2	EMV-111		STLP9149 HF- Ampflifier 9 kHz-250 MHz	EMV-306	
	Trilog Antenna 30-3000 MHz VULB9163	EMV-112		BBA150 (low noise) ISO11451-2 TLS	EMV-307	
	Monopol 9 kHz – 30 MHz VAMP 9243	EMV-113		10 kHz – 30 MHz Load Dump Generator	EMV-350	
	Antennapre.amp 18 – 40 GHz BBV 9721	EMV-114		LD 200N Ultra Compact Symulator	EMV-351	
	Hornantenna 200 – 2000 MHz AH-220	EMV-115		UCS 200N100 Automotive Power fail module	EMV-352	
	DC Artificial Network PVDC 8300	EMV-150		PFM 200N100.1 Voltage Drop Symulator	EMV-353	
	AC Artificial Network NNLK 8121 RC	EMV-151		VDS 200Q100 Arb. Generator	EMV-354	
	EMI Receiver ESW44	EMV-200/1		AutoWave Ultra Compact Symulator	EMV-355	
	Signalgenerator 9 kHz – 40 GHz	EMV-201		UCS 500N7		
	N5173B GPS Frequency normal	EMV-202	_	Coupling decoupling network CNI 503B7 / 32 A	EMV-356	
	B-88 DC Power supply	EMV-203	Ц	Coupling decoupling network CNI 503B7 / 63 A	EMV-357	
	N5745A			Telecom Surge Generator TSurge 7	EMV-358	
	Spektrum Analyzator FSV40	EMV-205		Coupling decoupling network CNI 508N2	EMV-359	
	Thd Multimeter Model 2015	EMV-206		Coupling decoupling network	EMV-360	
	Poweramplifier PAS15000	EMV- 207/abc		CNV 504N2.2 Immunity generator	EMV-361	
	Inrush Current Source	EMV- 208/abc		NSG4060/NSG4060-1 Coupling network	EMV-362	
	Arbgenerator Sycore	EMV-209		CDND M316-2 Coupling network	EMV-363	
	Harmonics/Flicker analyzer ARS 16/3	EMV-210		CT419-5 ESD Generator	EMV-364	
	Power Supply Regatron AC	EMV-214	П	NSG 437 Pulse Limiter	EMV-405	
	Power Supply Regatron DC	EMV-215		VTSD 9561-F BNC Transient emission	EMV-	
	Harmonics/Flicker analyser Zimmer	EMV-216		BSM200N40+BS200N100	450+451 EMV-455	
	Flicker Impedanz	EMV-218		Cap. Coupling Clamp HFK		
	Newtons4th 753 Comemso	EMV-219	Ц	Mag. Field System MS100N+MC26100+MC2630	EMV- 456-458	

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Appendix 1 (continued) Test equipment used



Coupling network EMV-459 CDN M2-100A ☐ Coupling network EMV-460 CDN M3-32A EMV-461 ☐ Coupling network CDN M5-100A EMV-462 ☐ Current Clamp CIP 9136A EMV-□ DC Artificial Network HV-AN 150 464+465 EMV-466 ☐ Coupling Clamp EM 101 EMV-467 ☐ Decoupling Clamp FTC 101

Power attenuator 10 dB / 250 Watt

EMV-469/2

Division: Industry & Energy

Department: FG

Test report number: INE-AT/FG-21/172

Page: 5 of 5

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