

THU IKT EMC-lab “List of test equipment”

09.07.2026 Fu

	description	type	manufacturer	serial number
<i>Generators:</i>				
☒	arbitrary generator	SyCore 1k1 DC – 100kHz	SPS	A4418 12/01209
☒	arbitrary generator	EDU 33212A DC – 20 MHz	Keysight	CN65259921
☒	signal generator	SME 06 9 kHz - 2.08 GHz	Rohde & Schwarz	100120
☒	signal generator	SMB 100A 9 kHz - 6 GHz	Rohde & Schwarz	114740
☒	signal generator	SMB 100A 100 kHz - 20 GHz	Rohde & Schwarz	178046
☒	signal generator	SMBV 100A 9 kHz - 6 GHz	Rohde & Schwarz	1407.6004K02-260005EX
☒	burst generator	EFT 500 0.2 – 4.4 kV by 5/50 ns spike frequency up to 1 MHz; cont. burst up to 10 kHz spike frequency	EM Test	0196-100
☒	ESD generator	SESD 30000 P 2 - 30 kV	Schlöder EMV	511330
☒	ESD generator	ESD 30 2 - 16 kV	EM Test	0496-57
☒	power fail simulator	PFS 503 accuracy 1° variation of phase (0 - 360°)	EM Test	0596-07
☒	surge generator	VCS 500 0.16 - 4 kV at 1.2/50µs 0.25- 2 kA at a pulse of 8/20µs	EM Test	0396-24
☒	impulse generator	CAR-TESTER II Impulses 1, 2a, 3a, 3b	Hilo Test	20093444

<i>Amplifiers:</i>				
☒	4-quadrant amplifier	PAS 10000 10000VA/ DC – 100 kHz	SPS	A4418 02/01209
☒	audio amplifier	SU-V470 PXS 2x90W/ 15 Hz – 150 kHz	Technics	FLOIA12424
☒	broadband amplifier	225LC 20W/ 10 kHz – 230 MHz	Kalmus	12129-1
☒	broadband amplifier	75A250 75W/ 10 kHz – 250 MHz	AR	18886
☒	broadband amplifier	BSA 1040-100 100W/ 100 kHz – 400 MHz	Bonn	118609
☒	broadband amplifier	603L 3W/ 800 kHz – 1000 MHz	Rochester	905
☒	broadband amplifier	100W1000M1 100W/ 80 MHz - 1 GHz	AR	18704
☒	broadband amplifier	BLMA1060-75 75W/ 1000 MHz – 6 GHz	Bonn	1711537

☒	broadband amplifier	BLMA 4080-30 30W/ 4.0 GHz – 8.0GHz	Bonn	097668
☒	active impedance converter	VHIC 9260 >10dB/ 9 kHz – 120 MHz	Schwarzbeck	9260-055
☒	pre amplifier	87405A 24dB/ 10 MHz – 3.0 GHz	Agilent	3950M00250
☒	pre amplifier	BBV 9718D 30dB/ 1.0 GHz – 18 GHz	Schwarzbeck	124
☒	pre amplifier	8449B 30dB/ 1.0 GHz – 26.5 GHz	Agilent	3008A01359

<i>Antennas:</i>				
☒	helmholtz coils	Helmholtz 16 DC - 150 kHz	THU	1
☒	magnetic field monitoring coil	FESP 5133-7/41 10 Hz - 200 kHz	Schwarzbeck	00660
☒	magnetic loop antenna	HXYZ 9170 9 kHz - 30 MHz	Schwarzbeck	X9170-239
☒	active loop antenna	FNZB 1516 9 kHz - 30 MHz	Schwarzbeck	151632/93
☒	inductive probe antenna	HFH2-Z4 100 kHz - 30 MHz	Rohde & Schwarz	881 468/ 002 881 468/ 003
☒	active vertical monopole antenna	VAMP 9243 9 kHz - 30 MHz	Schwarzbeck	9243-218
☒	biconical broadband dipole	BBDA-20/300 20 MHz – 300 MHz	Rolf Heine	001
☒	bilog. antenna	CBL 6112A 30 MHz - 2 GHz	Chase EMC Ltd.	2112
☒	bilog. antenna	VULB 9162 30 MHz - 7 GHz	Schwarzbeck	VULB 9162-023
☒	log. -per. antenna	LPA25-80 25 MHz - 80 MHz	THU	1
☒	log. -per. antenna	AT 1080 80 MHz - 1 GHz	Amplifier-Research	19451
☒	log. -per. antenna	LPA-200/1300 200 MHz – 1.3 GHz	Rolf Heine	001
☒	log. -per. antenna	LPA0.8-5.0 800 MHz – 5.0 GHz	THU	1; 2
☒	stacked log. -per. antenna	STLP 9149 700 MHz – 9.0 GHz	Schwarzbeck	9149-454
☒	horn antenna	3115 1000 MHz – 18 GHz	EMCO	9909-5899
☒	horn antenna	BBHA 9170 15 GHz – 26.5 GHz	Schwarzbeck	782
☒	electrical field probe	FP 4000 10 kHz – 1 GHz 1.0 – 300 V/m	AR	18928
☒	electrical field probe	HI 4450 80 MHz – 40 GHz 1.0 – 300 V/m	Holaday	101210

<i>Receivers/ Analyzers:</i>				
☒	harmonics analyzer and flicker meter	ARS 16/3 3 phases/ 32A	SPS	A4418 07/01209
☒	test receiver	ESH 3 9 kHz - 30 MHz	Rohde & Schwarz	872318/039
☒	test receiver	ESRP 7 10 Hz - 7 GHz	Rohde & Schwarz	101420
☒	test receiver	ESU 20 Hz – 26.5 GHz	Rohde & Schwarz	100223
☒	realtime spectrum analyzer	FSVR 20 Hz – 7 GHz	Rohde & Schwarz	1311.0006K07-100737vQ
☒	spectrum analyzer	8593E 9 kHz – 22 GHz	Agilent	3528U01024
☒	impedance analyzer	E4991B 1MHz – 1 GHz	Keysight	MY54100183
☒	network analyzer	BODE 100 1 Hz – 50 MHz, 2-port	OMICRON	TG931K
☒	network analyzer	ZVA8 300 kHz – 8 GHz, 4-port	Rohde & Schwarz	110175
☒	network analyzer	ZVM 10 MHz – 20 GHz, 2-port	Rohde & Schwarz	100044

<i>Line impedance stabilization networks (LISN):</i>				
☒	artificial mains network	ESH2-Z5 9 kHz - 30MHz	Rohde & Schwarz	843285/016
☒	artificial mains network	NNBM 8125 9 kHz - 30MHz	Schwarzbeck Messelektronik	8125406 81251599
☒	artificial mains network	NNBM 8124-200 9 kHz - 30MHz	Schwarzbeck Messelektronik	8124200-248 8124200-249
☒	artificial mains network companion device	LISN MATE 30 kHz - 110MHz	TEKBOX	TBLM118006

<i>Coupling Decoupling networks (CDN):</i>				
☒	EM injection clamp	F-2031 10 kHz - 1 GHz	Fisher Custom	255
☒	CDN-DCN	F-2031-DCN 100 kHz - 1 GHz	Fisher Custom	123
☒	CDN-C	FCC-801-C1	Fisher Custom	91
☒	CDN-M2	FCC-801-M2-16	Fisher Custom	98
☒	CDN-M3	FCC-801-M3-16	Fisher Custom	254
☒	CDN-M5	FCC-801-M5-25	Fisher Custom	21
☒	CDN-S8	ISN-S8 8-wire ISN CAT 6 STP	Schwarzbeck Messelektronik	ISN-S8-0013
☒	CDN-S9	CDN-S900m	Teseq	45979, 45978
☒	CDN-S25	FCC-801-S25	Fisher Custom	84
☒	CDN-T8	NTFM 8158 8-wire ISN CAT 6 UTP	Schwarzbeck Messelektronik	8158-0069

☒	coupling network coupling path of burst- or surge- pulses	CNI 503/32A 3x 400V/ 32A/ 50 Hz, 250V/ 25A DC with capacities of 33nF for each powerline	EM Test	0596-05
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<i>Probes, sensors and accessory:</i>				
☒	insertion unit	URV 5 Z-2 10V/ 9 kHz – 2 GHz	Rohde & Schwarz	843.240/001 843.240/002
☒	insertion unit	URV 5 Z-4 100V/ 100 kHz – 2 GHz	Rohde & Schwarz	843.241/032
☒	power sensor	NRP – Z91 23dBm/ 9 kHz – 6 GHz	Rohde & Schwarz	102369
☒	power sensor	NRP – Z92 33dBm/ 9 kHz – 6 GHz	Rohde & Schwarz	100135
☒	power sensor	NRV – Z2 2W/ 10 MHz – 18 GHz	Rohde & Schwarz	828.476/006
☒	broadband power sensor	NRP – Z81 1W/ 50 MHz – 18 GHz	Rohde & Schwarz	105368
☒	rf probe set	URV5-Z7 15V/ 20 kHz - 1000 MHz/ 2.5pF	Rohde & Schwarz	395.2615.02
☒	power meter	NRP 2	Rohde & Schwarz	103173
☒	power meter	NRV S	Rohde & Schwarz	843746/ 027 843746/ 028
☒	millivolt meter	URV 5	Rohde & Schwarz	830012/ 002
☒	digital multimeter	DMM 34465A 6 1/2 digit/ DC – 300 kHz	Keysight	MY64033110 MY64034288
☒	directional power sensor	NRT – Z43 30W/ 400 MHz – 4.0 GHz	Rohde & Schwarz	826.481/013
☒	passive probe	ESH2-Z3 9 kHz - 30MHz Att. 30dB (1500 Ω + 2 %) 9 pF	Rohde & Schwarz	299.7810.52
☒	rf current probe	TT-CC 220 10A-1000A/ DC – 300 kHz	Testec	20182426
☒	rf current probe	EZ-17-02 2A/ 20 Hz - 100 MHz	Rohde & Schwarz	842.447/015
☒	rf current probe	F-72-1 12A/ 10 Hz - 100 MHz	FCC	091966
☒	rf current probe	ESV-Z1 50A/ 9 kHz - 600 MHz	Rohde & Schwarz	835
☒	rf current probe	F-65 3A/ 10 kHz - 1000 MHz	FCC	08414
☒	bulk current injection probe	F-140 100W/ 100 kHz - 1000 MHz	FCC	101654
☒	high voltage probe	TT – SI9010A 5000V/ DC - 70 MHz	Testec	083879
☒	trimode probe	P7506 DC - 6 GHz	Tektronix	B011223
☒	near-field-probe- set with preamplifier	NFPS + PA 203 150 kHz - 3 GHz	Langer	001
☒	directional coupler	440990 43dB/ 100W/ 30 MHz - 125 MHz	Microwave Corporation	213A

☒	directional coupler	BDC 0140-40/200 40dB/ 200W/ 9 kHz - 400 MHz	Bonn	118609
☒	directional coupler	DC 6180M1 60dB/ 200W/ 80 MHz - 1000 MHz	Amplifier-Research	0354176
☒	directional coupler	BDC 0842-40 40dB/ 200W/ 800 MHz - 4200 MHz	Bonn	118609

<i>Further accessory:</i>				
☒	absorbing clamp	MDS 21 30 - 1000 MHz	RS/Lüthi	842437/025
☒	attenuator	40-6-34 6dB/ DC - 1500 MHz	Weinschel	K2146
☒	calibration fixture	FCC-BCICF-2 10 kHz – 1 GHz	FCC	121483
☒	capacitive coupling clamp	CCC 9224 according ISO 7637-3	Schwarzbeck Messelektronik	CCC9224-001
☒	capacitive coupling clamp	HFK according IEC 61000-4-4	EM Test	
☒	coaxial resistor	8141 250W/ DC – 4 GHz	Termaline	1165
☒	stripline	90 Ohm stripline 150 kHz - 1000 MHz	Kurt Stimpfl	

<i>Further test sites:</i>				
☒	high speed interconnect analyzer	Wavepulser BW: 40 GHz, 200GS/s, 4-port	Teledyne	LCRY4801N20 018
☒	EM-scanner	EHX 150 kHz – 8 GHz	EMexpert	EHX-1608163- 1596
☒	screening attenuation test site	Co Me T Triaxial tube and cells 10 kHz – 3GHz	Rosenberger - bedea	001
☒	digital serial analyzer	DSA70404B BW: 4 GHz, 25GS/s, 4-port	Tektronix	B110302
☒	mixed domain oscilloscope	MDO4104C BW: 1 GHz, 5 GS/s, 4-port, RF-BW: 6GHz	Tektronix	C010710

<i>Chambers:</i>				
☒	full anechoic room (FAR) 7.6m x 4.6 m x 3.6 m (l x w x h) with turntable and with both non-conductive table and conductive table, non-reflecting combined ferrite- and pyramidal absorbers, filter 4 x 32 A / 400VAC, filter 4 x 150A / 1000VDC and filters for data lines, 10 x lead-through for fibre optic cables 150 kHz – 40 GHz			
☒	shielding chamber 5.2 m x 2.5 m x 2.55 m filter 4 x 32 A / 400VAC, filter 4 x 150A / 1000VDC and filters for data lines, 6 x lead-through for fibre optic cables 150 kHz – 20 GHz			

☒	shielding chamber 1.9 m x 1.9 m x 2.55 m with wooden table filter 4 x 32 A / 400VAC, filter 4 x 150A / 1000VDC and filters for data lines, 6 x lead-through for fibre optic cables 150 kHz – 20 GHz
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