	Antennas
	Antenna holders / baluns
VHA 9103 B	Holder / Balun without telescopic dipole elements (for use with Biconical BBA 9106, BBAL 9136, BBAK 9137, BBVK 9138)
HFBA 9122	HF-VHF Broadband balun / holder (0.1) 0.15 - 300 (500) MHz especially to measure very high field strength. BBAL 9136, BBA 9106, BBAK 9137, BBVU 9135 or BBUK 9139 biconical elements required.
VHBA 9123	Antenna Holder / Balun for Bicon. Broad Band Antenna (e.g. BBA), 50 / 200 Ω, (better antenna factor below 50 MHz, also EMV application 100 W
VHBB 9124	Antenna holder / balun 50:200 Ohm , high symmetry, 25-300 MHz, 10 W for BBA, BBAL, BBAK, BBVK
VHBC 9133	Antenna holder / balun 50:200 Ohm, 1 kW, for biconical or collapsible elements (BBA, BBAL, BBFA, Triangle, FBAA, FBAB)
VHBD 9134-N	High power antenna holder / balun with N-connector, 50:200 Ohm, 2.5 kW for lower frequency range or limited by N-connector for upper frequency range, 20-200 MHz for biconical or collapsible elements.
VHBD 9134-7/16	High power antenna holder / balun with 7/16-connector, 50:200 Ohm, 2.5 kW, 20-200 MHz for biconical or collapsible elements.
VHBD 9134-4	4 kW high power antenna holder / balun 50:200 Ω, 20-200 MHz for BBAL 9136 or BBFA 9146, 7/16-female connector.
UBAA 9114	Broadband Balun/Holder 4:1, 30-1000 MHz, 5 W, low loss, BBVU, BBUK, BAOC or BBOC elem. required
UBAA 9115	Broadband Balun/Holder 4:1, 30-1000 MHz, 5 W, extremely high symmetry, BBVU, BBUK, BAOC or BBOC elem. required
	Biconical elements
BBA 9106	Biconical Elements, 30-300 MHz, requires VHA 9103 B, VHBC, VHBB or VHBA
BBAL 9136	Biconical Elements, 20-200 MHz, requires VHA 9103 B, VHBC, VHBB or VHBA
BBAK 9137	Biconical Elements, 45-450 MHz broad band, requires VHA 9103, VHBB or VHBA
BBVK 9138	Biconical Elements, 60-600 MHz broad band, requires VHA 9103, VHBB or VHBA
BBVU 9135	Biconical Elements, (30)100-1000 MHz (like VUBA), for UBAA 9114/9115
BBUK 9139	Biconical Elements, 160-1200 MHz broad band (like UBA), for UBAA 9114/9115
	Collapsible or open Biconical Elements, booster coils
BBAE 9179	Foldable elements for immunity for automotive applications, optimized for 1 m measurement distance, max. diameter 150 cm, 20-220 MHz suitable for: VHBC 9133, VHBD 9134, VHBD 9134-4. Balun must be equipped with “HOLDER SHORT”!
HOLDER SHORT	Plastic holders to be fixed at a high power balun e.g. VHBA 9123, VHBC 9133, VHBD 9134, VHBD 9134-4. BBAE 9179 elements cause torque in horizontal polarisation to the fixture at the balun. HOLDER SHORT absorbs the torque caused by BBAE 9179 in horizontal polarisation.
BBFA 9146	Large collapsible aluminium Elements with extensions up to 4 m
FBAB 9177	Collapsible Biconical Elements 30 – 300 MHz (instead of BBA)
FBAL 9178	Large Collapsible Biconical Elements 20 – 200 MHz (instead of BBAL)
BAOC 9216	Open Conical Elements, 160-1200 MHz broad band, for UBAA 9114/9115
BBOC 9217	Open Conical Elements, (30)100-1000 MHz broad band, for UBAA 9114/9115
BCOI 9180 5W	Set of pluggable coils with 10 mm element fixtures and 10 mm shafts. A pair of coils is added between the high power balun and the antenna element. Suitable for the following baluns: VHBA 9123, VHBC 9133, VHBD 9134, VHBD 9134-4. Suitable for the following elements: BBA 9106, BBAL 9136, BBFA 9146, BBAE 9179 and others. The booster coils have 5 turns and increase the gain of the biconical antenna in the lower frequency range remarkably. If the coils are used with BBAE 9179 the balun must be equipped with additional torque absorbing plastic fixation bar (holder long). (Also available: 4 turns = …4W and 3 turns = …3W)
HOLDER LONG	Plastic holders to be fixed at a high power balun e.g. VHBA 9123, VHBC 9133, VHBD 9134, VHBD 9134-4. The HOLDER LONG must be assembled to the balun to use BBAE 9179 with booster coils.
	Logarithmic Periodic Broadband Antennas
UHALP 9108 A	Log.-Periodic Antenna, alum. Tubing, 250 – 2400 MHz, low loss, 1 kW power
VUSLP 9111-1000	Log.-Per. Antenna, aluminium tubing, 1000 – 3000 (4000) MHz, low loss, 1 kW.
VUSLP 9111-400	Log.-Periodic Antenna, alum. Tubing, 400 - 3000 (4000) MHz, low loss, 1 kW.
VUSLP 9111	Log.-Periodic Antenna, alum. Tubing, 200 – 2300 (4000) MHz, low loss, 1 kW power

VUSLP 9111 B	Log.-Periodic Antenna, alum. Tubing, (180) 200 - 3000 (4000) MHz, low loss, 1 kW power
VUSLP 9111 E	Log.-Per. Antenna, aluminium tubing, 1 kW power, 70 (65)-3000 (4000) MHz. Recommended adapter: KG 9201. EN 61000-4-3
VULP 9118 A	Log.-Per. Antenna, aluminium tubing, 1 kW power, 180 -1500 (2000) MHz
VULP 9118 B	Log.-Per. Antenna, aluminium tubing, 1 kW power, 160-1500 (2000) MHz
VULP 9118 C	Log.-Per. Antenna, aluminium tubing, 1 kW power, 100-1400 (2000) MHz
VULP 9118 C special	Log.-Per. Antenna, aluminium tubing, 1 kW power, 100-1400 (2000) MHz. Nearly identical gain as VULP 9118 C but with reduced width. Special=folded longest elements.
VULP 9118 D	Log.-Per. Antenna, aluminium tubing, 1 kW power, (80) 95 -1500 (1800) MHz
VULP 9118 D special	Log.-Per. Antenna, aluminium tubing, 1 kW power, (80) 95 -1500 (1800) MHz. Nearly identical gain as VULP 9118 D but with reduced width. Special = folded longest elements.
VULP 9118 D HP	Log.-Per. Antenna, aluminium tubing, high power with 7/16.-connector, (80) 95 -1500 (1800) MHz
VULP 9118 D HP sp	Log.-Per. Antenna, aluminium tubing, high power with 7/16.-connector, (80) 95 -1500 (1800) MHz, nearly identical gain as VULP 9118 E High Power but with reduced width. Special = folded longest elements.
VULP 9118 E	Log.-Per. Antenna, aluminium tubing, 1 kW power, 75 (50)-1500 MHz.
VULP 9118 E special	Log.-Per. Antenna, aluminium tubing, 1 kW power, 75 (50)-1500 MHz. Nearly identical gain as VULP 9118 E but with reduced width. Special=folded longest elements.
VULP 9118 E High Power	Log.-Per. Antenna, aluminium tubing, high power, 7/16-connector, 75 (50)-1500 MHz.
VULP 9118 E HP sp	Log.-Per. Antenna, aluminium tubing, high power, 7/16-connector, 75 (50)-1500 MHz. Nearly identical gain as VULP 9118 E HP but with reduced width. Special=folded longest elements.
VULP 9118 F	Log.-Per. Antenna, al. tubing, end discs, 1 kW power, 55 -1800 MHz
VULP 9118 G	Log.-Per. Antenna, al. tubing, end discs, 1 kW power, 45 -1500 MHz
VULP 9118 G special	Log.-Per. Antenna, al. tubing, end discs, 1 kW power, 45 -1500 MHz. Nearly identical gain as VULP 9118 G but with reduced width. Special=folded longest elements.
VULP 9118 H	Log.-Per. Antenna, aluminium tubing, 1 kW power, (26) 30 - 1500 (1800) MHz, N-connector gain 6 dBi, VSWR<3, width 5.2 m, length 4.8 m, weight 35 kg.
Opt. WP	Option: grey coating and sealing for outdoor use
USLP 9142	UHF – SHF Log. – Per. Antenna, 0.7 – 5 (8) GHz
USLP 9143	UHF – SHF Log. – Per. Antenna, (0.25) 0.3 – 7 (8) GHz
USLP 9143 B	UHF – SHF Log. – Per. Antenna, (0.18) 0.2 – 7 (8) GHz
ESLP 9145	UHF – EHF Log. – Per. Antenna, (0.7) 1- 18 (20) GHz, N-connector
XSLP 9142	Dual Polarized UHF-SHF Log.-Per. Antenna, 800 MHz – 3(5) GHz, 50 W
XSLP 9143	Dual Polarized UHF-SHF Log.-Per. Antenna, 300 MHz – 3(5.5) GHz, 50 W
	Stacked Logarithmic Periodic Broadband Antennas
STLP 9128 C-N	Stacked double Log.-Per. Antenna, typ. gain: 9 dBi, alum. Tubing, high power, (150) 200 - 1500 (4000) MHz, N-connector max. power 1 kW for lower frequency range or limited by N-connector for higher frequency range.
STLP 9128 C-7/16	Stacked double Log.-Per. Antenna, typ. gain: 9 dBi, alum. Tubing, high power, (150) 200 - 1500 (4000) MHz, 7/16-connector max. power 2 kW for lower frequency range or limited by 7/16-connector for higher frequency range.
Opt. 13-30	Option: with 13-30-connector limited to 2500 MHz but higher power up to 8 kW including adapter similar to AA 9202
STLP 9128 D-N	Stacked double Log.-Per. Antenna, typ. gain: 9 dBi, alum. Tubing, high power, 80 -3000 (4000) MHz, max. power 1 kW in the lower frequency range, power limited by N-connector in the higher frequency range, fastlinks for quick removal of the rear parts of the antenna. Recommended Adapter: AA 9209
STLP 9128 D-7/16	Stacked double Log.-Per. Antenna, typ. gain: 9 dBi, alum. Tubing, high power, 80 -3000 (4000) MHz, max. power 2 kW in the lower frequency range, power limited by 7/16-connector in the higher frequency range, fastlinks for quick removal of the rear parts of the antenna. Recommended Adapter: AA 9209

STLP 9128 D sp-N	Like STLP 9128 D but with folded longest elements and smaller structure angle, N-connector, fastlinks for quick removal of the rear parts of the antenna. Antenna diameter < 150 cm. Recommended Adapter: AA 9209.
STLP 9128 D sp-7/16	Like STLP 9128 D but with folded longest elements and smaller structure angle, 7/16-connector, fastlinks for quick removal of the rear parts of the antenna. Antenna diameter < 150 cm. Recommended Adapter: AA 9209.
STLP 9128 E-N	Stacked double Log.-Per. Antenna, typ. gain: 9 dBi, alum. Tubing, high power, (65) 80 -1500 (3000) MHz, N-connector, max power in the lower frequency range 1 kW, in the upper frequency range limited by N-connector, fastlinks for quick removal of the rear parts of the antenna. Recommended Adapter: AA 9209
STLP 9128 E-7/16	Stacked double Log.-Per. Antenna, typ. gain: 9 dBi, alum. Tubing, high power, (65) 80 -1500 (3000) MHz, 7/16-connector, max power in the lower frequency range 2 kW, in the upper frequency range limited by 7/16-connector, fastlinks for quick removal of the rear parts of the antenna. Recommended Adapter: AA 9209
STLP 9128 E sp-N	Like STLP 9128 E but with folded longest elements and smaller structure angle. N-connector, antenna diameter < 150 cm. Fastlinks for quick removal of the rear parts of the antenna. Recommended Adapter: AA 9209
STLP 9128 E sp-7/16	Like STLP 9128 E but with folded longest elements and smaller structure angle. 7/16-connector, antenna diameter < 150 cm. Fastlinks for quick removal of the rear parts of the antenna. Recommended Adapter: AA 9209
STLP 9129	Stacked double Log.-Per. Antenna, typ. gain: 9 dBi, alum. Tubing, (70) 80 -9000 (10500) MHz, N-connector, fastlinks for quick removal of the rear parts of the antenna, tip with radome. Recommended Adapter: AA 9209. Ideal for IEC 61000-4-3.
STLP 9148	Stacked double Log.-Per. Antenna, typ. gain: 9 dBi (0.7) 1 – 18 (20) GHz, N-connector
STLP 9149	Stacked double Log.-Per. Antenna for IEC 61000-4-3 typ. gain 10.3 dBi, (0,6) 0,7 – 9 (10,5) GHz, N-connector female.
	Biconic Logarithmic Periodic Antennas (Hybrid)
VULB 9161 SE	TRILOG Super Broadband test Antenna, 30 – 1000 (2000) MHz, 1 kW with short Triangle elements, diameter < 150 cm
VULB 9162	TRILOG Broadband Antenna 30 MHz - 7 GHz, 100 W, diameter < 150 cm
VULB 9163	TRILOG Super Broadband test Antenna, (25) 30 – 3000 (4000) MHz, 100 W (200 W)
VULB 9168	TRILOG Super Broadb. Test Antenna, (25) 30-1000 (2000) MHz, 10 W, reduced width, diameter < 1.5 m.
	Biconical Antennas
SBA 9113 B	Small Biconical Antenna 80 MHz – 3 GHz for harmonics measurements acc. to IEC61000-4-3.
SBA 9113	Small biconical microwave antenna 0.5 – 3 GHz, 20 W. CIS/A/648/CDV CISPR 16-1-4 Site evaluation above 1 GHz
SBA 9112	Small biconical microwave antenna (1) 3 – 18 GHz, 10 W including transport case. CIS/A/648/CDV CISPR 16-1-4 Site evaluation above 1 GHz
SBA 9119	Small biconical microwave antenna 1 – 6 GHz, 20 W. CIS/A/648/CDV CISPR 16-1-4 Site evaluation above 1 GHz including transport case.
UBA 9116	Biconical UHF broad band antenna (160) 300 -1000 (1100) MHz
VUBA 9117	Biconical VHF-UHF broad band antenna (30) 150 -1000 MHz
	Dipoles
VHA 9103	VHF Half-Wave Dipole with 2 sets of telescopic elements, 30-300 MHz
UHA 9105	Tuneable UHF – Half – Wave Dipole, 300 – 1000 MHz w. telescopic elements
UHA 9125 C	Tuneable UHF – Half – Wave Dipole with EMI – Balun, 0.75 – 2 GHz with 4 sets of elements, L_E = 180, 140, 100, 80 mm including transport case.
UHA 9125 D	Tuneable UHF – Half – Wave Dipole with EMI – Balun, 1.0 – 3 (4) GHz with 6 sets of elements, L_E = 140, 114, 90, 72, 60, 48 mm, including transport case.
ILS Dipole	Linear polarized half-wave dipole with 1:1 balun and fixed element length for fieldstrength measurements at instrument landing systems (ILS) 108 - 118 MHz and 320 - 340 MHz.
CCA ILS	Transport and storage case made of aluminum for ILS Dipole
TETRA-Dipole	Linear polarized half-wave dipole with 1:1 balun and fixed element length for measurements at TETRA (terrestrical trunked radio) networks 340 - 480 MHz

	Precision Dipoles
VHAP	VHF Precision Dipole 30-300 MHz, 2 sets of telescopic elements (mostly required in pairs) CISPR 16-1-5.
UHAP	UHF Precision Dipole 300-1000 MHz (VHAP & UHAP mostly required in pairs) CISPR 16-1-5
CCA	Carrying and storing case for 2 x VHAP or 2 x UHAP, cases for other antennas also available.
VHAPA	Calibration adaptor for VHAP Precision Dipoles
UHAPA	Calibration adaptor for UHAP Precision Dipoles
	Monitoring & drive testing antennas
RSH 2342	Omni directional horizontally polarised UHF antenna 170 - 350 MHz.
RSH 4786	Omni directional horizontally polarised UHF antenna (350) 470 - 860 (1050) MHz for outside use.
RS 16	Vertical polarized microwave biconical antenna (0,5) 1 – 6 (8,5) GHz with omni directional H-plane pattern.
RE 1790	Vertical polarized VHF- UHF biconical antenna (170) 230 – 1000 (1100) MHz with omni directional H-plane pattern.
RE 4590	Vertical polarized VHF- UHF biconical antenna (330) 450 – 1000 (1100) MHz with omni directional H-plane pattern.
RS 0460	Vertically polarised symmetrical biconical antenna 0,4 – 6 GHz, omnidirectional in the H-plane.
CCA RS 0460	Transport case for RS 0460.
	Broadband Horn Antennas
BBHA 9120 A	Broad-Band Horn Antenna (0.8) 1 – 5 (10) GHz, N-connector
BBHA 9120 B	Broad-Band Horn Antenna 1 – 10 GHz, N-connector
BBHA 9120 C	Broad-Band Horn Antenna 2 – 18 (20) GHz, SMA-connector
BBHA 9120 D	Broad-Band Horn Antenna (0,8) 1 – 18 GHz, N-connector
BBHA 9120 E	Broad-Band Horn Antenna 0.5 – 6 GHz, N-connector
BBHA 9120 F-N	Broad-Band Horn Antenna 0.2 – 2 GHz, N-connector
BBHA 9120 F-7/16	Broad-Band Horn Antenna 0.2 – 2 GHz, 7/16-connector
BBHA 9120 G	Broad-Band Horn Antenna 0.4 – 2.8 GHz, 7/16-connector
BBHA 9120 J	Broadband horn antenna optimized for the gain in 1 m distance from 800 MHz to 6.2 GHz. Especially optimized for automotive immunity. Power limited by the N-connector. The N-connector can withstand ca. 400 Watt at 4 GHz.
BBHA 9120 LF	Broad-Band Horn Antenna 0.7 – 6 GHz, N-connector
BBHA 9170	Broad-Band Horn Antenna 15 – 26.5 (40) GHz, SMA-compatible connector
HA 9250-12	Pyramidal standard gain horn Antenna, 1-2 GHz, 7/16-connector, 20 dBi, optimized for far field gain.
HA 9250-24	Pyramidal standard gain horn Antenna, 2 – 4 GHz, 7/16-connector, 20 dBi, optimized for far field gain.
HA 9250-48	Pyramidal standard gain horn Antenna, 4 – 8 GHz, 7/16-connector, 22mm-tube, 20 dBi, optimized for far field gain. (Alternative fixture available: 3/8''-thread and M10 thread in center of gravity replaces 22mm-tube, alternative connector available: N replaces 7/16)
HA 9251-12	Pyramidal standard gain horn Antenna, 1-2 GHz, 7/16-connector, far field gain 19-22 dBi, optimized for 1 m gain.
HA 9251-24	Pyramidal standard gain horn Antenna, 2 – 4 GHz, 7/16-connector, 18 dBi, optimized for the gain in 1 m distance.
HA 9251-48	Pyramidal standard gain horn Antenna, 4 – 8 GHz, 7/16-connector, 22mm-tube, 19 dBi, optimized for the gain in 1 m distance.
HWRD750	Double ridged horn antenna 7.5-18 GHz with waveguide flange WRD750. Gain 16-21 dBi, 1 kW, especially to generate very high field strengths.
	Dual polarised horn antennas
CTIA 0710	CTIA horn antenna, dual polarized, 0,7-10 GHz, typ. 30 dB cross polar rejection, antenna with reduced size for OTA measurements. Antenna without 22 mm tube!
Opt. CTIA tube 22 mm	Option for CTIA 0710: 22 mm tube with indexing ring.
BBHX 9120 E	Dual polarized Broad-Band Horn Antenna 0.4 – 10 GHz, N-connectors
BBHX 9120 LF	Dual polarized Broad-Band Horn Antenna (0.8) 1 – 8 (10.5) GHz, N-connectors.

	Active Antennas
VAMP 9243	Vertikal active rod antenna, 9 kHz - 30 MHz, BNC, reduced noise floor, with mounting nut for AM 9144 and rechargeable battery.
Opt. GP	Option: Aluminium-Groundplane, 0.6 x 0.6 m
Opt. ACS 110	Option: Charger ACS 110
Opt. Divider	Option 20 dB plug in divider to measure high field strength
Opt. CA 9243	Calibration Adapter for VAMP 9243
Opt. MIL461F bonding kit	Bonding kit for VAMP 9243 acc. MIL-STD-461F consisting of a BNC cable double shielded ca. 70 cm, with braid current blocking ferrite in the center, elbow aluminium angle with BNC bulkhead adapter.
EFS 9218	Active Electric Field Probe with Biconical Elements, 9 kHz - 300 MHz, 12 µV/m - 65 V/m, antenna factor switchable 46 dB/m or 20 dB/m, high symmetry, built in rechargeable battery
Opt. ACS 110	Option: Automatic charger ACS 110 for EFS 9218
EFS 9219	Active antenna holder, high sensitivity (1 µV/m … 3 V/m), 9 kHz-30 MHz, BBUK 9139 biconical elements required.
Opt. Tube	Option: Isolating tube with braid chokes for EFS 9219
Opt. ACS 110	Option: Automatic charger Ansmann ACS 110 for EFS 9219
	Field probes
FSH3D	Isotropic H-Field Antenna for the Rohde und Schwarz handheld spectrum analyser FSH or the TS-EMF System 9 kHz - 200 (300) MHz. Light weight low attenuation radom, outer diameter ca. 150 mm. The selection of the active loop and the power supply for the antenna is provided by the included short cable that can directly be connected to the R&S FSH.
FSE3D	Isotropic E-field antenna for the Rohde und Schwarz handheld spectrum analyser FSH or the TS-EMF System (25) 30 MHz - 3 GHz. Light weight low attenuation radome, outer diameter ca. 150 mm. The selection of the active loop and the power supply for the antenna is provided by the included short cable that can directly be connected to the R&S FSH.
FSHPH	Passive H-Field probe for handheld spectrum analysers to measure large magnetic fields to analyse health effects of non-ionizing radiation acc. to standards like BGV-B11, ICNIRP, IEEE C95.1, FCC 96-236.
FSHPE	Passive E-field probe for handheld spectrum analysers to measure large electric fields to analyse health effects of non-ionizing radiation acc. to standards like BGV-B11, ICNIRP, IEEE C95.1, FCC 96-236.
	Automotive antennas
NMHA 6M	Nissan Specification 28401NDS02 [6]antenna set Immunity to handy transmitters and RENAULT antenna set Immunity to handy transmitters acc. 36-00-808/M (Combined Set) consisting of: NMHA 26, NMHA 28, NMHA 30, NMHA 40, NMHA 52, NMHA 75, NMHA 125, NMHA 145, NMHA 155, NMHA 165, NMHA 174, NMHA 190, NMHA 223, NMHA 350, SBA 9113 without original biconical elements, 420 NJ flat elements, Spacer 50, counterpoise for NMHA antennas and case.
VW TL 82166 2009-05 Antenna Set	Antenna set acc. to Volkswagen Specification VW TL 82166:2009-05 section 7.3 "antenna set for mobile radio testing using mobile portable radio units inside the vehicle." The set consists of: NMHA 26.5, NMHA 27.5, NMHA 28.5, NMHA 29.5, NMHA 71, NMHA 77, NMHA 83.75, NMHA 151, NMHA 166, SBA 9113 mini version total length of the balun LH=20 cm without the small original biconical elements, 420 NJ, Spacer 50, VW metal case large with short 22 mm tube, VW metal case small with short 22 mm tube, MSS 9630, AD Nm BNCf, AD Nm Nm Case for all parts CCA VW.
420 NJ	Elements for radiated immunity caused by handy transmitters with SBA 9113 or SBA 9113 mini version for the Ford standard RI115.
Opt. Spacer 50	Spacer made of Polystyrene to set the 420 NJ test distance to 50 mm.
422 NJ	Elements for radiated immunity caused by handy transmitters for SBA 9119.
Spacer 30 for 422 NJ	Spacer for 422 NJ. Test distance 30 mm.
WAND0918	Wireless Immunity “Wand” Antenna acc. to Dell Specification „SYSTEM IMMUNITY TO WIRELESS GSM TEST REQUIREMENT” 800 MHz -2 GHz.
RS 9244	Radiating source for CISPR/D/391/CD (CIS/D/386/CD, CIS/D/388A/CC), consisting of a 500 mm brass rod with 4 mm diameter and 2 aluminum angles with N-connectors.
Comet SB14	Comet SB-14 mobile antenna for 50 MHz with PL connector.
Diamond CR6	CR-6 mobile antenna for 50 MHz with PL connector.
Diamond CR11	CR-11 mobile antenna for 26-28 MHz with PL connector.
EGG 900	Antenna for IMMUNITY TO ON-BORD TRANSMITTERS (PSA EQ/IR 05,

	ISO 11452-9 B.4.2) for GSM 900, GSM 850 and PDC 800 bands (890-915 MHz)
EGG 1860	Antenna for IMMUNITY TO ON-BORD TRANSMITTERS (PSA EQ/IR 05, ISO 11452-9 B4.3.3) for GSM 1800, UMTS, GSM 1900 and PDC 1500 bands (1710-2025 MHz).
FAN 405	Symmetrically folded antenna w. housing 380-430 MHz according to ISO 11452-9 B.4.8
FAN 450	Symmetrically folded antenna w. housing 430-470 MHz according to ISO 11452-9 B4.9
HLC 27	Helical T-antenna with housing according to ISO 11452-9 B4.5, 26.96-27.4 MHz.
HLC 146	Helical antenna with top cone & housing according to ISO 11452-9 B.4.6, 144-148 MHz.
HLC 170	Helical antenna with top cone & housing according to ISO 11452-9 B.4.7, 168-173 MHz.
PCD 2440	Antenna for IMMUNITY TO ON-BORD TRANSMITTERS (PSA EQ/IR 05, ISO 11452-9 B.4.4) for bluetooth band (2402 – 2480 MHz)
TSA 385	Tuned sleeve antenna 373-397 MHz acc. ISO 11452-9 B.3
TSA 400	Tuned sleeve antenna 387-419 MHz acc. ISO 11452-9 B.3
TSA 415	Tuned sleeve antenna 407-423 MHz acc. ISO 11452-9 B.3
TSA 430	Tuned sleeve antenna for Toyota TSC7006G or ISO 11452-9 B.3, 425-435 MHz
TSA 455	Tuned sleeve antenna 437-470 MHz acc. ISO 11452-9 B.3
TSA 835	Tuned sleeve antenna for Toyota TSC7006G, VSWR = 1.5 or better at 835 MHz.
TSA 880	Tuned sleeve antenna 806-958 MHz acc. ISO 11452-9 B.3
TSA 900	Tuned sleeve antenna for Toyota TSC7006G, VSWR = 1.5 or better at 900 MHz.
TSA 1270	Tuned sleeve antenna for Toyota TSC7006G, VSWR = 1.5 or better at 1270 MHz.
TSA 1440	Tuned sleeve antenna 1440-1453 MHz acc. ISO 11452-9 B.3
TSA 1750	Tuned sleeve antenna 1.14-2.0 GHz acc. ISO 11452-9 B.3
TSA 1950	Tuned sleeve antenna for Toyota TSC7006G, VSWR = 1.5 or better at 1950 MHz.
	Passive Rod Antenna
VPMP 9241	Monopole acc. to CISPR/D/391/CD (CIS/D/386/CD, CIS/D/388A/CC), passive, 2 N-connectors, element fixture for rod, rod, aluminum housing and groundplane.
Opt. TLD 9241	Top loading disc for VPMP 9241 diameter < 12 cm.
VPMP 9242	Vertical passive rod antenna, 10 – 40 MHz, possible rods: FBAB 9177, FBAL 9178, BBA 9106, BBAL 9136 (have to be ordered extra)
Opt. GP	Option: Aluminium groundplane 0.6 x 0.6 m
	Helical antennas
HLX 0810-LHCP	Helical antenna 800 - 1000 MHz, left circular polarisation, gain 11 dBc, 22 mm tube, N-jack.
HLX 0810-RHCP	Helical antenna 800 - 1000 MHz, right circular polarisation, gain 11 dBc, 22 mm tube, N-jack.
CLSA 0110L	Conical Log Spiral Antenna 1-10 GHz, typ. gain 2 dBi, N-connector, left threaded.
CLSA 0110R	Conical Log Spiral Antenna 1-10 GHz, typ. gain 2 dBi, N-connector, right threaded.
Opt. 0110 Radome	Radome for CLSA 0110 L/R
	Magnetic Antennas, TX-Loop Antennas
HFRA 5148	Circular transmitting loop antenna diam. 180 mm, 1 turn
HFRA 5149	Circular transmitting loop antenna 9 kHz – 30 MHz, diam. 500 mm including 50 Ohm 20 Watt termination, N-connectors.
HFRA 5152	Circular transmitting loop antenna diam. 250 mm, DC-3 MHz
HFRA 5153	Circular transmitting loop antenna diam. 180 mm, 0-20 (30) MHz, 5 W
HFRA 5154	Circular transmitting loop antenna diam. 100 mm, 0.1 – 30 MHz, Transformer 50 Ohm, 0.5 W
HFRA 5155	Circular Transmitting VHF – UHF loop antenna, diam. 50 mm,
HFRA 5156	Circular Transmitting Loop Antenna diam. 50 mm, 0-5 MHz, 2 W, 10 turns
HFRA 5157	Circular Transmitting Loop Antenna diam. 50 mm, 0-20(30) MHz, 3 W, 2 turns
HFRA 5158	Circular Transmitting Loop Antenna diam. 180 mm, 0-2 MHz, 5 W, 10 turns
HFRA 5159	Circular Transmitting Loop Antenna diam. 250 mm, 0-400 kHz, 5 W
HFRA 5170	Cal. Loop 3 W, diam. 100 mm, 0-30 MHz, 1 turn, 250 Ohm
HFRA 1356	Circular Transmitting Loop Antenna diam. 250 mm, resonating at 13.56 MHz
HFRA SF02G	Tuneable resonant magnetic loop antenna to generate extremely high magnetic fields in the range 10 kHz to 30 MHz acc. to VG95373-13:2008-11 and VG95373-23:2008-11. Including sensor loop HFRAE 5163 und control cable.

	Passive Magnetic Antennas, RX-Loop Antennas
HFRAE 5160	Receiving VHF – UHF loop antenna, diam. 50 mm, 2-300 MHz, transformer
HFRAE 5161	HF RX Loop, diam. 100 mm, 70 k-120 MHz, 1 turn, transformer
HFRAE 5162	VLF-HF RX Loop, diam. 250 mm, 50 k-30 MHz, 1 turn, transformer
HFRAE 5163	Passive magnetic loop antenna 9 kHz – 400 MHz, 1 turn, transformer, diam. 50 mm
	CISPR 15 3-dimensional loop antenna van Veen
HXYZ 9170	3-dimensional large loop antenna, diam. 2 m, acc. EN 55015 / CISPR 15, Socket and Coaxial switch recommended
Socket for HXYZ 9170	Socket and mounting equipment for large loop HXYZ 9170
Opt. fold HXYZ 9170	Option foldable for HXYZ 9170: The joints of the base version of HXYZ are stiff. The option foldable replaces the stiff joints which have to be removed by screws by rotatable connections. Only one locking pin per joint has to be removed to collapse the antenna. The socket will additionally be equipped with wheels. This option allows to park the antenna folded close to a wall and to set it up in less than 5 minutes.
Coaxial Switch for HXYZ 9170	3 in one coaxial switch for manual / remote operation including cable set (3 BNC cables with braid current blockers) for large loop HXYZ 9170
12 V PS f. Coax. Sw.	12 V DC ultra low emission trafo wall outlet plug in power supply for Coaxial Switch of HXYZ 9170, not required in case of manual switching or if switched remotely by a Schwarzbeck receiver or by an R&S receiver with 12V/100mA on pin 25 of the USER-Port. Is required in all other cases e.g. for R&S receivers with AUX Port or with USER-Port without 12V/100mA on Pin 25.
HXYZ 9170-RS USER Ad	HXYZ 9170-RS USER Adapter for remote control of the HXYZ 9170 Coaxial Switch by an R&S receiver with USER Port. 12 V Power Supply for Coaxial Switch eventually required!
HXYZ 9170-RS AUX Ad.	HXYZ 9170-RS AUX Adapter for remote control of the HXYZ 9170 Coaxial Switch by an R&S receiver with AUX Port. 12 V Power Supply for Coaxial Switch required!
HFCD 9171	Calibration Balun / Dipole for HXYZ 9170 (recommended accessory: AM 9144)
CDA 9271	Adapter to hold HFCD 9171 on AM 9144, 3/8'' female large camera thread.
HXYZ 9170 3m	3-dimensional large loop antenna, diam. 3 m, acc. EN 55015 / CISPR 15, Socket and Coaxial switch recommended. Annex C CISPR 16-1-4 Ed 3 Fig. C7 not applicable to the 3 m version, higher tolerances for the transmission between 10 and 30 MHz will apply.
Opt. Sockel 3m	Option: Socket and mounting equipment for large loop HXYZ 9170 3m
Coaxial Sw. 3m	Accessory: 3 in one coaxial switch for manual / remote operation including cable set (3 BNC cables with braid current blockers) for large loop HXYZ 9170 3m
	Active Loop Antennas / Magnetic Field Probes
FMZB 1513	Active loop antenna, 9 kHz to 30 MHz, constant antenna factor 20 dB/m with built in NiMH-batteries, detachable glass fiber handle 180 mm. Optimized for mobility.
Opt. ACS 110	Option: Charger ACS 110 for FMZB 1513.
Opt. 500 mm Handle	Option for FMZB 1513: Additional glass fiber handle of 500 mm length.
CCA 1513	Transport case for FMZB 1513 and accessories.
FMZB 1519 B	Active magnetic loop antenna acc. to CISPR 16, 9 kHz to 30 MHz, constant antenna factor 20 dB/m, built in rechargeable NiMH-battery.
Opt. ACS 110	Option: ACS 110 charger for FMZB 1519 B
HFS 1546	Active magnetic Field Probe with shielded 50-mm-Loop, 150 kHz – 400 MHz
Opt. ACS 110	Option: ACS 110 charger for HFS 1546
FMZB 1512	Active magnetic loop antenna with 15 cm loop diameter for mobile applications with built in re-chargeable batteries, 9 kHz to 30 MHz, antenna factor adjustable.
Opt. ACS 110	Option: ACS 110 charger for FMZB 1512

	Helmholtz coils, electro magnets, audio amplifiers
MagTest	Schwarzbeck-Software to test Immunity against magnetic fields and to calibrate monitoring loops. Fulfills standards like MIL-461 E, ISO 11452-8, EN 61000-4-8, SAE J551-17 and others. Control of all required devices via GPIB.
NFPA 9730	Universal audio frequency power amplifier DC - 250 kHz for magnetic field immunity testing, 60 V peak, 40 A peak.
NFCN 9731	Universal matching network with built in shunt resistor to compensate for the inductance of Helmholtz coils, GPIB or RS232 controllable.
SHUNT 9571	Low inductive high power precision shunt resistor DC-250 kHz, 2 x 0,5 Ohm / 400 W, 1 x 1 Ohm / 800 W, 1 x 250 mOhm / 800 W respectively for best matching at low frequencies, cooling fans. Note: If you order the compensation network NFCN 9731 an additional shunt is not required as the network already contains a shunt.
HHS 5201-6	Helmholtz Coils circular up to 2860 A/m 5 MHz for DuT size 45 mm.
HHS 5201-98	Helmholtz Coils circular up to 64 kA/m 200 kHz for DuT size 45 mm.
HHS 5202-9	Helmholtz Coils, circular, diam. 200 mm, 3053 A/m 2,5 MHz acc. MIL-STD 461E
HHS 5202-81	Helmholtz Coils, circular, diam. 200 mm, 3000 A/m 300 kHz acc. MIL-STD 461E
HHS 5204-12	Helmholtz Coils, circular, diam. 400 mm, 2500 A/m 500 kHz MIL-STD 461E
HHS 5204-36	Helmholtz Coils, circular, diam. 400 mm, 2500 A/m 150 kHz MIL-STD 461E
HHS 5206-16	Circular pair of Helmholtz coils, diameter 600 mm, up to 2100 A/m, max. current 55 A.
HHS 5206-132	Circular pair of Helmholtz coils, diameter 600 mm, up to 4713 A/m, max. current 15 A.
FESP 5210-1	1 x 1 m induction coil side length 100cm, 1 turn, EN 61000-4-8.
HHS 5210	Helmholtz Coils up to 300 A/m constant H field, 1 m x 1 m, 10 turns per coil, EN 61000-4-8, VDE 0847 part 4-8
HHS 5210-100	Helmholtz Coils up to 2183 A/m constant H field, 1 m x 1 m, 100 turns per coil, EN 61000-4-8, VDE 0847 part 4-8
HHS 5210-100-2,5	Helmholtz coil pair, square shaped, side length 1 m, 100 turns with 2.5 mm diameter copper wire (for higher currents with less heat dissipation)
HHS 5212	Helmholtz Coils up to 250 A/m H field, 1.20m x 1.20 m, 10 turns.
HHS 5213-50	Helmholtz Coils 1.25 m x 1.25 m, 50 turns per coil, acc. EN 55103-2 A.2.1.b)
HHS 5213-100	Helmholtz Coils 1.29 m x 1.29 m, 100 turns per coil.
HHS 5215	Helmholtz Coils up to 200 A/m constant H field, 1,5 m x 1,5 m, 10 turns per coil
HHS 5215-100	Helmholtz Coils up to 2000 A/m constant H field, 1,5 m x 1,5 m, 100 turns per coil
HHS 5218	Helmholtz Coils up to 126 A/m constant H field, 1,8 m x 1,8 m, 10 turns per coil
HHS 5230-100	Pair of Helmholtz coils according to SAE J551-17: 2 square coils with a side length of 3 m, 100 turns, max. 650 A/m, each coil movable separately on a wheeled platform.
NFCN 9731-100	Matching network for HHS 5230-100 for the following frequencies: 16,666 Hz; 50 Hz; 60 Hz; 150 Hz; 180 Hz. Recommended amplifiers: 2 units of AE Techron 7224.
NFCN 9732-xx	Compensations network with a fixed capacitor of xx microfarad capacity. Lowers the total impedance of a series circuitry of HHS and NFCN at a fixed design frequency.
AGEM 5520	Air gap electromagnet for extreme high magnetic field strengths of up to 2.2 Tesla.
HS 5136	Hall probe to measure magnetic fields DC-200 kHz including 30 V power supply.
FESP 5132	Radiating loop diam. 12 cm, 20 turns, DC to 250 kHz, max 15 A, 2x Banana jack 4mm, ISO 11452-8, MIL-STD 461E p. 108, EN 55103 5.18.3.2
LoopHolder50	Calibration fixture to hold FESP 5134-40 in FESP 5132 in a distance of 50 mm acc. MIL461E figure RS101-3.
FESP 5134-40	Loop Sensor / Antenna, diam. 4 cm, 51 turns, 5 Hz to 250 kHz, electrostatic shielding, BNC jack.
FESP 5133	Loop Sensor / Antenna, 36 turns in 4 layers, diam. 133 mm, EN 55103-1 A.2.b), EN 55103-2 A.4.1 0 – 200 kHz, banana plugs (standard) or BNC connector female.
FESP 5133-9	Circular Transmitting Loop Antenna, 133mm diameter, 10 kHz to 3 MHz, including 5cm distance ring, suitable for VG 95377 Part 13 or Volvo Immunity against magnetic fields.
FESP 5133-7/41	Circular shielded loop sensor to determine the magnetic field strength 5 Hz – 250 kHz. 36 turns AWG 7/41, diameter 133 mm, distance gauge 7 cm included. MIL 461E RE101 or RS101 alternative test procedures.
FESP 5133 1330	Circular radiating loop for extremely high field strength up to several mT, 225 turns, acc. SF 01 G, VG95377.
FESP 5135	Radiating coil diam. 0.5 m, 20 turns in one layer, acc. EN 55103-2 A.3.1
RSAL 5340	LF 3-dimensional magnetic rolling stock antenna for the lower frequency range acc. to CLC/TS 50238-3:2010. 10 kHz to 100 kHz.
RSAH 5324	3-dimensional magnetic rolling stock antenna for the higher frequency range acc. to CLC/TS

	50238-3:2010. 100 kHz to 1.3 MHz.
RSA COVER	Dirt and weather protection cover to house the rolling stock antennas RSAL 5340 or RSAH 5324 and to fix the antenna to the rail track.
	Antenna Masts / Tripods / Adapters
AM 9104	Detachable Antenna Mast System (glass-fibre tubing) for VHF-UHF Antennas, manual height scanning 0.4 m to 4 m, insulated mast and antenna box with 0°/90° detents, zinc-plated / stainless steel 3-leg mast foot.
AM 9104 GF	Detachable Antenna Mast System (glass-fibre tubing) for VHF-UHF Antennas, manual height scanning 0.4 m to 4 m, insulated mast and antenna box with 0°/90° detents, 3-leg mast foot made of glass fiber.
Opt. wheels	Option: Caster Wheels and Brakes for zinc-plated / stainless steel 3-leg mast foot
AM 9144 T-05	Glass fiber telescopes for antenna tripod/mast AM 9144, height range adjustable by screw 510-940mm, 3/8“-thread on top, 55mm shaft to be inserted into a mast foot
AM 9144 T-08	Glass fiber telescopes for antenna tripod/mast AM 9144, height range adjustable by screw 700-1300mm, 3/8“-thread on top, 55mm shaft to be inserted into a mast foot
AM 9144 T-09	Glass fiber telescopes for antenna tripod/mast AM 9144, height range adjustable by screw 800-1510mm, 3/8“-thread on top, 55mm shaft to be inserted into a mast foot
AM 9144 T-12	Glass fiber telescopes for antenna tripod/mast AM 9144, height range adjustable by screw 1050-1950mm, 3/8“-thread on top, 55mm shaft to be inserted into a mast foot
AM 9144 M-VA	Robust 3-leg-mastfoot made of stainless steel with 55mm-inlet
AM 9144 M-GFK	Low reflective 3-leg-mastfoot made of glass fiber reinforced plastics with 55 mm-inlet
AM 9144 W-VA	Caster wheels and brakes for stainless foot AM 9144 M-VA
AM 9144 W-GFK	Caster wheels and brakes for GF-foot AM 9144 M-GFK
AM 9144 E-05	Accessory for AM 9144: extender rod with 3/8" thread male on top and 3/8" thread female on bottom. Allows to extend by a fixed length. Length: 430mm
AM 9144 E-08	Accessory for AM 9144: extender rod with 3/8" thread male on top and 3/8" thread female on bottom. Allows to extend by a fixed length. Length: 600mm
AM 9144 E-09	Accessory for AM 9144: extender rod with 3/8" thread male on top and 3/8" thread female on bottom. Allows to extend by a fixed length. Length: 710mm
AM 9144 E-12	Accessory for AM 9144: extender rod with 3/8" thread male on top and 3/8" thread female on bottom. Allows to extend by a fixed length. Length: 900mm
AA 9202	Mast Adapter for AM 9144 with 22 mm hole for most Antenna models, 3/8” and 1/4” camera threads, polarisation continuously adjustable.
AA 9202 POM	Non metallic mast adapter for most light weight Antenna models with 22 mm tube, minimizes reflections, 3/8” camera thread, polarisation continuously adjustable.
AA 9203	Mast Adapter for AM 9144 with 22 mm hole for most Antenna models, 3/8” and 1/4” camera threads polarisation and elevation continuously adjustable
AA 9205	Orthogonal Swivel Adapter for positioning in 3 perpendicular directions. Application: determination of the magnitude of the fieldstrength
AA 9209	Antenna adapter to fix STLP 9128 E, STLP 9128 E special, STLP 9128 D, STLP 9128 D special on AM 9144. Alllows antenna rotation without height adjustment. Antenna can be fixed in the center of gravity without any collision with the AM 9144 during polarisation change.
AA 9213	Adapter to convert a 3/8’’ female thread to 22 mm tube, e.g. to fix BBHA 9170 on AM 9104.
RS 9214	Adapter to convert the R&S Aluminium Flange into 22 mm tube with indexing ring.
RA 9215	Indexing adapter for fast & precise polarisation change.
R&S Flange	R&S Flange for Schwarzbeck antenna with 22 mm tube.
KG 9201	Mast Adapter (swivel, 90° vertical/horizontal polarisation for AM 9144), for VULP 9118 D,E,F,G and VUSLP 9111 E only
PPS 9208	Pneumatic polarisation shifter with 2-way pneumatic cylinder for all Schwarzbeck antennas with 22 mm tube on AM 9144. Compressed air required.
PDG 9211	Polarisation changer jig for large horn antennas. Allows easy polarisation change of large horn antennas on AM 9144. Connection to AM 9144: 3/8" female thread. Antenna will be held close to center of gravity. Polarisation change by rotating along circular metal curve by one single person without any height offset.
Opt. 9211 PN	Additional option for PDG 9211: polarisation change with pneumatic cylinder and 12V valve 5/2 ways.
Opt. 9211 J	Specific accessories to fix BBHA 9120 J to PDG 9211. (rotating ring, braces, short central tube, fixture materials). If ordered together with the antenna we will fix everything before shipment.

Opt. 9211 F	Specific accessories to fix BBHA 9120 F to PDG 9211. (rotating ring, braces, short central tube, fixture materials). If ordered together with the antenna we will fix everything before shipment.
SWHA 9204	Swivel handle for light antennas
EA 9207	Adapter for Schwarzbeck antennas with 22 mm tube on EMCO mast.
TA 9204	Thread Adapter with 3/8" female and 1/4" male threads. Mainly for American antenna brands.
TA 9205	Thread Adapter with 1/4" female and 3/8" male threads. (For camera tripods, not for AM 9144)
TA 9206	Thread Adapter with 3/8" female and 5/8" male threads. (Geodesy)
POSITIONER	Positioner for light weight antennas like SBA 9113 with 420 NJ. The positioner consists of: 1 piece of glass fiber tube 22 mm thick, 1000 mm long, an adapter AA 9203 is mounted to the tube. The other end of the tube carries a 3/8 inch male camera thread.
	LISN Line Impedance Stabilisation Networks
NSLK 8127	V-LISN, 9 kHz – 30 MHz, 50 µH + 5 Ohm || 50 Ohm, 250 µH isolating choke, 2 x 16 A Schuko socket, Artificial Hand.
NSLK 8127 RC	V-LISN, 9 kHz – 30 MHz, 50 µH + 5 Ohm || 50 Ohm, 250 µH isolating choke, 2 x 16 A Schuko socket, Artificial Hand. Built in RC for LISN: Remote Control with built in power supply. LISN can be controlled by R&S or Schwarzbeck code, LISN can be selected from the R&S receiver menu or in the EMC32 software like an R&S LISN. No programming of the user interface necessary. Functions: path selection and PE grounded or via choke. Remote control cable RCCAB required depending on receiver type.
NSLK 8127 PLC	V-LISN, 9 kHz – 30 MHz, 50 µH + 5 Ohm || 50 Ohm, 250 µH isolating choke, 2 x 16 A Schuko socket, Artificial Hand. Additional PLC ranges built in: Power Line Communication, according to EN 50065-1, selectable ranges: 3 – 9 kHz, 9 – 95 kHz, 95 kHz – 30 MHz.
NSLK 8122	V-LISN, 9 kHz – 30 MHz, 50 µH + 5 Ohm || 50 Ohm, 250 µH isolating choke, 2 x 50 A, cooling fans, wing terminals, max. 1000 V DC, 750 V AC.
NSLK 8122 RC	V-LISN, 9 kHz – 30 MHz, 50 µH + 5 Ohm || 50 Ohm, 250 µH isolating choke, 2 x 50 A, cooling fans, wing terminals, max. 1000 V DC, 750 V AC. Built in RC for LISN: Remote Control with built in power supply. LISN can be controlled by R&S or Schwarzbeck code, LISN can be selected from the R&S receiver menu or in the EMC32 software like an R&S LISN. No programming of the user interface necessary. Functions: path selection and PE grounded or via choke. Remote control cable RCCAB required depending on receiver type.
NSLK 8126	V-LISN, 9 kHz – 30 MHz, 50 µH + 5 Ohm || 50 Ohm, 250 µH isolating choke, 2 x 16 A Schuko and 4 x 16 A CEKON socket, Artificial Hand.
NSLK 8126 RC	V-LISN, 9 kHz – 30 MHz, 50 µH + 5 Ohm || 50 Ohm, 250 µH isolating choke, 2 x 16 A Schuko and 4 x 16 A CEKON socket, Artificial Hand. Built in RC for LISN: Remote Control with built in power supply. LISN can be controlled by R&S or Schwarzbeck code, LISN can be selected from the R&S receiver menu or in the EMC32 software like an R&S LISN. No programming of the user interface necessary. Functions: path selection and PE grounded or via choke. Remote control cable RCCAB required depending on receiver type.
NSLK 8128	V-LISN, 9 kHz – 30 MHz, 50 µH + 5 Ohm || 50 Ohm, 250 µH isolating choke, 2 x 16 A Schuko and 4 x 32 A CEKON socket, Artificial Hand.
NSLK 8128 RC	V-LISN, 9 kHz – 30 MHz, 50 µH + 5 Ohm || 50 Ohm, 250 µH isolating choke, 2 x 16 A Schuko and 4 x 32 A CEKON socket, Artificial Hand. Built in RC for LISN: Remote Control with built in power supply. LISN can be controlled by R&S or Schwarzbeck code, LISN can be selected from the R&S receiver menu or in the EMC32 software like an R&S LISN. No programming of the user interface necessary. Functions: path selection and PE grounded or via choke. Remote control cable RCCAB required depending on receiver type.
NNLK 8121	V-LISN, 9 kHz – 30 MHz, 50 µH + 5 Ohm || 50 Ohm, 250 µH isolating choke, 4 x 50 (100) A, wing terminals (For continuously 100 A add the options cont. high current and cooling fans!)
NNLK 8121 RC	V-LISN, 9 kHz – 30 MHz, 50 µH + 5 Ohm || 50 Ohm, 250 µH isolating choke, 4 x 50 (100) A, wing terminals (For continuously 100 A add the options cont. high current and cooling fans!) Built in RC for LISN: Remote Control with built in power supply. LISN can be controlled by R&S or Schwarzbeck code, LISN can be selected from the R&S receiver menu or in the EMC32 software like an R&S LISN. No programming of the user interface necessary. Function: path selection. Remote control cable RCCAB required depending on receiver type.
Opt. cont. high current	Option: cont. high current, additional terminals to bypass the 250 µH chokes, provides less voltage drop and less heating.
Opt. 400/700 V	Option: 400/700 V Voltage to Neutral / Voltage between lines
Opt. Fans	Option: Cooling Fans
NNLK 8129	V-LISN, (9) 150 kHz – 30 MHz, 50 µH || 50 Ohm, 4 x 200 (300) A, wing terminals, low voltage drop,

	High power resistors
NNLK 8129 RC	V-LISN, (9) 150 kHz – 30 MHz, 50 µH || 50 Ohm, 4 x 200 (300) A, wing terminals, low voltage drop, High power resistors. Built in RC for LISN: Remote Control with built in power supply. LISN can be controlled by R&S or Schwarzbeck code, LISN can be selected from the R&S receiver menu or in the EMC32 software like an R&S LISN. No programming of the user interface necessary. Function: path selection. Remote control cable RCCAB required depending on receiver type.
Opt. 400/700 V	Option: 400/700 V Voltage to Neutral / Voltage between lines
Opt. Fans	Option: Cooling Fans
NNLK 8130	V-LISN, (9) 150 kHz – 30 MHz, 50 µH || 50 Ohm, 4 x 400 (500) A, wing terminals, low voltage drop, High power resistors, cooling fans.
NNLK 8130 RC	V-LISN, (9) 150 kHz – 30 MHz, 50 µH || 50 Ohm, 4 x 400 (500) A, wing terminals, low voltage drop, High power resistors, cooling fans. Built in RC for LISN: Remote Control with built in power supply. LISN can be controlled by R&S or Schwarzbeck code, LISN can be selected from the R&S receiver menu or in the EMC32 software like an R&S LISN. No programming of the user interface necessary. Function: path selection. Remote control cable RCCAB required depending on receiver type.
Opt. 400/700 V	Option: 400/700 V Voltage to Neutral / Voltage between lines
Opt. RCCAB1	Remote Control Cable for Schwarzbeck LISN with Option RC and the following EMI receiver types: Schwarzbeck FMLK 1518, FCKL 1528, FCLE 1535.
Opt. RCCAB2	Remote control cable for Schwarzbeck LISN with option RC for the following EMI receivers: Rohde & Schwarz EMI receivers equipped with a 25 pin userport: ESHS30, ESPI, ESCS, ESCI, ESU, Agilent MXE receivers with a 25 pin AUX/IO port.
Opt. RCCAB3	Remote Control Cable for Schwarzbeck LISN with Option RC and the following EMI receiver types: Rohde & Schwarz EMI receivers equipped with a 9 pin AUX port: ESL (with option R&S FSL–B5 only), ESR, ESRP.
Opt. RCCAB4	Remote control cable for Schwarzbeck LISN with option RC for the following EMI receivers: Gauss Instruments TDEMI with 25 pin userport
Opt. RCCAB5	Remote control cable for Schwarzbeck LISN with option RC for the following EMI receivers: PMM 9010 with DSUB15 jack
Opt. RCCAB6	Remote control cable for Schwarzbeck LISN with option RC for the following EMI receivers: Rohde & Schwarz ESIB
NNLK 8140	Single Path V-LISN, (9) 150 kHz – 30 MHz, 50 µH || 50 Ohm, 1 x 800 A continuously (1000 A short time), wing terminals, low voltage drop, High power resistors, cooling fans. Max. Voltage: 1000 V DC or 650 V AC 50/60 Hz.
Opt. TC	Temperature control for LISN with 2 thresholds: Threshold 1: Fans will be automatically switched on, threshold 2: alarm signal optically and acoustically.
	Single path LISN (Automotive) CISPR 25 / ISO 7637
NNBM 8124 BNC	Automotive LISN acc. CISPR 25 and ISO 7637-2 and for BCI-Testing. Impedance (5µH + 1 Ohm) || 50 Ohm. Max. 70 (100) A. With switchable 50 Ohm load and switchable 1 microfarad capacitor at mains side, single path, BNC female connector.
NNBM 8124 N	Automotive LISN acc. CISPR 25 and ISO 7637-2 and for BCI-Testing. Impedance (5µH + 1 Ohm) || 50 Ohm. Max. 70 (100) A. With switchable 50 Ohm load and switchable 1 microfarad capacitor at mains side, single path, N female connector.
CAP 10-100	10 microfarad capacitor 500 V, 400 Hz, built into an adapter, which can be applied to the mains terminals of the LISN types NNBM 8126 A, NNBM 8124 or NNBM 8126 A 890 (all models up to 100A).
NNBM 8124-200 BNC	Automotive LISN acc. CISPR 25 and ISO 7637-2 and for BCI-Testing. Impedance (5µH + 1 Ohm) || 50 Ohm. Max.200 A. With switchable 50 Ohm load and switchable 1 microfarad capacitor at mains side, single path, BNC female connector.
NNBM 8124-200 N	Automotive LISN acc. CISPR 25 and ISO 7637-2 and for BCI-Testing. Impedance (5µH + 1 Ohm) || 50 Ohm. Max.200 A. With switchable 50 Ohm load and switchable 1 microfarad capacitor at mains side, single path, N female connector.
CAP 10-200	10 microfarad capacitor 500 V, 400 Hz, built into an adapter, which can be applied to the mains terminals of the LISN types NNBM 8126 D, NNBM 8124-200 (all models up to 200A).
NNBM 8124-400 BNC	Automotive LISN acc. CISPR 25 and ISO 7637-2 and for BCI-Testing. Impedance (5µH + 1 Ohm) || 50 Ohm. Max. 400 A. With switchable 50 Ohm load and switchable 1 microfarad capacitor at mains side, single path, BNC female connector.
NNBM 8124-400 N	Automotive LISN acc. CISPR 25 and ISO 7637-2 and for BCI-Testing. Impedance (5µH + 1 Ohm) || 50 Ohm. Max. 400 A. With switchable 50 Ohm load and switchable 1 microfarad capacitor at mains side, single path, N female connector.

NNBM 8126 A 890	LISN 5 µH || 50 Ohm, 70 (100) single path. Similar to NNBM 8126 A but suitable for 600V DC and 270 V AC 890 Hz. Calibrated up to 400 MHz according to DO-160.
	HV-LISN acc. to CISPR 25 Ed. 4 or BMW GS 95025-1
NNHV 8123	High Voltage LISN acc. to CISPR 25 Ed. 4 or BMW GS 95025-1 to measure the conducted disturbance voltage on shielded lines for (hybrid) electric vehicles (HEV, EV), can be used for BCI with an external dummy load, impedance (5µH) || 50 Ohm. 70 (100) A, 1000 V DC. Backside with built in 0.1 microfarad capacitor to ground, N-jack. Normally used in pairs inside the enclosure HVSE 8600!
NNHV 8123-200	High Voltage LISN acc. to CISPR 25 Ed. 4 or BMW GS 95025-1 to measure the conducted disturbance voltage on shielded lines for (hybrid) electric vehicles (HEV, EV), can be used for BCI with an external dummy load, impedance (5µH) || 50 Ohm. 200 A, 1000 V DC. Backside with built in 0.1 microfarad capacitor to ground, N-jack. Normally used in pairs inside the enclosure HVSE 8600!
NNHV 8123-400	High Voltage LISN acc. to CISPR 25 Ed. 4 or BMW GS 95025-1 to measure the conducted disturbance voltage on shielded lines for (hybrid) electric vehicles (HEV, EV), can be used for BCI with an external dummy load, impedance (5µH) || 50 Ohm. 400 A, 1000 V DC. Backside with built in 0.1 microfarad capacitor to ground, N-jack. Normally used in pairs inside the enclosure HVSE 8600!
NNHV 8123-800	High Voltage LISN acc. to CISPR 25 Ed. 4 or BMW GS 95025-1 to measure the conducted disturbance voltage on shielded lines for (hybrid) electric vehicles (HEV, EV), can be used for BCI with an external dummy load, impedance (5µH)||50 Ohm. 800 A, 1000 V DC. Backside with built in 0.1 microfarad capacitor to ground and suitable discharge resistor, N-jack. To be used in pairs inside a shielded enclosure HVSE 8601!
HVSE 8600	Shielded housing for 2 HV-LISN, 2 paths with cable feed throughs for HV+ and HV-, shield can be connected to the housing, 2 measurement ports N, 1 monitor port N, with connecting cables between inside measurement ports and outside N-connectors. All models of the NNHV- and NNBM-series can be inserted. For full CISPR 25 Ed. 4 compliance a modification of the back side circuitry of the NNBM series is required!
Opt. 8600-blanco	1 pair of flange panels for HVSE 8600. Mains side with no connector or feed through. DuT side with only 2 x N-feed throughs for AUX and 2 x N feedthroughs for RF-HV+ and RF- HV-. Feed throughs for HV+ and HV- must be drilled and assembled by customer.
Opt. 8600-100	1 pair of flange panels for HVSE 8600 with cable feed throughs for shielded cables up to ca. 100 A.
Opt. 8600-200	1 pair of flange panels for HVSE 8600 with cable feed throughs for shielded cables suitable for max. currents in a range of ca. 100 A to 200 A.
Opt. 8600-400	1 pair of flange panels for HVSE 8600 with cable feed throughs for shielded cables suitable for a range of ca. 200 A to 400 A.
HVSE 8601	Shielded housing for 2 units of HV-LISN NNHV 8123-800, with cable feed throughs for HV, shield can be connected to the housing, 2 measurement ports N, 2 monitor ports N, with connecting cables between inside measurement ports and outside N-connectors.
Opt. 8601-800	1 pair of flange panels for HVSE 8601 with cable feed throughs for shielded cables suitable for a range of ca. 400 A to 800 A.
	BAN Broadband Artificial Networks acc. ISO 11452-7 or DC-10614
BAN 8508	BAN broadband artificial network 2 A - 8 A acc. ISO 11452-7 or DC-10614
BAN 8530	BAN broadband artificial network 8 A - 30 A acc. ISO 11452-7 or DC-10614
DC-Block 500	DC-blocking capacitor BNC for direct injection with BAN
	LISN according to MIL 461 MIL 462
NNBL 8225	V-LISN (9) 150 kHz – 100 MHz, 50 µH + 5 Ohm || 50 Ohm, 20 A, 50 Hz AC 250 V, single path, Mil. Std. 461/462.
NNBL 8226	V-LISN (9) 150 kHz – 100 MHz, 50 µH + 5 Ohm || 50 Ohm, 70 (100) A, 50 Hz AC 250 V, single path, Mil. Std. 461/462.
NNBL 8226-HV	V-LISN (9) 150 kHz – 100 MHz, 50 µH + 5 Ohm || 50 Ohm, 70 (100) A, 50 Hz AC 800 V, single path, Mil. Std. 461/462.
NNBL 8226-2	V-LISN (9) 150 kHz – 100 MHz, 50 µH + 5 Ohm || 50 Ohm, 70 (100) A, 50 Hz AC 250 V, two path, Mil. Std. 461/462.
NNBL 8229-HV	V-LISN (9) 150 kHz – 100 MHz, 50 µH + 5 Ohm || 50 Ohm, 200 A, one path, Mil. Std. 461/462
NNBL 8230	V-LISN (9) 150 kHz – 100 MHz, 50 µH + 5 Ohm || 50 Ohm, 300 A, 50 Hz AC 250 V, single path, Mil. Std. 461/462.
NNBL 8240	V-LISN (9) 150 kHz – 100 MHz, 50 µH + 5 Ohm || 50 Ohm, 1 x 800 A continuously (1000 A short

	time), wing terminals, low voltage drop, high power resistors, cooling fans. Max. voltage: 1000 V DC or 650 V AC 50/60 Hz., Mil. Std. 461E/F/G, MIL 462.
	Special LISN and accessories
NDTV 8160	Universal Delta-, T-, V-LISN
PVDC 8300	PV LISN, 1500 V, 50 A, common mode impedance 150 Ohm, Z differential mode = 100 Ohm, air coils 280 microhenry.
PVDC 8300 Opt. Fans	Option for PVDC 8300: Fans for a maximum continuous current of 100 A.
PVDC 8301	PV-LISN for the DC side of grid connected power converters GCPC, 1500 V, 200 A, common mode impedance = 150 Ohm, differential mode impedance = 100 Ohm, air coils 280 microhenry.
TEMP 8400	Tempest LISN 9 kHz to 1 GHz, 2 path model 10 A, N-connectors for DuT power supply and N-connectors for the 2 measurement ports. The unit allows to listen to even the smallest signals on power lines.
TEMP 8401	Adapter N-male to wing terminals for TEMP 8400
NPLC 8500	LISN acc. to recommendation ITU-T G.9901: 250 Volt 16 A, 1 path, wing terminals, measuring output BNC, to measure the power spectral density of PRIME transceivers for power line communication.
CMDM 8700	Common mode differential mode noise separator for V-LISN, 2 BNC inputs, 1 BNC output. 9 kHz-30 MHz.
	ISN / T-Networks
NTFM 8131	T-ISN 150 Ohm asymmetric 50 Ohm unsymmetric, 2-wire, 400 V AC, 9 kHz – 30 MHz, CISPR 22 D1/EN55015-2002
NTFM 8158	ISN T8 CAT6 (LCL = 75 dB) acc. CISPR 22 edition 5.2, figure D.3. for up to 4 pairs UTP.
CAT5 8158	ISN T8 CAT5 (LCL = 65 dB) acc. CISPR 22 edition 5.2, figure D.3. for up to 4 pairs UTP.
CAT3 8158	ISN T8 CAT3 (LCL = 55 dB) acc. CISPR 22 edition 5.2, figure D.3. for up to 4 pairs UTP.
EAB8 50-150	Adapter 50 to 150 Ohm for conducted immunity testing with the ISNs NTFM 8158, CAT5 8158 or CAT3 8158. Connectors: RJ45 male and BNC female.
Mag Base 8158	Magnetic base for models NTFM 8158, CAT5 8158, CAT3 8158.
ISN S8	ISN for screened RJ45 or RJ11 connections, 2, 4 or 8 wire, acc. D.11 CISPR 22 Ed.5.2.
ISN S1	ISN acc. CISPR 22 Ed.5.5:2006, Annex D, D9 for coaxial lines
SR100-6W	Adapter 150 to 50 Ohm for immunity testing with ISN S8, ISN S1 or CDNE M2, M3, 0-500 MHz, 6 W, Connectors: BNC female, 4 mm security banana jack.
	Voltage Probes
TK 9417	HF-Probe, 2.5 kOhm
TK 9420	High-Voltage-Probe, 1.5 kOhm, 4 pF, 9 kHz – 30 MHz, RF < 30 V
VT 9420	Plug-In divider 1.5 kOhm for TK 9420 probe for determination of disturbance source impedance
TK 9421	High Power Voltage Probe, 1.5 kOhm, 4 pF, 150 kHz – 30 MHz RF < 100 V
TK 9422	High Power Voltage Probe, 5 kOhm, 4 pF, (9) 150 kHz – 30 MHz RF < 100 V
	Measurement set f. PLC-devices acc. to EN 50561-1
CU 50561-1	Coupling unit acc. EN 50561-1:2013 figure 3, R=2,5 kOhm, C=1nF.
AC-Separator	AC-separator for EN 50561-1 containing 100nF parallel 1MOhm, Schuko-outlet, 2 x security 4mm lab jacks.
SPLIT 100	100 Ohm symmetrical splitter acc. EN 50561-1:2011.
SY 9223-50561-1	2:1 balun acc. to EN 50561-1:2013 figure 4 to measure PLC transmit signal levels 150 kHz to 30 MHz.
CS-50	Coaxial 50 Ohm splitter 6 dB
SYMAT 40	Symmetrical attenuator f. EN 50561-1, switchable from 0 to 50 dB in 10 dB steps.
ISN 50561-1	ISN acc. EN 50561-1:2013 Annex B, figure B.1.
50561 CABLES	Cables, terminations and connectors for EN 50561-1 testing. Scope of delivery see data sheet "Overview PLC measurement equipment"

	EMI Receivers
FCKL 1528	EMI-Receiver acc. CISPR 16-1, 9 kHz – 30 MHz, 5 Detectors: Quasipeak, Peak, Average, CAV, CRMS. Attenuator with 1 dB steps, Protected Input, Automatic Calibration w. built-in Pulse Generator, GPIB-Interface.
Opt. XY-Rec.	Option: 25-pin connector on the back side with analogous voltages for frequency and Interference voltage to connect an XY-recorder.
Opt. TG	Option: Built-In Tracking Generator, Output Level 120 dBµV.
Opt. Softw.	Option: Schwarzbeck-Software FCKL for EMI-Measurement
FCVU 1534	EMI-Receiver acc. CISPR 16-1, 20 – 1050 MHz, 5 Detectors: Quasipeak, Peak, Average, CAV and CRMS, Attenuator with 1 dB steps, Protected Input, Automatic Calibration w. built-in Pulse Generator, GPIB-Interface.
Opt. XY-Rec.	Option: 25-pin connector on the back side with analogous voltages for frequency and Interference voltage to connect an XY-recorder.
Opt. TG	Option: Built-In Tracking Generator, Output Level 120 dBµV P.D.
Opt. Softw.	Option: Schwarzbeck-Software FCVU for EMI-Measurement
BKAB 488	IEEE 488 cable, 2 m, necessary for PCI card, not necessary for PCMCIA card
	Pulse Generators
IGUU 2918	Calibration-Pulse Generator acc. CISPR 16 for Band A, B, C, D (9 kHz-1000 MHz) To calibrate the pulse response of EMI receivers. Pulse repetition frequency main generator 0.1 – 200 Hz (aux. generator up to 1 MHz) with IEEE-488 Interface.
Opt. RecTest Softw.	Option: Receiver Test Software for IGUU 2916 or 2918 signal generator and EMI-receiver to perform an automatic calibration of an EMI receiver acc. to CISPR 16-1-1.
Opt. KU 9618	Option: KU 9618 Coaxial Switching Unit for automatic performance tests with IGUU 2918, N-Connectors female
IGUF 2910	Battery driven High Power Pulse Generator, Pulse Repetition Frequency 300 Hz, weighted CISPR Level 80 dbµV (Quasipeak, 120 kHz IF-BW). Broad band signal source up to 300 (1000) MHz w. 0.5 ns Pulses of 300 V at 50 Ohm
LGA 9802	Automatic Charging Unit 230 V for IGUF 2910
	Coaxial Cables
RG223/U	50 Ohm coaxial cable with N- or BNC-plugs, double shielded, flexible, robust, suitable for measurements with LISN, basic price Euro 35,00 + price per Meter Euro 2,50.
AK 9513	50 Ohm Coax. Cable with N plugs, individual length, usable up to 3 (5) GHz, Basic price Euro 80,00 + price / m Euro 5,00 + price for individual calibration Euro 80,00. Indiv. Cal. possible if cable longer than 3 m. Standard lengths: 3 m, 5 m, 10 m.
AK 9515 D	50 Ohm Coaxial Cable with N plugs, low loss, limited flexibility, usable up to 10 (18) GHz, 10.5 mm diam. Basic price Euro 140,00 + price / m Euro 6,00+ price for individual calibration Euro 80,00. Indiv. Cal. possible if cable longer than 1 m.
AK 9515 E	50 Ohm Coaxial Cable with N plugs, low loss, good flexibility, usable up to 10 (18) GHz, 10.8 mm diam. Basic price Euro 140,00 + price / m Euro 6,00 + price for individual calibration Euro 80,00. Indiv. Cal. possible if cable longer than 1 m.
AK 9515 G	50 Ohm Coaxial Cable available with N- or 7/16-plugs,very low loss, high power, good flexibility, usable up to 6 GHz, 14.6 mm diam. Basic price Euro 170,00 + price / m Euro 15,00 + price for individual calibration Euro 80,00. Indiv. Cal. possible if cable longer than 1 m.
AK 9515 H	50 Ohm Microwave Coaxial Cable with N- or SMA-connectors, low loss, flexible, usable up to 18 GHz. Basic price Euro 170,00 + price / m Euro 15,00 + price for individual calibration Euro 80,00. Indiv. Cal. possible if cable longer than 1 m.
MSS 9630	Sheath current blocking cable to avoid coupling effects caused by braid currents. Standard configuration: N-male, N-female, length ca. 0.3 m
	Fixed Attenuators
DGA 9552 N	Bidirectional Attenuator N-female N-male to 18 GHz, 50 Ohm 5 Watt. Available values: 3 dB, 6 dB, 10 dB, 20, 30, 40 dB.
DGA 9553 BNC	Attenuator BNC-female BNC-male up to 1 GHz, 50 Ohm 1 Watt. Available values: 3 dB, 6 dB, 10 dB, 20, 30, 40 dB.
VTSD 9561 F-BNC	Diode Pulse Limiter + 10 dB Attenuation, fuse lamp, input BNC-female, output BNC-male.
VTSD 9561 F-N	Diode Pulse Limiter + 10 dB Attenuation, fuse lamp, input N-female, output N-male.
VTSD 9561 D-	Diode Pulse Limiter + 20 dB Attenuation, fuse lamp, input BNC-female,

BNC	output BNC-male.
VTSD 9561 D-N	Diode Pulse Limiter + 20 dB Attenuation, fuse lamp, input N-female, output N-male.
VTSD 9562	Bandpass and Limiter for Partial Discharge Measurements BNC
	Current Clamps and calibration adapters
SW 9602	Current Transformer, shielded, 0.01 - 200 MHz, Transfer Impedance: 1 Ohm for wires up to 6.5 mm.
SW 9603	Current Transformer, shielded, 9 kHz - 150 MHz, Transfer Impedance: 1 Ohm for wires up to 14 mm.
SW 9605	Current Transformer Clamp CISPR 22, 9 kHz - 80 MHz, Transfer Impedance: 1 Ohm for wires up to 23 mm.
SW 9606	Current injection clamp for RF current injection into harnesses up to 23 mm diamter, transducer 18 dB.
CA 9607	Universal calibration adapter for current clamps, test jig for ferrites, length adjustable.
CA 9608	Universal calibration adapter for e.g. the following current clamps: R&S ESV-Z1, Prodyn, IT-050-1, length and height settable.
	Baluns
SY 9223-120	Balun for transmission measurements acc. to IEC61643-21. 50 Ohm N to 120 Ohm screw terminals.
SY 9223-CISPR 13	Broad band isolation transformer acc. CISPR 13 fig. A.2, 50 Ohm 75 Ohm.
SY 9223-PLC	1:1 PLC balun acc. to EN 50065-2-1 2003 + A1:2005 für Immunity against small band disturbance voltage. 3 kHz - 30 MHz, BNC and banana jacks.
IN 9223-PLC	Opt. for SY 9223-PLC: 2 µF + 50 Ohm, in isolated housing, banana jacks.
SY 9501	Balun unsymm. 50 Ohm to symm. 150 Ohm EN 55015, CISPR 15
SY 9223-17-100	Broadband transformer 1:1,4 or 50 Ohm : 100 Ohm respectively acc. to CISPR 17 for filter measurements. 100 Ohm-side with banana jacks. 50 Ohm-side with BNC-jacks.
SY 9223-17-0.1	Broadband transformer 22:1 or 50 Ohm : 0.1 Ohm respectively acc. to CISPR 17 for filter measurements. 50 Ohm-side with BNC-jacks, 0.1 Ohm-side with banana jacks.
SY 9223-100	Balun, input BNC jack 50 Ohm unsymmetrical, output 1: banana jacks 100 Ohm symmetrical, output 2: RJ 45 jack Pin 4,5 100 Ohm symmetrical, frequency range: 9 kHz to 60 MHz, max. power: 1W
SY 9223-120B	Balun, input BNC jack 50 Ohm unsymmetrical, output 1: banana jacks 120 Ohm symmetrical, output 2: RJ 45 jack Pin 4,5 120 Ohm symmetrical, frequency range: 9 kHz to 60 MHz, max. power: 1W
SY 9223-135	Balun, input BNC jack 50 Ohm unsymmetrical, output 1: banana jacks 135 Ohm symmetrical, output 2: RJ 45 jack Pin 4,5 135 Ohm symmetrical, frequency range: 9 kHz to 60 MHz, max. power: 1W
SY 9223-150	Balun, input BNC jack 50 Ohm unsymmetrical, output 1: banana jacks 150 Ohm symmetrical, output 2: RJ 45 jack Pin 4,5 150 Ohm symmetrical, frequency range: 9 kHz to 60 MHz, max. power: 1W
SY 9223-7637-4	Balun to insert strong CW signals 0,1...30 MHz into HV-lines acc. to ISO 7637-4. 150 Vpp, Guanella balun, N-jack, symmetrical side 4 mm security lab jacks. Max. power 100 Watt.
	Other passive devices
BD 9501	IEEE-488 Bus-Feed through for flange mounting (shielded rooms) (other feed throughs on request)
CAN 280	Coupling network type A acc. to CISPR 16-1-2 chapter C.1. for example to measure the decoupling factor DR of the absorbing clamp MDS 21 acc. to CISPR 16-1-3 B.3.2.
HPF	High Pass Filter 35 – 1000 MHz, Insertion loss at 27.12 MHz typ. 100 dB
TF 130-150	Test Fixture for Ford RI 130/ 150 Per EMC-CS-2009
VDHH 9502	Van der Hoofden test head with protection network and individual calibration of the network acc. IEC62493 or VDE 0848-493.
CISPR 17 Equipment	Transformers, fixtures and adapters to measure filters, ferrites and other passive components. Detailed product list and data sheets on request.
BN 1701	Buffer network (set of 2 pieces) acc. CISPR 17 Annex D2, D3, max. current: 32 A, connectors: wing terminals, BNC female.
HPF 150 k	Highpass filter 150kHz for improved selectivity of receivers for conducted voltage measurements.
CCC 9224	Capacitive coupling clamp for transients acc. to ISO 7637-3 or DC-10614 B.5.
CCP 9225	Capacitive coupling plate similar to ISO 7637-3 acc. to MBN 10284-2, 2011-04 or MBN 10284-4, 2011-04 for CV tests.
	Preamplifiers

BBV 9743	Broadband Coaxial Preamplifier gain max. 30 dB, 10 MHz – 6 GHz, low noise floor, N-jack N-plug, including power supply.
BBV 9744	Broadband Coaxial Preamplifier gain max. 30 dB, 9 kHz – 6 GHz, low noise floor, N-jack N-plug, including power supply.
BBV 9745	Broadband Coaxial Preamplifier gain max. 30 dB, 9 kHz –2 GHz, low noise floor, N-jack N-plug, improved ESD protection, including power supply.
BBV 9718	Broadband Coaxial Preamplifier typ. 33 dB, 1 – 18 GHz with fixture for 22 mm antenna tube, and N to SMA cable, power supply 12 V 250 mA necessary.
Opt. PS	Option Power supply for BBV 9718 or 9719.
Opt. Battery	Option Rechargeable battery pack for BBV 9718 or 9719.
Opt. ALCS 2-24A	Battery charger ALCS 2-24A for rechargeable battery pack
BBV 9719	Broadband Coaxial Preamplifier typ. 33 dB, 18-26.5 GHz, power supply 12 V 300 mA necessary. Including short cable with SMA plugs to connect the BBV 9719 with the antenna (for example BBHA 9170).
Opt. PS	Option Power supply for BBV 9718 or 9719.
Opt. Battery	Option Rechargeable battery pack for BBV 9718 or 9719.
Opt. ALCS 2-24A	Battery charger ALCS 2-24A for rechargeable battery pack.
BBV 9721	Broadband Coaxial Preamplifier typ. 30 dB, 18-40 GHz. Including short cable with 2.92 plugs to connect the BBV 9721 with the antenna (for example BBHA 9170). Noise figure 5.5 dB, P1dBmin=15 dBm, VSWR max in/out = 2,6.
Opt. PS 9721	Power supply unit for BBV 9721 including cables with ecurity plugs, can be used for 110 and 230 V.
Opt. PS 9721 Battery	Power supply unit for BBV 9721 including cables with security plugs, can be used for 110 V and 230 V. Built in rechargeable battery. This unit can supply power to the BBV 9721 without connection to mains. Charging electronics also included.
	Reference radiators, comb generators
SG 9301	Spectrum Generator 30-1000 MHz, spectrum lines switchable 100 Hz – 1 MHz, N-female connect-or, charger ACS 110 required, main application: reference radiator (antenna required e.g. UBAA 9114 with BBVU 9135)
Opt. ACS 110	Option: Charger ACS 110 for SG 9301.
SG 9302	Comb generator 0.1 – 18 GHz, spectrum lines every 100 MHz, battery driven, including charger for 230 V.
	Field probes
VUFM 1670	E-Field Meter 70 kHz-3 GHz, 1V/m-300V/m, linear polarized, charger ACS 110 required.
VUFM 1671	LCD-Display Unit for VUFM 1670 with 5 m fibre optical link, Additional cost for longer fibre: Euro 5,00/m, charger ACS 110 required.
	Other active devices
VHIC 9260	Impedance converter acc. CISPR 25 9 kHz – 30 (120) MHz.
Opt. ACS 110	Option: Charger ACS 110 for VHIC 9260.
CA 9260	Artificial antenna acc. CISPR 25 Ed. 3 to verify the impedance converter VHIC 9260.
CVP 9222 B	High Impedance Capacitive Voltage Probe acc. to CISPR 22, EN 55022 C 1.3. Frequency range: 9 kHz – 100 MHz.
Opt. ACS 110	Option: Charger ACS 110 for CVP 9222 B.
Opt. CAL 9222 B	Option: Calibration Adapter for CVP 9222 B.
	Near Field Probes
FS-SET 7100	Nearfield Probe Set including HFSL, HFSH, EFS and Separator EW and AC/DC Adaptor in storing case.
HFSL 7101	Active Near Field Probe (magnetic) 9 kHz - 30 MHz (EW 7110 required)
HFSH 7102	Active Near Field Probe (magnetic) 4 MHz - 1000 MHz (EW 7110 required)
EFS 7103	Active Near Field Probe (electric) 9 kHz - 1000 MHz (EW 7110 required)
EW 7110	Coaxial DC-Separator for Near Field Probes HFSL, HFSH, EFS
ACDC 7110	AC/DC Adapter for DC-Separator EW 7110

	Strip lines
TEMZ 5231	50 Ohm Strip line according to ISO 11452-5 for automotive testing, 4.3 x 1.5 x 0.15 m, septum with cylindrical rods, N-connectors, wooden base construction and termination required.
Opt. Termination 150 W	Option: 50 Ohm termination, N-jack,150 Watt, connecting cable for TEMZ 5231
Opt. Termination 500 W	Option: 50 Ohm termination, N-jack, 500 Watt, connecting cable, for TEMZ 5231
Opt. Foldaway	Instead of cylindrical rods to hold the septum there will be side arms. The cell can be folded away vertically. A stainless steel construction with caster wheels supports the cell. Must be ordered together with TEMZ 5231, cannot be refitted.
TEMZ 5232	90 Ohm Strip line according to ISO 11452-5 for automotive testing, 3.5 x 0.9 x 0.15 m, N-connector, built-in termination 90 Ohm, 50 W, wooden base construction required
TEMZ 5233	Closed, unsymmetrical 50 Ohm strip line DC - 420 (600) MHz, Crawford TEM Cell, for E- field probe and H-field probe calibration and for immunity testing. ISO 11452-3, IEEE 1309 und EN 61000-4-20.
	Decoupling clamps and absorbing clamps (Luethi)
MDS 21 B	Absorbing clamp 30 - 1000MHz as per CISPR 16 for automatic operation, including 5m measuring cable, N-connector
FTC 40X15 E	Decoupling clamp, 1 - 1000MHz as per CISPR 16 or CISPR 22
MDS 22	Absorbing clamp 300MHz - 2.5GHz (3GHz) as per CISPR 16
EM 101	RF Injection clamp, (10kHz) 150kHz - 1000MHz, 100W, 4 kV, max. cable diameter 22mm as per IEC 61000-4-6.
FTC 101	Decoupling clamp for EM 101 RF injection clamp

Other EMC/EMI/EMF special products available on request.

Extra price lists are available for:

- dummy lamps according to CISPR 15 / EN 55015
- Coupling decoupling networks CDN 0.15 – 230 MHz, EN 61000-4-6
- calibration of antennas and LISN
- CEKON / CEE / Schuko and NEMA plugs sockets and adapters
- Calibration adapters for LISN
- Wiring accessories for LISN

This product list is valid from April 1st 2016 on. Our business terms apply.