

SCHWARZBECK MESS - ELEKTRONIK

An der Klinge 29 D-69250 Schönau Tel.: 06228/1001 Fax.: (49)6228/1003

UHA 9125 Halbwellendipol mit EMI-Schleife UHA 9125 Half-Wave Dipole with EMI-Balun

UHA 9125 C, Dipolgesamtlänge 150 mm, Kurzschlußschieber hinten
UHA 9125 C, Dipole total Length of 150mm, shorting bar max.rear pos.

Frequency	Distance	lambda	Attenuat.	Gain(Isotr.)	Gain,dipole	Ant.-Factor
MHz	m	m	dB	dBi	dBd	dB/m
750.00	0.73	0.40	32.40	-2.60	-4.75	30.32
775.00	0.73	0.39	30.10	-1.30	-3.45	29.31
800.00	0.73	0.38	28.50	-0.37	-2.52	28.65
825.00	0.73	0.36	26.80	0.62	-1.53	27.93
850.00	0.73	0.35	25.70	1.30	-0.85	27.51
875.00	0.73	0.34	24.90	1.82	-0.33	27.24
900.00	0.73	0.33	24.40	2.19	0.04	27.11
925.00	0.73	0.32	24.20	2.41	0.26	27.13
950.00	0.73	0.32	24.10	2.58	0.43	27.20
975.00	0.73	0.31	24.70	2.39	0.24	27.61
1000.00	0.73	0.30	25.10	2.30	0.15	27.92
1025.00	0.73	0.29	25.70	2.11	-0.04	28.33
1050.00	0.73	0.29	26.05	2.04	-0.11	28.61
1075.00	0.73	0.28	26.20	2.06	-0.09	28.78
1100.00	0.73	0.27	26.40	2.06	-0.09	28.98
1125.00	0.73	0.27	26.90	1.91	-0.24	29.33
1150.00	0.73	0.26	27.40	1.76	-0.40	29.68
1175.00	0.73	0.26	28.05	1.52	-0.63	30.10
1200.00	0.73	0.25	28.90	1.19	-0.96	30.61

Edelstahl Elemente 54 mm für eine Gesamt-Elementlänge von 150 mm, Kurzschlußbügel 70 mm
Stainless-steel elements 54 mm each for total length 150mm, shorting bar separation 70 mm

Radiation in front direction under free-space far-field conditions. Gain at 900 MHz / 1 GHz near 0 dBd @ 2.15 dBi (= lossless ideal half-wave dipole).

To measure Field-Strength add ANTENNA FACTOR and Cable Loss in dB to Test Receiver reading in dB μ V across 50 ohm input. Result is Field-Strength in dB μ V/m

To generate an EFFECTIVE RADIATED POWER (referenced to the ideal lossless half-wave dipole) feed the power - identical to the required ERP - into the N connector of this antenna. Use a 50 ohm coaxial cable and measure power at the N plug of the cable next to the female N socket at the UHA 9125-C, tuned to 900 MHz / 1 GHz (or any other frequency, considering the difference to 0 dBd / 2.15 dBi). Increase the generator power by the amount of cable loss.

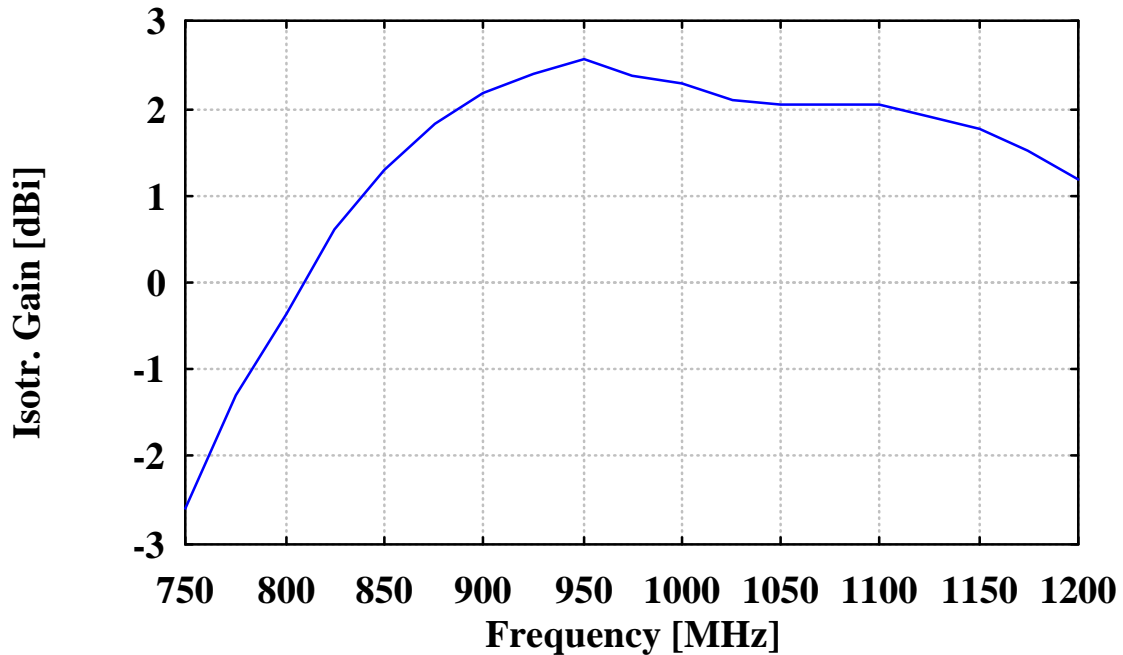
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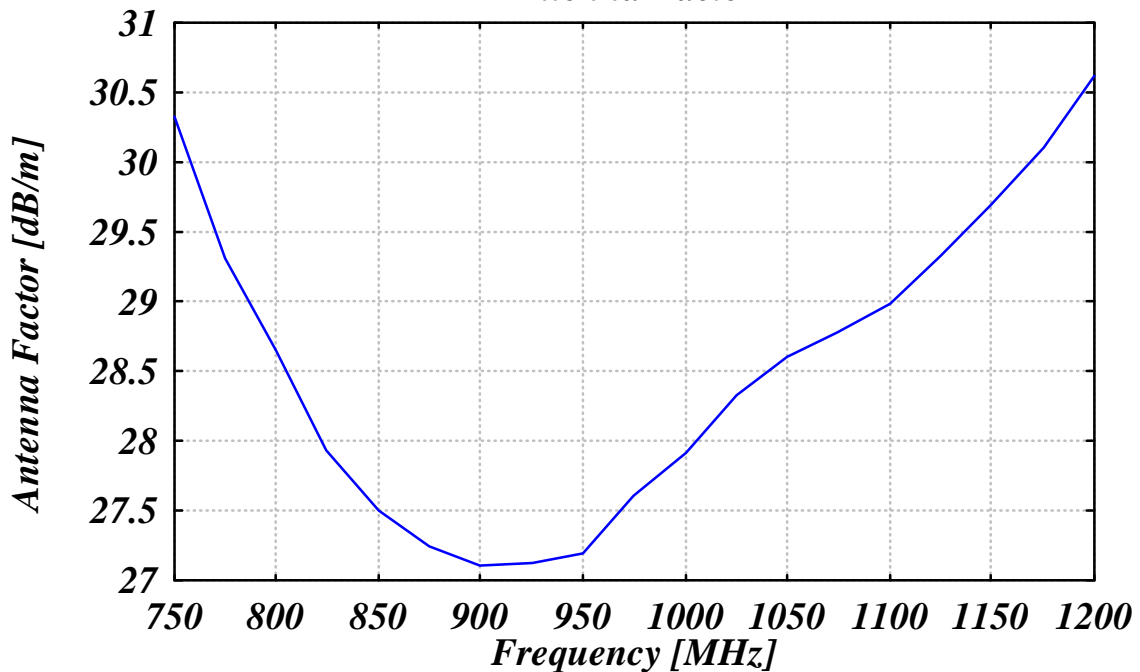
UHA 9125 Halbwellendipol mit EMI-Schleife *UHA 9125 Half-Wave Dipole with EMI-Balun*

UHA 9125 C, Dipolgesamtlänge 150 mm, Kurzschlußschieber hinten
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Isotropic Gain



Antenna Factor



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UHA 9125 C, Dipolgesamtlänge 82 mm, Kurzschlußschieber 40 mm
UHA 9125 C, Dipole total Length of 82 mm, shorting bar 40 mm pos.

Frequency MHz	Distance m	lambda m	Attenuat. dB	Gain(Isotr.) dBi	Gain,dipole dBd	Ant.-Factor dB/m
1300.00	0.73	0.23	36.00	-2.01	-4.16	34.51
1350.00	0.73	0.22	34.00	-0.84	-2.99	33.67
1400.00	0.73	0.21	32.95	-0.16	-2.31	33.30
1450.00	0.73	0.21	32.00	0.47	-1.68	32.98
1500.00	0.73	0.20	31.25	0.99	-1.16	32.75
1550.00	0.73	0.19	30.60	1.46	-0.70	32.57
1600.00	0.73	0.19	30.05	1.87	-0.28	32.43
1650.00	0.73	0.18	29.60	2.23	0.07	32.34
1700.00	0.73	0.18	29.35	2.48	0.33	32.35
1750.00	0.73	0.17	29.10	2.73	0.58	32.35
1800.00	0.73	0.17	29.05	2.88	0.73	32.45
1850.00	0.73	0.16	29.35	2.85	0.70	32.72
1900.00	0.73	0.16	29.95	2.66	0.51	33.13
1950.00	0.73	0.15	30.50	2.50	0.35	33.52
2000.00	0.73	0.15	31.25	2.23	0.08	34.01
2050.00	0.73	0.15	32.05	1.94	-0.21	34.51
2100.00	0.73	0.14	32.50	1.82	-0.33	34.84
2150.00	0.73	0.14	32.70	1.82	-0.33	35.05
2200.00	0.73	0.14	32.80	1.87	-0.28	35.20

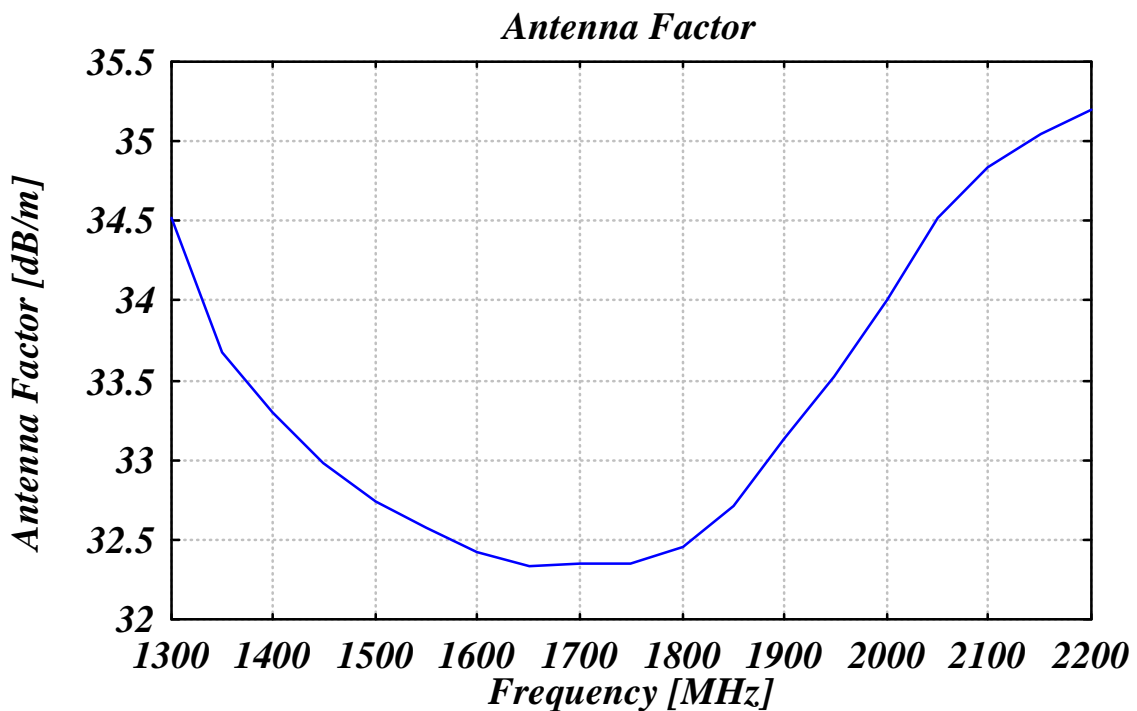
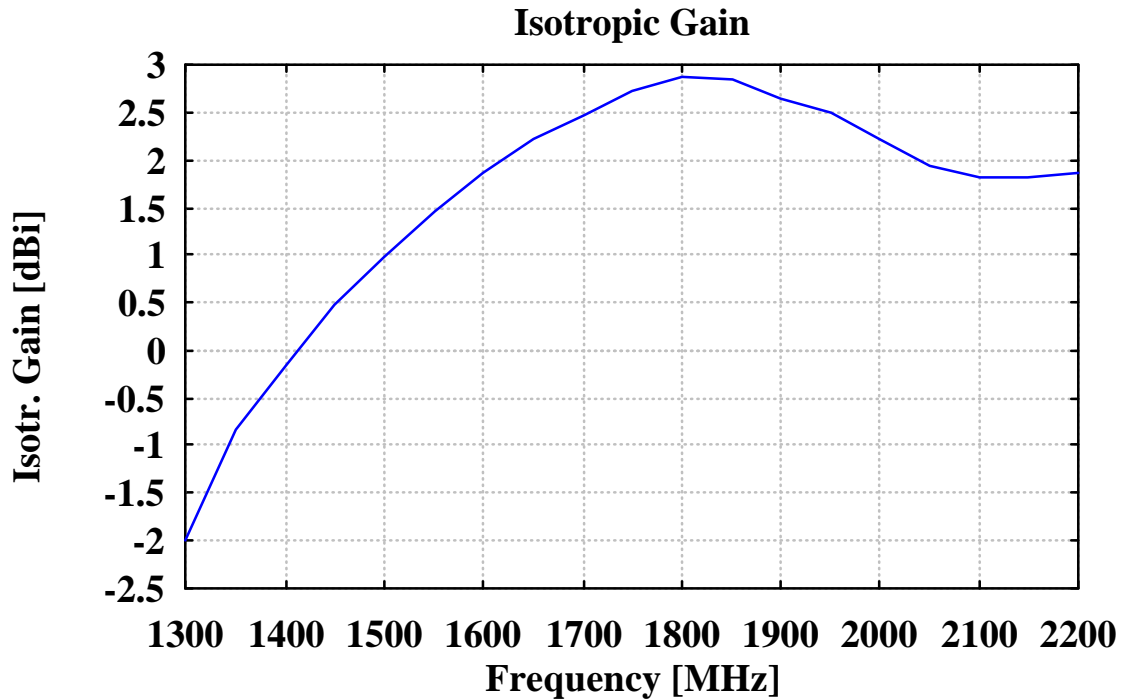
Zur Ermittlung der Feldstärke wird zur Meßwert der Spannung (an 50 Ω) der Antennenfaktor und die Kabeldämpfung addiert. Das Ergebnis ist die Feldstärke in dB μ V/m.

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