

Freq. (MF/HF) (MHz/Band)	Antenna Gain (dBi)	Peak Envelope Power (watts)							
		100 watts		500 watts		1000 watts		1500 watts	
		Con.	Unc.	Con.	Unc.	Con.	Unc.	Con.	Unc.
2(160m)	0	0.1	0.2	0.3	0.5	0.5	0.7	0.6	0.8
2(160m)	3	0.2	0.3	0.5	0.7	0.6	1.1	0.8	1.2
4(75/80m)	0	0.2	0.4	0.4	1.0	0.6	1.3	0.7	1.6
4(75/80m)	3	0.3	0.6	0.6	1.3	0.9	1.9	1.0	2.3
7.3(40m)	0	0.3	0.8	0.8	1.7	1.1	2.5	1.3	3.0
7.3(40m)	3	0.5	1.1	1.1	2.5	1.6	3.5	1.9	4.2
7.3(40m)	6	0.7	1.5	1.5	3.5	2.2	4.9	2.7	6.0
10.15(30m)	0	0.5	1.1	1.1	2.4	1.5	3.4	1.9	4.2
10.15(30m)	3	0.7	1.5	1.5	3.4	2.2	4.8	2.6	5.9
10.15(30m)	6	1.0	2.2	2.2	4.8	3.0	6.8	3.7	8.3
14.35(20m)	0	0.7	1.5	1.5	3.4	2.2	4.8	2.6	5.9
14.35(20m)	3	1.0	2.2	2.2	4.8	3.0	6.8	3.7	8.4
14.35(20m)	6	1.4	3.0	3.0	6.8	4.3	9.6	5.3	11.8
14.35(20m)	9	1.9	4.3	4.3	9.6	6.1	13.6	7.5	16.7
18.168(17m)	0	0.9	1.9	1.9	4.3	2.7	6.1	3.3	7.5
18.168(17m)	3	1.2	2.7	2.7	6.1	3.9	8.6	4.7	10.6
18.168(17m)	6	1.7	3.9	3.9	8.6	5.5	12.2	6.7	14.9
18.168(17m)	9	2.4	5.4	5.4	12.2	7.7	17.2	9.4	21.1
21.145(15m)	0	1.0	2.3	2.3	5.1	3.2	7.2	4.0	8.8
21.145(15m)	3	1.4	3.2	3.2	7.2	4.6	10.2	5.6	12.5
21.145(15m)	6	2.0	4.6	4.6	10.2	6.4	14.4	7.9	17.6
21.145(15m)	9	2.9	6.4	6.4	14.4	9.1	20.3	11.1	24.9
24.99(12m)	0	1.2	2.7	2.7	5.9	3.8	8.4	4.6	10.3
24.99(12m)	3	1.7	3.8	3.8	8.4	5.3	11.9	6.5	14.5
24.99(12m)	6	2.4	5.3	5.3	11.9	7.5	16.8	9.2	20.5
24.99(12m)	9	3.4	7.5	7.5	16.8	10.6	23.7	13.0	29.0
29.7(10m)	0	1.4	3.2	3.2	7.1	4.5	10.0	5.5	12.2
29.7(10m)	3	2.0	4.5	4.5	10.0	6.3	14.1	7.7	17.3
29.7(10m)	6	2.8	6.3	6.3	14.1	8.9	19.9	10.9	24.4
29.7(10m)	9	4.0	8.9	8.9	19.9	12.6	28.2	15.4	34.5

Freq (VHF/UHF) (MHz/Band)	Antenna Gain (dBi)	Open Power (watts)							
		50 watts		100 watts		500 watts		1000 watts	
		Con.	Unc.	Con.	Unc.	Con.	Unc.	Con.	Unc.
50(6m)	0	1.0	2.3	1.4	3.2	3.2	7.1	4.5	10.1
50(6m)	3	1.4	3.2	2.0	4.5	4.5	10.1	6.4	14.3
50(6m)	6	2.0	4.5	2.8	6.4	6.4	14.2	9.0	20.1
50(6m)	9	2.8	6.4	4.0	9.0	9.0	20.1	12.7	28.4
50(6m)	12	4.0	9.0	5.7	12.7	12.7	28.4	18.0	40.2
50(6m)	15	5.7	12.7	8.0	18.0	18.0	40.2	25.4	56.8
144(2m)	0	1.0	2.3	1.4	3.2	3.2	7.1	4.5	10.1
144(2m)	3	1.4	3.2	2.0	4.5	4.5	10.1	6.4	14.3
144(2m)	6	2.0	4.5	2.8	6.4	6.4	14.2	9.0	20.1
144(2m)	9	2.8	6.4	4.0	9.0	9.0	20.1	12.7	28.4
144(2m)	12	4.0	9.0	5.7	12.7	12.7	28.4	18.0	40.2
144(2m)	15	5.7	12.7	8.0	18.0	18.0	40.2	25.4	56.8
144(2m)	20	10.1	22.6	14.3	32.0	32.0	71.4	45.1	101.0
222(1.25m)	0	1.0	2.3	1.4	3.2	3.2	7.1	4.5	10.1
222(1.25m)	3	1.4	3.2	2.0	4.5	4.5	10.1	6.4	14.3
222(1.25m)	6	2.0	4.5	2.8	6.4	6.4	14.2	9.0	20.1
222(1.25m)	9	2.8	6.4	4.0	9.0	9.0	20.1	12.7	28.4
222(1.25m)	12	4.0	9.0	5.7	12.7	12.7	28.4	18.0	40.2
222(1.25m)	15	5.7	12.7	8.0	18.0	18.0	40.2	25.4	56.8
450(70cm)	0	0.8	1.8	1.2	2.6	2.6	5.8	3.7	8.2
450(70cm)	3	1.2	2.6	1.6	3.7	3.7	8.2	5.2	11.6
450(70cm)	6	1.6	3.7	2.3	5.2	5.2	11.6	7.4	16.4
450(70cm)	9	2.3	5.2	3.3	7.3	7.3	16.4	10.4	23.2
450(70cm)	12	3.3	7.3	4.6	10.4	10.4	23.2	14.7	32.8
902(33cm)	0	0.6	1.3	0.8	1.8	1.8	4.1	2.6	5.8
902(33cm)	3	0.8	1.8	1.2	2.6	2.6	5.8	3.7	8.2
902(33cm)	6	1.2	2.6	1.6	3.7	3.7	8.2	5.2	11.6
902(33cm)	9	1.6	3.7	2.3	5.2	5.2	11.6	7.3	16.4
902(33cm)	12	2.3	5.2	3.3	7.3	7.3	16.4	10.4	23.2
1240(23cm)	0	0.5	1.1	0.7	1.6	1.6	3.5	2.2	5.0
1240(23cm)	3	0.7	1.6	1.0	2.2	2.2	5.0	3.1	7.0
1240(23cm)	6	1.0	2.2	1.4	3.1	3.1	7.0	4.4	9.9
1240(23cm)	9	1.4	3.1	2.0	4.4	4.4	9.9	6.3	14.0
1240(23cm)	12	2.0	4.4	2.8	6.2	6.2	14.0	8.8	19.8

Freq. (MF/HF) (MHz/Band)	Antenna Gain (dBi)	Peak Envelope Power (watts)							
		100 watts		500 watts		1000 watts		1500 watts	
		Con.	Unc.	Con.	Unc.	Con.	Unc.	Con.	Unc.
2(160m)	0	0.3	0.7	1.0	1.6	1.6	2.3	2.0	2.6
2(160m)	3	0.7	1.0	1.6	2.3	2.0	3.5	2.6	3.9
4(75/80m)	0	0.7	1.3	1.3	3.3	2.0	4.3	2.3	5.2
4(75/80m)	3	1.0	2.0	2.0	4.3	3.0	6.2	3.3	7.5
7.3(40m)	0	1.0	2.6	2.6	5.6	3.6	8.2	4.3	9.8
7.3(40m)	3	1.6	3.6	3.6	8.2	5.2	11.5	6.2	13.8
7.3(40m)	6	2.3	4.9	4.9	11.5	7.2	16.1	8.9	19.7
10.15(30m)	0	1.6	3.6	3.6	7.9	4.9	11.2	6.2	13.8
10.15(30m)	3	2.3	4.9	4.9	11.2	7.2	15.7	8.5	19.4
10.15(30m)	6	3.3	7.2	7.2	15.7	9.8	22.3	12.1	27.2
14.35(20m)	0	2.3	4.9	4.9	11.2	7.2	15.7	8.5	19.4
14.35(20m)	3	3.3	7.2	7.2	15.7	9.8	22.3	12.1	27.6
14.35(20m)	6	4.6	9.8	9.8	22.3	14.1	31.5	17.4	38.7
14.35(20m)	9	6.2	14.1	14.1	31.5	20.0	44.6	24.6	54.8
18.168(17m)	0	3.0	6.2	6.2	14.1	8.9	20.0	10.8	24.6
18.168(17m)	3	3.9	8.9	8.9	20.0	12.8	28.2	15.4	34.8
18.168(17m)	6	5.6	12.8	12.8	28.2	18.0	40.0	22.0	48.9
18.168(17m)	9	7.9	17.7	17.7	40.0	25.3	56.4	30.8	69.2
21.145(15m)	0	3.3	7.5	7.5	16.7	10.5	23.6	13.1	28.9
21.145(15m)	3	4.6	10.5	10.5	23.6	15.1	33.5	18.4	41.0
21.145(15m)	6	6.6	15.1	15.1	33.5	21.0	47.2	25.9	57.7
21.145(15m)	9	9.5	21.0	21.0	47.2	29.9	66.6	36.4	81.7
24.99(12m)	0	3.9	8.9	8.9	19.4	12.5	27.6	15.1	33.8
24.99(12m)	3	5.6	12.5	12.5	27.6	17.4	39.0	21.3	47.6
24.99(12m)	6	7.9	17.4	17.4	39.0	24.6	55.1	30.2	67.3
24.99(12m)	9	11.2	24.6	24.6	55.1	34.8	77.8	42.7	95.1
29.7(10m)	0	4.6	10.5	10.5	23.3	14.8	32.8	18.0	40.0
29.7(10m)	3	6.6	14.8	14.8	32.8	20.7	46.3	25.3	56.8
29.7(10m)	6	9.2	20.7	20.7	46.3	29.2	65.3	35.8	80.1
29.7(10m)	9	13.1	29.2	29.2	65.3	41.3	92.5	50.5	113.2

Freq (VHF/UHF) (MHz/Band)	Antenna Gain (dBi)	Emission Power (watts)							
		50 watts		100 watts		500 watts		1000 watts	
		Con.	Unc.	Con.	Unc.	Con.	Unc.	Con.	Unc.
50(6m)	0	3.3	7.5	4.6	10.5	10.5	23.3	14.8	33.1
50(6m)	3	4.6	10.5	6.6	14.8	14.8	33.1	21.0	46.9
50(6m)	6	6.6	14.8	9.2	21.0	21.0	46.6	29.5	65.9
50(6m)	9	9.2	21.0	13.1	29.5	29.5	65.9	41.7	93.2
50(6m)	12	13.1	29.5	18.7	41.7	41.7	93.2	59.1	131.9
50(6m)	15	18.7	41.7	26.2	59.1	59.1	131.9	83.3	186.4
144(2m)	0	3.3	7.5	4.6	10.5	10.5	23.3	14.8	33.1
144(2m)	3	4.6	10.5	6.6	14.8	14.8	33.1	21.0	46.9
144(2m)	6	6.6	14.8	9.2	21.0	21.0	46.6	29.5	65.9
144(2m)	9	9.2	21.0	13.1	29.5	29.5	65.9	41.7	93.2
144(2m)	12	13.1	29.5	18.7	41.7	41.7	93.2	59.1	131.9
144(2m)	15	18.7	41.7	26.2	59.1	59.1	131.9	83.3	186.4
144(2m)	20	33.1	74.1	46.9	105.0	105.0	234.3	148.0	331.4
222(1.25m)	0	3.3	7.5	4.6	10.5	10.5	23.3	14.8	33.1
222(1.25m)	3	4.6	10.5	6.6	14.8	14.8	33.1	21.0	46.9
222(1.25m)	6	6.6	14.8	9.2	21.0	21.0	46.6	29.5	65.9
222(1.25m)	9	9.2	21.0	13.1	29.5	29.5	65.9	41.7	93.2
222(1.25m)	12	13.1	29.5	18.7	41.7	41.7	93.2	59.1	131.9
222(1.25m)	15	18.7	41.7	26.2	59.1	59.1	131.9	83.3	186.4
450(70cm)	0	2.6	5.9	3.9	8.5	8.5	19.0	12.1	26.9
450(70cm)	3	3.9	8.5	5.2	12.1	12.1	26.9	17.1	38.1
450(70cm)	6	5.2	12.1	7.5	17.1	17.1	38.1	24.3	53.8
450(70cm)	9	7.5	17.1	10.8	24.0	24.0	53.8	34.1	76.1
450(70cm)	12	10.8	24.0	15.1	34.1	34.1	76.1	48.2	107.6
902(33cm)	0	2.0	4.3	2.6	5.9	5.9	13.5	8.5	19.0
902(33cm)	3	2.6	5.9	3.9	8.5	8.5	19.0	12.1	26.9
902(33cm)	6	3.9	8.5	5.2	12.1	12.1	26.9	17.1	38.1
902(33cm)	9	5.2	12.1	7.5	17.1	17.1	38.1	24.0	53.8
902(33cm)	12	7.5	17.1	10.8	24.0	24.0	53.8	34.1	76.1
1240(23cm)	0	1.6	3.6	2.3	5.2	5.2	11.5	7.2	16.4
1240(23cm)	3	2.3	5.2	3.3	7.2	7.2	16.4	10.2	23.0
1240(23cm)	6	3.3	7.2	4.6	10.2	10.2	23.0	14.4	32.5
1240(23cm)	9	4.6	10.2	6.6	14.4	14.4	32.5	20.7	45.9
1240(23cm)	12	6.6	14.4	9.2	20.3	20.3	45.9	28.9	65.0