



# **Annex A**

# **Output Power**



**Output Power for 10dBi gain PtoMP antennas**

Bandwidth	Frequency	Data Rate	TP	J3 Level	J4 Level	J3 Level	J4 Level	Total Summed Power	Limit	Margin
MHz	MHz			dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	6	18	14.1	16.4	25.7	43.7	18.4	26	-7.6
10	5800	6	20	17.3	17.9	53.7	61.7	20.6	26	-5.4
10	5840	6	19	16.6	16.3	45.9	42.7	19.5	26	-6.5
20	5740	6	16	12.3	15.6	17.0	36.3	17.3	26	-8.7
20	5800	6	20	15.8	17.4	37.8	55.0	19.7	26	-6.3
20	5835	6	16	11.9	15.2	15.5	33.1	16.9	26	-9.1
30	5745	6	14	11.3	12.6	13.5	18.2	15.0	26	-11.0
30	5800	6	20	16.7	16.4	46.8	43.7	19.6	26	-6.4
30	5830	6	15	12.4	14.6	17.4	28.8	16.6	26	-9.4
40	5750	f0	14	9.1	11.1	8.1	12.9	13.2	26	-12.8
40	5800	f0	20	15.3	15.8	33.9	38.0	18.6	26	-7.4
40	5825	f0	16	12.3	14.2	17.0	26.3	16.4	26	-9.6

**Output Power for 13dBi gain PtoMP antennas**

Bandwidth	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	6	11.1	13.4	12.9	21.9	15.4	23	-7.6
10	5800	6	14.3	14.9	26.9	30.9	17.6	23	-5.4
10	5840	6	13.6	13.3	23.0	21.4	16.5	23	-6.5
20	5740	6	9.3	12.6	8.5	18.2	14.3	23	-8.7
20	5800	6	12.8	14.4	19.0	27.5	16.7	23	-6.3
20	5835	6	8.9	12.2	7.8	16.6	13.9	23	-9.1
30	5745	6	8.3	9.6	6.8	9.1	12.0	23	-11.0
30	5800	6	13.7	13.4	23.4	21.9	16.6	23	-6.4
30	5830	6	9.4	11.6	8.7	14.5	13.6	23	-9.4
40	5750	f0	6.1	8.1	4.1	6.5	10.2	23	-12.8
40	5800	f0	12.3	12.8	17.0	19.1	15.6	23	-7.4
40	5825	f0	9.3	11.2	8.5	13.2	13.4	23	-9.6



**Output Power for 16dBi gain PtoP antennas**

Bandwidth	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	6	8.1	10.4	6.5	11.0	12.4	30	-17.6
10	5800	6	11.3	11.9	13.5	15.5	14.6	30	-15.4
10	5840	6	10.6	10.3	11.5	10.7	13.5	30	-16.5
20	5740	6	6.3	9.6	4.3	9.1	11.3	30	-18.7
20	5800	6	9.8	11.4	9.5	13.8	13.7	30	-16.3
20	5835	6	5.9	9.2	3.9	8.3	10.9	30	-19.1
30	5745	6	5.3	6.6	3.4	4.6	9.0	30	-21.0
30	5800	6	10.7	10.4	11.7	11.0	13.6	30	-16.4
30	5830	6	6.4	8.6	4.4	7.2	10.6	30	-19.4
40	5750	f0	3.1	5.1	2.0	3.2	7.2	30	-22.8
40	5800	f0	9.3	9.8	8.5	9.5	12.6	30	-17.4
40	5825	f0	6.3	8.2	4.3	6.6	10.4	30	-19.6

**Output Power for 17dBi gain PtoP antennas**

Bandwidth	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	6	7.1	9.4	5.1	8.7	11.4	30	-18.6
10	5800	6	10.3	10.9	10.7	12.3	13.6	30	-16.4
10	5840	6	9.6	9.3	9.2	8.5	12.5	30	-17.5
20	5740	6	5.3	8.6	3.4	7.2	10.3	30	-19.7
20	5800	6	8.8	10.4	7.6	11.0	12.7	30	-17.3
20	5835	6	4.9	8.2	3.1	6.6	9.9	30	-20.1
30	5745	6	4.3	5.6	2.7	3.6	8.0	30	-22.0
30	5800	6	9.7	9.4	9.3	8.7	12.6	30	-17.4
30	5830	6	5.4	7.6	3.5	5.8	9.6	30	-20.4
40	5750	f0	2.1	4.1	1.6	2.6	6.2	30	-23.8
40	5800	f0	8.3	8.8	6.8	7.6	11.6	30	-18.4
40	5825	f0	5.3	7.2	3.4	5.2	9.4	30	-20.6



**Output Power for 19dBi gain PtoP antennas**

Bandwidth	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	6	5.1	7.4	3.2	5.5	9.4	30	-20.6
10	5800	6	8.3	8.9	6.8	7.8	11.6	30	-18.4
10	5840	6	7.6	7.3	5.8	5.4	10.5	30	-19.5
20	5740	6	3.3	6.6	2.1	4.6	8.3	30	-21.7
20	5800	6	6.8	8.4	4.8	6.9	10.7	30	-19.3
20	5835	6	2.9	6.2	1.9	4.2	7.9	30	-22.1
30	5745	6	2.3	3.6	1.7	2.3	6.0	30	-24.0
30	5800	6	7.7	7.4	5.9	5.5	10.6	30	-19.4
30	5830	6	3.4	5.6	2.2	3.6	7.6	30	-22.4
40	5750	f0	0.1	2.1	1.0	1.6	4.2	30	-25.8
40	5800	f0	6.3	6.8	4.3	4.8	9.6	30	-20.4
40	5825	f0	3.3	5.2	2.1	3.3	7.4	30	-22.6

**Output Power for 20dBi gain PtoP antennas**

Bandwidth	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	6	4.1	6.4	2.6	4.4	8.4	30	-21.6
10	5800	6	7.3	7.9	5.4	6.2	10.6	30	-19.4
10	5840	6	6.6	6.3	4.6	4.3	9.5	30	-20.5
20	5740	6	2.3	5.6	1.7	3.6	7.3	30	-22.7
20	5800	6	5.8	7.4	3.8	5.5	9.7	30	-20.3
20	5835	6	1.9	5.2	1.5	3.3	6.9	30	-23.1
30	5745	6	1.3	2.6	1.3	1.8	5.0	30	-25.0
30	5800	6	6.7	6.4	4.7	4.4	9.6	30	-20.4
30	5830	6	2.4	4.6	1.7	2.9	6.6	30	-23.4
40	5750	f0	-0.9	1.1	0.8	1.3	3.2	30	-26.8
40	5800	f0	5.3	5.8	3.4	3.8	8.6	30	-21.4
40	5825	f0	2.3	4.2	1.7	2.6	6.4	30	-23.6



**Output Power for 21dBi gain PtoP antennas**

Bandwidth	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	6	3.1	5.4	2.0	3.5	7.4	30	-22.6
10	5800	6	6.3	6.9	4.3	4.9	9.6	30	-20.4
10	5840	6	5.6	5.3	3.6	3.4	8.5	30	-21.5
20	5740	6	1.3	4.6	1.3	2.9	6.3	30	-23.7
20	5800	6	4.8	6.4	3.0	4.4	8.7	30	-21.3
20	5835	6	0.9	4.2	1.2	2.6	5.9	30	-24.1
30	5745	6	0.3	1.6	1.1	1.4	4.0	30	-26.0
30	5800	6	5.7	5.4	3.7	3.5	8.6	30	-21.4
30	5830	6	1.4	3.6	1.4	2.3	5.6	30	-24.4
40	5750	f0	-1.9	0.1	0.6	1.0	2.2	30	-27.8
40	5800	f0	4.3	4.8	2.7	3.0	7.6	30	-22.4
40	5825	f0	1.3	3.2	1.3	2.1	5.4	30	-24.6

**Output Power for 22dBi gain PtoP antennas**

Bandwidth	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	6	2.1	4.4	1.6	2.8	6.4	30	-23.6
10	5800	6	5.3	5.9	3.4	3.9	8.6	30	-21.4
10	5840	6	4.6	4.3	2.9	2.7	7.5	30	-22.5
20	5740	6	0.3	3.6	1.1	2.3	5.3	30	-24.7
20	5800	6	3.8	5.4	2.4	3.5	7.7	30	-22.3
20	5835	6	-0.1	3.2	1.0	2.1	4.9	30	-25.1
30	5745	6	-0.7	0.6	0.9	1.1	3.0	30	-27.0
30	5800	6	4.7	4.4	3.0	2.8	7.6	30	-22.4
30	5830	6	0.4	2.6	1.1	1.8	4.6	30	-25.4
40	5750	f0	-2.9	-0.9	0.5	0.8	1.2	30	-28.8
40	5800	f0	3.3	3.8	2.1	2.4	6.6	30	-23.4
40	5825	f0	0.3	2.2	1.1	1.7	4.4	30	-25.6



**Output Power for 30dBi gain PtoP antennas**

Bandwidth	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	6	-5.9	-3.6	0.3	0.4	-1.6	30	-31.6
10	5800	6	-2.7	-2.1	0.5	0.6	0.6	30	-29.4
10	5840	6	-3.4	-3.7	0.5	0.4	-0.5	30	-30.5
20	5740	6	-7.7	-4.4	0.2	0.4	-2.7	30	-32.7
20	5800	6	-4.2	-2.6	0.4	0.5	-0.3	30	-30.3
20	5835	6	-8.1	-4.8	0.2	0.3	-3.1	30	-33.1
30	5745	6	-8.7	-7.4	0.1	0.2	-5.0	30	-35.0
30	5800	6	-3.3	-3.6	0.5	0.4	-0.4	30	-30.4
30	5830	6	-7.6	-5.4	0.2	0.3	-3.4	30	-33.4
40	5750	f0	-10.9	-8.9	0.1	0.1	-6.8	30	-36.8
40	5800	f0	-4.7	-4.2	0.3	0.4	-1.4	30	-31.4
40	5825	f0	-7.7	-5.8	0.2	0.3	-3.6	30	-33.6

**Output Power for 31dBi gain PtoP antennas**

Bandwidth	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	6	-6.9	-4.6	0.2	0.3	-2.6	30	-32.6
10	5800	6	-3.7	-3.1	0.4	0.5	-0.4	30	-30.4
10	5840	6	-4.4	-4.7	0.4	0.3	-1.5	30	-31.5
20	5740	6	-8.7	-5.4	0.1	0.3	-3.7	30	-33.7
20	5800	6	-5.2	-3.6	0.3	0.4	-1.3	30	-31.3
20	5835	6	-9.1	-5.8	0.1	0.3	-4.1	30	-34.1
30	5745	6	-9.7	-8.4	0.1	0.1	-6.0	30	-36.0
30	5800	6	-4.3	-4.6	0.4	0.3	-1.4	30	-31.4
30	5830	6	-8.6	-6.4	0.1	0.2	-4.4	30	-34.4
40	5750	f0	-11.9	-9.9	0.1	0.1	-7.8	30	-37.8
40	5800	f0	-5.7	-5.2	0.3	0.3	-2.4	30	-32.4
40	5825	f0	-8.7	-6.8	0.1	0.2	-4.6	30	-34.6



**Output Power for 34dBi gain PtoP antennas**

Bandwidth	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	6	-9.9	-7.6	0.1	0.2	-5.6	30	-35.6
10	5800	6	-6.7	-6.1	0.2	0.2	-3.4	30	-33.4
10	5840	6	-7.4	-7.7	0.2	0.2	-4.5	30	-34.5
20	5740	6	-11.7	-8.4	0.1	0.1	-6.7	30	-36.7
20	5800	6	-8.2	-6.6	0.2	0.2	-4.3	30	-34.3
20	5835	6	-12.1	-8.8	0.1	0.1	-7.1	30	-37.1
30	5745	6	-12.7	-11.4	0.1	0.1	-9.0	30	-39.0
30	5800	6	-7.3	-7.6	0.2	0.2	-4.4	30	-34.4
30	5830	6	-11.6	-9.4	0.1	0.1	-7.4	30	-37.4
40	5750	f0	-14.9	-12.9	0.0	0.1	-10.8	30	-40.8
40	5800	f0	-8.7	-8.2	0.1	0.2	-5.4	30	-35.4
40	5825	f0	-11.7	-9.8	0.1	0.1	-7.6	30	-37.6