

<b>Link Parameters</b>	<b>Units</b>	<b>346KG7W</b>	<b>461KG7W</b>	<b>1M84G7W</b>	<b>8M25G7W</b>
Uplink Frequency	GHz	6.130	6.130	6.130	6.130
Downlink Frequency	GHz	3.905	3.905	3.905	3.905
Carrier Allocated Bandwidth	kHz	346.0	461.0	1840.0	8250.0
<b>Uplink:</b>					
Noise BW (or energy dispersal for TV/FM)	kHz	256	341.3	1365.3	6111.3
Nominal E/S e.i.r.p. per carrier	dBW	48.1	51.0	57.3	62.9
Earth Station Diameter	m	4.5	7.2	11.0	4.5
Earth Station Gain	dBi	47.3	51.4	55.1	47.3
Uplink Input Power per Carrier	dBW	0.8	-0.4	2.2	15.6
Free Space Loss	dB	199.9	199.9	199.9	199.9
G/T Satellite	dB/K	-5.0	-5.0	-5.0	-5.0
C/N Thermal Uplink	dB	17.7	19.4	19.6	18.7
C/I XPOL, ACI, IM, ASI	dB	14.1	15.7	16.0	15.1
C/(N+I) uplink	dB	12.5	14.2	14.4	13.5
<b>Downlink:</b>					
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	9.2	12.1	18.4	23.9
Max e.i.r.p. Density	dBW/4KHz	-5.9	-4.2	-4.0	-5.0
Max PFD	dBW/m2/4kHz	-168.0	-166.3	-166.1	-167.1
Free Space Loss	dB	195.5	195.5	195.5	195.5
Earth Station Diameter	m	3.8	4.5	4.5	3.8
Earth Station Gain	dBi	42.3	43.8	43.8	42.3
Noise Temperature	kHz	95.0	95.0	95.0	95.0
Earth Station G/T	dB/K	22.5	24.0	24.0	22.5
C/N Thermal Downlink	dB	10.7	13.9	14.2	11.7
C/I XPOL, ACI, IM, ASI	dB	13.5	16.6	16.9	14.4
C/(N+I) downlink	dB	8.9	12.0	12.3	9.8
<b>Adjacent satellite interference:</b>					
uplink input power dens @ 2 deg	dBW/Hz	-44	-44	-44	-44
downlink eirp dens @ 2 deg	dBW/Hz	-37	-37	-37	-37
C/I up	dB	17.07	18.72	19.00	18.09
C/I dn	dB	16.47	19.62	19.90	17.39
Aggregate C/I up	dB	14.07	15.72	16.00	15.09
Aggregate C/I dn	dB	13.47	16.62	16.90	14.39
<b>Overall:</b>					
C/(N+I) overall	dB	7.3	10.0	10.2	8.3
C/(N+I) required	dB	6.0	9.3	9.3	6.9
System Margin	dB	1.3	0.7	0.9	1.4

<b>72M0G7W</b>	<b>36M0F3F</b>
6.130	6.130
3.905	3.905
72000.0	36000.0
63330	2000.0
79.0	70.8
13.0	13.0
56.6	56.6
22.4	14.2
199.9	199.9
-4.0	-3.5
25.7	20.4
21.0	15.8
19.8	14.5
34.0	33.6
-5.0	9.6
-167.1	-152.5
195.5	196.2
6.3	4.5
47.1	43.8
95.0	95.0
27.3	24.0
16.4	14.5
19.1	18.9
14.6	13.1
-44	-44.5
-37	-38
24.04	18.79
22.14	21.89
21.04	15.79
19.14	18.89
13.4	10.8
12.7	10.0
0.7	0.8