

Link Parameters	Units	346KG7W	461KG7W	1M84G7W	8M25G7W
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	48.2	50.3	56.4	62.3
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	0.9	-1.1	1.3	15.0
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	17.8	18.7	18.7	18.1
C/I XPOL, ACI, IM, ASI	dB	14.2	15.0	15.1	14.5
C/(N+I) uplink	dB	12.6	13.5	13.5	12.9
<b>Downlink:</b>					
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	10.6	12.8	18.8	24.7
Max e.i.r.p. Density	dBW/4KHz	-4.5	-3.5	-3.6	-4.2
Max PFD	dBW/m2/4kHz	-166.6	-165.6	-165.7	-166.3
Free Space Loss	dB	195.7	195.7	195.7	195.7
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	11.9	14.4	14.4	12.3
C/I XPOL, ACI, IM, ASI	dB	14.9	17.3	17.3	15.2
C/(N+I) downlink	dB	10.2	12.6	12.6	10.5
<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	17.17	18.02	18.10	17.49
C/I dn	dB	17.87	20.32	20.30	18.19
Aggregate C/I up	dB	14.17	15.02	15.10	14.49
Aggregate C/I dn	dB	14.87	17.32	17.30	15.19
<b>Overall:</b>					
C/(N+I) overall	dB	8.2	10.0	10.0	8.5
C/(N+I) required	dB	6.0	9.3	9.3	6.9
System Margin	dB	2.2	0.7	0.7	1.6

<b>72M0G7W</b>	<b>36M0F3F</b>
6.130	6.130
3.905	3.905
72000.0	36000.0
63330	2000.0
81.3	74.2
13.0	13.0
56.6	56.6
24.7	17.6
199.9	200.0
-4.0	-4.0
28.0	23.2
23.3	18.7
22.1	17.4
35.0	32.8
-4.0	8.8
-166.1	-153.3
195.7	195.7
5.6	4.5
45.9	43.8
95.0	95.0
26.1	24.0
16.0	14.2
17.9	17.1
13.9	12.4
-44	-44
-36	-37
26.34	21.69
20.94	20.09
23.34	18.69
17.94	17.09
13.2	11.2
12.7	10.0
0.5	1.2