

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	48.8	52.2	58.4	63.6
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	1.5	0.8	3.3	16.3
Free Space Loss	dB	200.0	200.0	200.0	200.0
G/T Satellite	dB/K	-8.0	-8.0	-8.0	-8.0
C/N Thermal Uplink	dB	15.3	17.5	17.6	16.3
C/I XPOL, ACI, IM, ASI	dB	14.8	16.9	17.1	15.8
C/(N+I) uplink	dB	12.0	14.2	14.4	13.0
<b>Downlink:</b>					
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	9.8	13.1	19.4	24.6
Max e.i.r.p. Density	dBW/4KHz	-5.3	-3.2	-3.0	-4.3
Max PFD	dBW/m2/4kHz	-167.4	-165.3	-165.1	-166.4
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	11.3	14.9	15.2	12.4
C/I XPOL, ACI, IM, ASI	dB	14.1	16.8	16.9	15.1
C/(N+I) downlink	dB	9.5	12.7	12.9	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	-36.2	-36	-37
C/I up	dB	17.77	19.92	20.10	18.79
C/I dn	dB	17.07	19.82	19.90	18.09
Aggregate C/I up	dB	14.77	16.92	17.10	15.79
Aggregate C/I dn	dB	14.07	16.82	16.90	15.09
<b>Overall:</b>					
C/(N+I) overall	dB	7.6	10.4	10.6	8.6
C/(N+I) required	dB	6.0	9.3	9.3	6.9
System Margin	dB	1.6	1.1	1.3	1.7

<b>72M0G7W</b>	<b>36M0F3F</b>
6.130	6.130
3.905	3.905
72000.0	36000.0
63330	2000.0
82.9	75.2
13.0	13.0
56.6	56.6
26.3	18.6
200.0	199.9
-7.0	-8.0
26.5	20.3
24.9	20.2
22.6	17.3
34.9	33.6
-4.1	9.6
-166.2	-152.5
195.5	196.2
6.3	4.5
47.1	43.8
95.0	95.0
27.3	24.0
17.3	14.5
19.0	18.9
15.1	13.1
-44	-44.5
-36	-38
27.94	23.19
22.04	21.89
24.94	20.19
19.04	18.89
14.4	11.7
12.7	10.0
1.7	1.7