

Link Parameters	Units	346KG7W	461KG7W	1M84G7W	8M25G7W
Uplink Frequency	GHz	6.050	6.050	6.050	6.050
Downlink Frequency	GHz	11.830	11.830	11.830	11.830
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	48.9	50.6	56.7	63.7
Earth Station Diameter	m	3.8	4.5	4.5	9.0
Earth Station Gain	dBi	45.8	47.2	47.3	53.4
Uplink Input Power per Carrier	dBW	3.1	3.4	9.4	10.3
Free Space Loss	dB	199.8	199.8	199.8	199.8
G/T Satellite	dB/K	-5.0	-5.0	-5.0	-5.0
C/N Thermal Uplink	dB	18.6	19.1	19.1	19.6
C/I XPOL, ACI, IM, ASI	dB	14.9	15.3	15.4	15.9
C/(N+I) uplink	dB	13.3	13.8	13.9	14.4
<b>Downlink:</b>					
Satellite e.i.r.p. per carrier (-5dB contour)	dBW	20.2	21.9	27.9	34.9
Max e.i.r.p. Density	dBW/4KHz	7.1	7.6	7.5	8.0
Max PFD	dBW/m2/4kHz	-155.0	-154.5	-154.6	-154.1
Free Space Loss	dB	206.1	206.1	206.1	206.1
Earth Station Diameter	m	2.4	3.7	3.7	2.4
Earth Station Gain	dBi	48.0	51.7	51.7	48.0
Noise Temperature	kHz	160.0	160.0	160.0	160.0
Earth Station G/T	dB/K	26.0	29.7	29.7	26.0
C/N Thermal Downlink	dB	14.6	18.7	18.7	15.5
C/I XPOL, ACI, IM, ASI	dB	19.2	23.3	23.3	20.1
C/(N+I) downlink	dB	13.3	17.4	17.4	14.2
<b>Adjacent satellite interference:</b>					
uplink input power dens @ 2 deg	dBW/Hz	-44	-44	-44	-44
downlink eirp dens @ 2 deg	dBW/Hz	-26	-26	-26	-26
C/I up	dB	17.87	18.32	18.40	18.89
C/I dn	dB	22.17	26.32	26.30	23.09
Aggregate C/I up	dB	14.87	15.32	15.40	15.89
Aggregate C/I dn	dB	19.17	23.32	23.30	20.09
<b>Overall:</b>					
C/(N+I) overall	dB	10.3	12.2	12.3	11.3
C/(N+I) required	dB	6.0	9.3	9.3	6.9
System Margin	dB	4.3	2.9	3.0	4.4

<b>72M0G7W</b>	<b>36M0F3F</b>
6.050	6.050
11.830	11.830
72000.0	36000.0
63330	2000.0
80.7	69.6
9.0	9.0
53.2	53.2
27.5	16.4
199.8	199.8
-5.0	-5.0
26.5	17.8
22.7	19.1
21.2	15.4
44.8	36.2
7.8	14.2
-154.3	-147.9
206.1	206.1
4.5	5.6
53.4	54.6
160.0	160.0
31.4	32.6
20.6	15.7
25.2	22.3
19.3	14.8
-44	-49
-26	-28
25.74	22.09
28.24	25.29
22.74	19.09
25.24	22.29
17.2	12.1
12.7	10.0
4.5	2.1