

Link Parameters	Units	346KG7W	461KG7W	1M84G7W	8M25G7W
Uplink Frequency	GHz	14.125	14.125	14.125	14.125
Downlink Frequency	GHz	3.825	3.825	3.825	3.825
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	49.2	51.0	57.0	62.7
Earth Station Diameter	m	1.8	2.4	3.7	1.8
Earth Station Gain	dBi	49.5	49.1	52.8	46.5
Uplink Input Power per Carrier	dBW	-0.3	1.9	4.2	16.2
Free Space Loss	dB	207.6	207.6	207.6	207.6
G/T Satellite	dB/K	5.0	5.0	5.0	5.0
C/N Thermal Uplink	dB	21.1	21.7	21.6	20.8
C/I XPOL, ACI, IM, ASI	dB	21.2	21.7	21.7	20.9
C/(N+I) uplink	dB	18.1	18.7	18.7	17.9
<b>Downlink:</b>					
Satellite e.i.r.p. per carrier (-6dB contour)	dBW	10.8	12.6	18.7	24.3
Max e.i.r.p. Density	dBW/4KHz	-1.3	-0.7	-0.7	-1.6
Max PFD	dBW/m2/4kHz	-163.4	-162.8	-162.8	-163.7
Free Space Loss	dB	195.8	195.8	195.8	195.8
Earth Station Diameter	m	3.8	5.6	5.6	4.5
Earth Station Gain	dBi	42.4	45.9	45.9	43.8
Noise Temperature	kHz	95.0	95.0	95.0	95.0
Earth Station G/T	dB/K	22.6	26.1	26.1	24.0
C/N Thermal Downlink	dB	12.1	16.2	16.3	13.3
C/I XPOL, ACI, IM, ASI	dB	15.2	19.2	19.3	16.3
C/(N+I) downlink	dB	10.4	14.4	14.5	11.5
<b>Adjacent satellite interference:</b>					
uplink input power dens @ 2 deg	dBW/Hz	-50	-50	-50	-50
downlink eirp dens @ 2 deg	dBW/Hz	-37	-37	-37	-37
C/I up	dB	24.17	24.72	24.70	23.89
C/I dn	dB	18.17	22.22	22.30	19.29
Aggregate C/I up	dB	21.17	21.72	21.70	20.89
Aggregate C/I dn	dB	15.17	19.22	19.30	16.29
<b>Overall:</b>					
C/(N+I) overall	dB	9.7	13.1	13.1	10.6
C/(N+I) required	dB	6.0	9.3	9.3	6.9
System Margin	dB	3.7	3.8	3.8	3.7

<b>72M0G7W</b>	<b>36M0F3F</b>
14.125	14.125
3.825	3.825
72000.0	36000.0
63330	2000.0
79.1	70.8
4.5	5.6
54.5	56.5
24.6	14.3
207.6	207.6
5.0	5.0
27.1	21.2
27.1	21.3
24.1	18.3
31.0	28.8
-5.0	7.8
-167.1	-154.3
195.8	195.8
9.0	9.0
50.0	50.0
95.0	95.0
30.2	30.2
16.0	16.3
19.0	19.3
14.3	14.5
-50	-50
-37	-37
30.14	24.29
22.04	22.29
27.14	21.29
19.04	19.29
13.8	13.0
12.7	10.0
1.1	3.0