

Link Parameters	Units	346KG7W	461KG7W	1M84G7W	8M25G7W
Uplink Frequency	GHz	6.130	6.130	6.130	6.130
Downlink Frequency	GHz	11.910	11.910	11.910	11.910
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	50.8	52.5	58.5	65.2
Earth Station Diameter	m	3.8	4.5	4.5	9.0
Earth Station Gain	dBi	45.8	47.3	47.3	53.4
Uplink Input Power per Carrier	dBW	5.0	5.2	11.2	11.8
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	17.3	17.8	17.7	17.9
C/I XPOL, ACI, IM, ASI	dB	16.8	17.2	17.2	17.4
C/(N+I) uplink	dB	14.0	14.5	14.5	14.6
<b>Downlink:</b>					
Satellite e.i.r.p. per carrier (-5dB contour)	dBW	20.9	22.7	28.7	35.3
Max e.i.r.p. Density	dBW/4KHz	7.8	8.4	8.3	8.4
Max PFD	dBW/m2/4kHz	-154.3	-153.7	-153.8	-153.7
Free Space Loss	dB	206.2	206.2	206.2	206.2
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	15.2	19.4	19.4	15.8
C/I XPOL, ACI, IM, ASI	dB	19.9	24.1	24.1	20.5
C/(N+I) downlink	dB	13.9	18.2	18.1	14.5
<b>Adjacent satellite interference:</b>					
uplink input power dens @ 2 deg	dBW/Hz	-44	-44	-44	-44
downlink eirp dens @ 2 deg	dBW/Hz	-26	-26	-26	-26
C/I up	dB	19.77	20.22	20.20	20.39
C/I dn	dB	22.87	27.12	27.10	23.49
Aggregate C/I up	dB	16.77	17.22	17.20	17.39
Aggregate C/I dn	dB	19.87	24.12	24.10	20.49
<b>Overall:</b>					
C/(N+I) overall	dB	11.0	12.9	12.9	11.6
C/(N+I) required	dB	6.0	9.3	9.3	6.9
System Margin	dB	5.0	3.6	3.6	4.7

<b>72M0G7W</b>	<b>36M0F3F</b>
6.130	6.130
11.910	11.910
72000.0	36000.0
63330	2000.0
81.9	74.0
9.0	9.0
53.4	53.4
28.5	20.6
200.0	200.0
-8.0	-8.0
24.5	19.0
23.9	22.5
21.2	17.4
45.0	36.2
8.0	14.2
-154.1	-147.9
206.2	206.2
4.5	5.6
53.4	54.6
160.0	160.0
31.4	32.6
20.7	15.6
25.4	22.3
19.5	14.8
-44	-48
-26	-28
26.94	25.49
28.44	25.29
23.94	22.49
25.44	22.29
17.2	12.9
12.7	10.0
4.5	2.9