

Link Parameters	Units	346KG7W	461KG7W	1M84G7W	8M25G7W
Uplink Frequency	GHz	14.125	14.125	14.125	14.125
Downlink Frequency	GHz	11.830	11.830	11.830	11.830
Carrier Allocated Bandwidth	kHz	346.0	461.0	1840.0	8250.0
Uplink:					
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	55.5	58.0	64.1	68.2
Earth Station Diameter	m	4.5	3.7	11.0	4.5
Earth Station Gain	dBi	54.5	52.8	62.4	54.5
Uplink Input Power per Carrier	dBW	1.0	5.2	1.7	13.7
Free Space Loss	dB	207.5	207.5	207.5	207.5
G/T Satellite	dB/K	4.0	4.0	4.0	4.0
C/N Thermal Uplink	dB	26.5	27.8	27.8	25.4
C/I XPOL, ACI, IM, ASI	dB	27.5	28.7	28.8	26.4
C/(N+I) uplink	dB	24.0	25.2	25.3	22.9
Downlink:					
Satellite e.i.r.p. per carrier (-4dB contour)	dBW	22.5	25.0	31.1	35.2
Max e.i.r.p. Density	dBW/4KHz	8.4	9.7	9.7	7.3
Max PFD	dBW/m2/4kHz	-153.7	-152.4	-152.4	-154.8
Free Space Loss	dB	206.1	206.1	206.1	206.1
Earth Station Diameter	m	1.8	2.4	2.4	2.4
Earth Station Gain	dBi	45.3	47.8	47.8	47.8
Noise Temperature	kHz	160.0	160.0	160.0	160.0
Earth Station G/T	dB/K	23.3	25.8	25.8	25.8
C/N Thermal Downlink	dB	14.2	17.9	18.0	15.6
C/I XPOL, ACI, IM, ASI	dB	18.8	22.5	22.6	20.2
C/(N+I) downlink	dB	12.9	16.6	16.7	14.3
Adjacent satellite interference:					
uplink input power dens @ 2 deg	dBW/Hz	-50	-50	-50	-50
downlink eirp dens @ 2 deg	dBW/Hz	-26	-26	-26	-26
C/I up	dB	30.47	31.72	31.80	29.39
C/I dn	dB	21.77	25.52	25.60	23.19
Aggregate C/I up	dB	27.47	28.72	28.80	26.39
Aggregate C/I dn	dB	18.77	22.52	22.60	20.19
Overall:					
C/(N+I) overall	dB	12.6	16.1	16.1	13.7
C/(N+I) required	dB	6.0	9.3	9.3	6.9
System Margin	dB	6.6	6.8	6.8	6.8

72M0G7W	36M0F3F
14.125	14.125
11.830	11.830
72000.0	36000.0
63330	2000.0
82.9	78.4
13.0	13.0
62.4	63.9
20.5	14.5
207.5	207.5
4.0	4.0
30.0	27.9
30.9	28.9
27.4	25.4
47.9	37.1
9.9	14.1
-152.2	-148.0
206.1	205.6
3.7	4.5
51.6	52.5
160.0	160.0
29.6	30.5
21.9	15.0
26.5	19.1
20.6	13.6
-50	-50
-26	-26
33.94	31.89
29.54	22.09
30.94	28.89
26.54	19.09
19.8	13.3
12.7	10.0
7.1	3.3