

<b>Link Parameters</b>	<b>Units</b>	<b>1M34G7W</b>
Uplink frequency	GHz	14.18
Downlink frequency	GHz	11.88
User data rate	kbit/s	1544
Modulation		QPSK
Total coding rate		0.691
Carrier bandwidth	kHz	1340
<b>Uplink:</b>		
Nominal E/S e.i.r.p. per carrier	dBW	51.4
Earth station diameter	m	1.2
Earth station gain	dBi	43.2
Uplink input power per carrier	dBW	8.2
Uplink input power density	dBW/Hz	-53.0
Atmospheric loss	dB	0.1
Free space path loss	dB	207.2
G/T satellite (-3 dB contour)	dB/K	3.0
C/N thermal uplink	dB	14.4
C/I XPOL, ACI, ASI	dB	20.1
C/(N+I) uplink	dB	13.4
<b>Downlink:</b>		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	31.1
Atmospheric loss	dB	0.1
Free space path loss	dB	205.7
Earth station diameter	m	2.4
Earth station gain	dBi	47.7
Noise temperature	K	120.0
Earth station G/T	dB/K	26.9
C/N thermal downlink	dB	19.5
C/I XPOL, ACI, IM, ASI	dB	13.4
C/(N+I) downlink	dB	10.8
<b>Overall:</b>		
C/(N+I) overall	dB	8.9
C/(N+I) required	dB	5.7
Margin	dB	3.2