

<b>Link Parameters</b>	<b>Units</b>	<b>1M34G7W</b>
Uplink frequency	GHz	12.88
Downlink frequency	GHz	10.83
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	63.0
Earth station diameter	m	2.4
Earth station gain	dBi	48.4
Uplink input power per carrier	dBW	14.6
Uplink input power density	dBW/Hz	-46.6
Atmospheric loss	dB	0.2
Free space path loss	dB	206.4
G/T satellite (-6 dB contour)	dB/K	-1.0
C/N thermal uplink	dB	22.8
C/I XPOL, ACI, ASI	dB	24.8
C/(N+I) uplink	dB	20.7
<b>Downlink:</b>		
Satellite e.i.r.p. per carrier (-4 dB contour)	dBW	30.7
Atmospheric loss	dB	0.1
Free space path loss	dB	204.8
Earth station diameter	m	1.8
Earth station gain	dBi	44.4
Noise temperature	K	120.0
Earth station G/T	dB/K	23.6
C/N thermal downlink	dB	16.7
C/I XPOL, ACI, IM, ASI	dB	11.7
C/(N+I) downlink	dB	8.6
<b>Overall:</b>		
C/(N+I) overall	dB	8.3
C/(N+I) required	dB	5.7
Margin	dB	2.6