

Link Parameters	Units	1M34G7W
Uplink frequency	GHz	6.88
Downlink frequency	GHz	4.65
User data rate	kbit/s	1544
Modulation		QPSK
Total coding rate		0.691
Carrier bandwidth	kHz	1340
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	59.9
Earth station diameter	m	4.5
Earth station gain	dBi	48.4
Uplink input power per carrier	dBW	11.5
Uplink input power density	dBW/Hz	-49.7
Atmospheric loss	dB	0.1
Free space path loss	dB	200.9
G/T satellite (-3 dB contour)	dB/K	-5.0
C/N thermal uplink	dB	21.2
C/I XPOL, ACI, ASI	dB	13.6
C/(N+I) uplink	dB	12.9
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	23.3
Atmospheric loss	dB	0.1
Free space path loss	dB	197.5
Earth station diameter	m	4.5
Earth station gain	dBi	45.0
Noise temperature	K	100.0
Earth station G/T	dB/K	25.0
C/N thermal downlink	dB	18.0
C/I XPOL, ACI, IM, ASI	dB	12.2
C/(N+I) downlink	dB	9.0
Overall:		
C/(N+I) overall	dB	7.5
C/(N+I) required	dB	5.7
Margin	dB	1.8