

Link Parameters	Units	1M34G7W
Uplink frequency	GHz	13.90
Downlink frequency	GHz	11.10
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	67.3
Earth station diameter	m	4.5
Earth station gain	dBi	54.5
Uplink input power per carrier	dBW	12.8
Uplink input power density	dBW/Hz	-48.5
Atmospheric loss	dB	0.2
Free space path loss	dB	207.0
G/T satellite (-3 dB contour)	dB/K	2.4
C/N thermal uplink	dB	29.8
C/I XPOL, ACI, ASI	dB	22.9
C/(N+I) uplink	dB	22.1
Downlink:		
Satellite e.i.r.p. per carrier (-3 dB contour)	dBW	36.1
Atmospheric loss	dB	0.1
Free space path loss	dB	205.1
Earth station diameter	m	1.2
Earth station gain	dBi	41.0
Noise temperature	K	120.0
Earth station G/T	dB/K	20.3
C/N thermal downlink	dB	18.6
C/I XPOL, ACI, IM, ASI	dB	13.3
C/(N+I) downlink	dB	9.9
Overall:		
C/(N+I) overall	dB	9.6
C/(N+I) required	dB	5.7
Margin	dB	3.9