

Link Parameters	Units	1M34G7W
Uplink frequency	GHz	14.40
Downlink frequency	GHz	12.10
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	51.6
Earth station diameter	m	1.2
Earth station gain	dBi	43.3
Uplink input power per carrier	dBW	8.3
Uplink input power density	dBW/Hz	-53.0
Atmospheric loss	dB	0.2
Free space path loss	dB	207.3
G/T satellite (-3 dB contour)	dB/K	1.6
C/N thermal uplink	dB	13.0
C/I XPOL, ACI, ASI	dB	20.3
C/(N+I) uplink	dB	12.2
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	29.0
Atmospheric loss	dB	0.1
Free space path loss	dB	205.8
Earth station diameter	m	3.7
Earth station gain	dBi	51.6
Noise temperature	K	120.0
Earth station G/T	dB/K	30.8
C/N thermal downlink	dB	21.2
C/I XPOL, ACI, IM, ASI	dB	14.3
C/(N+I) downlink	dB	12.0
Overall:		
C/(N+I) overall	dB	9.1
C/(N+I) required	dB	5.7
Margin	dB	3.4