

Link Parameters	Units	1M34G7W
Uplink frequency	GHz	14.38
Downlink frequency	GHz	11.33
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	65.0
Earth station diameter	m	6.1
Earth station gain	dBi	57.4
Uplink input power per carrier	dBW	7.6
Uplink input power density	dBW/Hz	-53.7
Atmospheric loss	dB	0.2
Free space path loss	dB	207.3
G/T satellite (-3 dB contour)	dB/K	2.4
C/N thermal uplink	dB	27.2
C/I XPOL, ACI, ASI	dB	21.9
C/(N+I) uplink	dB	20.8
Downlink:		
Satellite e.i.r.p. per carrier (-3 dB contour)	dBW	24.5
Atmospheric loss	dB	0.1
Free space path loss	dB	205.2
Earth station diameter	m	4.5
Earth station gain	dBi	52.7
Noise temperature	K	130.0
Earth station G/T	dB/K	31.6
C/N thermal downlink	dB	18.1
C/I XPOL, ACI, IM, ASI	dB	12.3
C/(N+I) downlink	dB	9.3
Overall:		
C/(N+I) overall	dB	9.0
C/(N+I) required	dB	5.7
Margin	dB	3.3