

Link Parameters	Units	1M34G7W
Uplink frequency	GHz	13.89
Downlink frequency	GHz	11.60
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	59.7
Earth station diameter	m	4.5
Earth station gain	dBi	54.5
Uplink input power per carrier	dBW	5.2
Uplink input power density	dBW/Hz	-56.0
Atmospheric loss	dB	0.2
Free space path loss	dB	207.0
G/T satellite	dB/K	4.3
C/N thermal uplink	dB	24.1
C/I XPOL, ACI, ASI	dB	19.3
C/(N+I) uplink	dB	18.1
Downlink:		
Satellite e.i.r.p. per carrier	dBW	33.1
Atmospheric loss	dB	0.1
Free space path loss	dB	205.4
Earth station diameter	m	2.4
Earth station gain	dBi	47.5
Noise temperature	K	120.0
Earth station G/T	dB/K	26.7
C/N thermal downlink	dB	21.5
C/I XPOL, ACI, IM, ASI	dB	14.8
C/(N+I) downlink	dB	12.1
Overall:		
C/(N+I) overall	dB	11.2
C/(N+I) required	dB	5.7
Margin	dB	5.5