

Link Parameters	Units	1M78G7W
Uplink frequency	GHz	6.20
Downlink frequency	GHz	4.00
User data rate	kbit/s	2048.0
Modulation		QPSK
Total coding rate		0.691
Carrier bandwidth	kHz	1778.0
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	54.3
Earth station diameter	m	7.0
Earth station gain	dBi	51.3
Uplink input power per carrier	dBW	3.0
Uplink input power density	dBW/Hz	-59.5
Atmospheric loss	dB	0.1
Free space path loss	dB	200.0
G/T satellite (-3dB contour)	dB/K	1.2
C/N thermal uplink	dB	21.5
C/I XPOL, ACI, IM, ASI	dB	13.9
C/(N+I) uplink	dB	13.2
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	22.2
Atmospheric loss	dB	0.1
Free space path loss	dB	196.2
Earth station diameter	m	4.5
Earth station gain	dBi	43.7
Noise temperature	K	105.0
Earth station G/T	dB/K	23.5
C/N thermal downlink	dB	15.4
C/I XPOL, ACI, IM, ASI	dB	11.5
C/(N+I) downlink	dB	7.8
Overall:		
C/(N+I) overall	dB	6.7
C/(N+I) required	dB	5.7
System Margin	dB	1.0