

Link Parameters	Units	48K6G7W
Uplink frequency	GHz	6.88
Downlink frequency	GHz	4.65
User data rate	kbit/s	56
Modulation		QPSK
Total coding rate		0.691
Carrier bandwidth	kHz	48.6
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	50.5
Earth station diameter	m	4.5
Earth station gain	dBi	48.4
Uplink input power per carrier	dBW	2.1
Uplink input power density	dBW/Hz	-44.7
Atmospheric loss	dB	0.1
Free space path loss	dB	200.9
G/T satellite (-3 dB contour)	dB/K	-5.0
C/N thermal uplink	dB	26.2
C/I XPOL, ACI, ASI	dB	17.9
C/(N+I) uplink	dB	17.3
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	13.9
Atmospheric loss	dB	0.1
Free space path loss	dB	197.5
Earth station diameter	m	2.4
Earth station gain	dBi	39.5
Noise temperature	K	100.0
Earth station G/T	dB/K	19.5
C/N thermal downlink	dB	17.5
C/I XPOL, ACI, IM, ASI	dB	11.6
C/(N+I) downlink	dB	10.7
Overall:		
C/(N+I) overall	dB	9.8
C/(N+I) required	dB	5.7
Margin	dB	4.1