

Link Parameters	Units	48K6G7W
Uplink frequency	GHz	12.88
Downlink frequency	GHz	10.83
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	42.6
Earth station diameter	m	1.2
Earth station gain	dBi	42.3
Uplink input power per carrier	dBW	0.3
Uplink input power density	dBW/Hz	-46.6
Atmospheric loss	dB	0.2
Free space path loss	dB	206.4
G/T satellite (-6 dB contour)	dB/K	2.3
C/N thermal uplink	dB	20.1
C/I XPOL, ACI, ASI	dB	21.4
C/(N+I) uplink	dB	17.7
Downlink:		
Satellite e.i.r.p. per carrier (-4 dB contour)	dBW	16.1
Atmospheric loss	dB	0.1
Free space path loss	dB	204.8
Earth station diameter	m	2.4
Earth station gain	dBi	46.9
Noise temperature	K	120.0
Earth station G/T	dB/K	26.1
C/N thermal downlink	dB	19.0
C/I XPOL, ACI, IM, ASI	dB	12.2
C/(N+I) downlink	dB	11.3
Overall:		
C/(N+I) overall	dB	10.4
C/(N+I) required	dB	5.7
Margin	dB	4.7