

Link Parameters	Units	72M0G7W
Uplink frequency	GHz	12.88
Downlink frequency	GHz	10.83
User data rate	kbit/s	153004
Modulation		8PSK
Total coding rate		0.841
Carrier bandwidth	kHz	72000
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	85.8
Earth station diameter	m	4.5
Earth station gain	dBi	53.8
Uplink input power per carrier	dBW	32.0
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	31.6
C/I XPOL, ACI, ASI	dB	26.3
C/(N+I) uplink	dB	25.1
Downlink:		
Satellite e.i.r.p. per carrier (-4 dB contour)	dBW	52.1
Atmospheric loss	dB	0.1
Free space path loss	dB	204.8
Earth station diameter	m	1.8
Earth station gain	dBi	44.4
Noise temperature	K	120.0
Earth station G/T	dB/K	23.6
C/N thermal downlink	dB	20.7
C/I XPOL, ACI, IM, ASI	dB	16.9
C/(N+I) downlink	dB	13.1
Overall:		
C/(N+I) overall	dB	12.8
C/(N+I) required	dB	6.5
Margin	dB	6.3