

Link Parameters	Units	72M0G7W
Uplink frequency	GHz	14.38
Downlink frequency	GHz	11.33
User data rate	kbit/s	153005
Modulation		8PSK
Total coding rate		0.841
Carrier bandwidth	kHz	72000
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	76.3
Earth station diameter	m	4.5
Earth station gain	dBi	54.8
Uplink input power per carrier	dBW	21.5
Uplink input power density	dBW/Hz	-57.0
Atmospheric loss	dB	0.2
Free space path loss	dB	207.3
G/T satellite (-3 dB contour)	dB/K	2.4
C/N thermal uplink	dB	21.2
C/I XPOL, ACI, ASI	dB	18.4
C/(N+I) uplink	dB	16.6
Downlink:		
Satellite e.i.r.p. per carrier (-3 dB contour)	dBW	40.9
Atmospheric loss	dB	0.1
Free space path loss	dB	205.2
Earth station diameter	m	6.1
Earth station gain	dBi	55.3
Noise temperature	K	150.0
Earth station G/T	dB/K	33.6
C/N thermal downlink	dB	19.2
C/I XPOL, ACI, IM, ASI	dB	15.1
C/(N+I) downlink	dB	11.3
Overall:		
C/(N+I) overall	dB	10.2
C/(N+I) required	dB	6.5
Margin	dB	3.7