

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	84.8
Earth station diameter	m	6.1
Earth station gain	dBi	57.4
Uplink input power per carrier	dBW	27.4
Uplink input power density	dBW/Hz	-51.2
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	29.7
C/I XPOL, ACI, ASI	dB	22.8
C/(N+I) uplink	dB	22.0
Downlink:		
Satellite e.i.r.p. per carrier (-3 dB contour)	dBW	48.7
Atmospheric loss	dB	0.1
Free space path loss	dB	205.2
Earth station diameter	m	3.7
Earth station gain	dBi	51.0
Noise temperature	K	150.0
Earth station G/T	dB/K	29.2
C/N thermal downlink	dB	22.6
C/I XPOL, ACI, IM, ASI	dB	17.7
C/(N+I) downlink	dB	14.1
Overall:		
C/(N+I) overall	dB	13.4
C/(N+I) required	dB	6.5
Margin	dB	6.9