

Link Parameters	Units	36M0G7W
Uplink frequency	GHz	14.18
Downlink frequency	GHz	11.88
User data rate	kbit/s	41505
Modulation		QPSK
Total coding rate		0.691
Number of carriers		1
Carrier bandwidth	kHz	36000
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	72.3
Earth station diameter	m	4.5
Earth station gain	dBi	54.7
Uplink input power per carrier	dBW	17.6
Uplink input power density	dBW/Hz	-57.9
Atmospheric loss	dB	0.1
Free space path loss	dB	207.2
G/T satellite (-3 dB contour)	dB/K	3.0
C/N thermal uplink	dB	21.0
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	49.4
Atmospheric loss	dB	0.1
Free space path loss	dB	205.7
Earth station diameter	m	1.2
Earth station gain	dBi	41.6
Noise temperature	K	120.0
Earth station G/T	dB/K	20.8
C/N thermal downlink	dB	17.5
Adjacent Satellite 1:		
Orbital separation	degrees	1.85
Uplink input power density	dBW/Hz	-45.0
Downlink e.i.r.p. density	dBW/Hz	-23.0
Adjacent Satellite 2:		
Orbital separation	degrees	2.05
Uplink input power density	dBW/Hz	-45.0
Downlink e.i.r.p. density	dBW/Hz	-23.0
Link Degradations:		
C/I IM, XPOL, ACI	dB	27.0
C/I uplink ASI	dB	18.0
C/I downlink ASI	dB	14.7
Overall:		
C/(N+I) overall	dB	11.1
C/(N+I) required	dB	5.7
Margin	dB	5.4