

Link Parameters	Units	390MG7W
Uplink frequency	GHz	25.00
Downlink frequency	GHz	17.50
User data rate	kbit/s	160500
Modulation		QPSK
Total coding rate		0.247
Number of carriers per TXP		1
Carrier bandwidth	kHz	389879
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	84.7
Earth station diameter	m	3.5
Earth station gain	dBi	57.4
Uplink input power per carrier	dBW	27.3
Uplink input power density	dBW/Hz	-58.0
Atmospheric loss	dB	0.4
Free space path loss	dB	211.9
G/T satellite	dB/K	-8.0
C/N thermal uplink	dB	7.9
C/I ASI	dB	39.9
C/(N+I) uplink	dB	7.9
Downlink:		
Satellite e.i.r.p. per carrier	dBW	33.3
Atmospheric loss	dB	0.2
Free space path loss	dB	208.7
Earth station mis-pointing loss	dB	0.3
Earth station diameter	m	6.3
Earth station gain	dBi	59.4
Noise temperature	K	150.0
Earth station G/T	dB/K	37.6
C/N thermal downlink	dB	5.2
C/I XPOL, IM, ASI	dB	9.4
C/(N+I) downlink	dB	2.7
Overall:		
C/(N+I) overall	dB	1.6
C/(N+I) required	dB	-2.0
Margin	dB	3.6