

Link Parameters	Units	18M2G7W
Uplink frequency	GHz	6.18
Downlink frequency	GHz	3.95
Modulation		QPSK
Carrier bandwidth	kHz	18200
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	75.0
Earth station diameter	m	9.3
Earth station gain	dBi	53.7
Uplink input power per carrier	dBW	21.3
Uplink input power density	dBW/Hz	-51.3
Atmospheric loss	dB	0.1
Free space path loss	dB	200.2
G/T satellite (-3 dB contour)	dB/K	0.9
C/N thermal uplink	dB	32.6
C/I XPOL, ACI, ASI	dB	21.2
C/(N+I) uplink	dB	20.9
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	39.6
Atmospheric loss	dB	0.1
Free space path loss	dB	196.3
Earth station antenna pointing loss	dB	0.3
Earth station diameter	m	2.4
Earth station gain	dBi	38.1
Earth station G/T	dB/K	18.1
C/N thermal downlink	dB	18.0
C/I XPOL, ACI, IM, ASI	dB	9.9
C/(N+I) downlink	dB	6.5
Overall:		
C/(N+I) overall	dB	6.4
C/(N+I) required	dB	5.7
Margin	dB	0.7