

Link Parameters	Units	48K6G7W
Uplink frequency	GHz	6.18
Downlink frequency	GHz	3.95
Modulation		QPSK
Carrier bandwidth	kHz	48.6
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	49.4
Earth station diameter	m	4.5
Earth station gain	dBi	47.4
Uplink input power per carrier	dBW	2.0
Uplink input power density	dBW/Hz	-44.9
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	32.5
C/I XPOL, ACI, ASI	dB	21.1
C/(N+I) uplink	dB	20.8
Downlink:		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	12.1
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	16.1
C/I XPOL, ACI, IM, ASI	dB	7.5
C/(N+I) downlink	dB	7.0
Overall:		
C/(N+I) overall	dB	6.8
C/(N+I) required	dB	5.7
Margin	dB	1.1