

<b>Link Parameters</b>	<b>Units</b>	<b>1M69G7W</b>
Uplink frequency	GHz	6.18
Downlink frequency	GHz	3.95
Modulation		8PSK
Carrier bandwidth	kHz	1688
<b>Uplink:</b>		
Nominal E/S e.i.r.p. per carrier	dBW	57.0
Earth station diameter	m	2.4
Earth station gain	dBi	42.0
Uplink input power per carrier	dBW	15.0
Uplink input power density	dBW/Hz	-47.2
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	25.2
C/I XPOL, ACI, ASI	dB	14.2
C/(N+I) uplink	dB	13.9
<b>Downlink:</b>		
Satellite e.i.r.p. per carrier (-3dB contour)	dBW	24.7
Atmospheric loss	dB	0.1
Free space path loss	dB	196.3
Earth station antenna pointing loss	dB	0.3
Earth station diameter	m	9.3
Earth station gain	dBi	49.9
Earth station G/T	dB/K	29.9
C/N thermal downlink	dB	25.5
C/I XPOL, ACI, IM, ASI	dB	18.8
C/(N+I) downlink	dB	16.7
<b>Overall:</b>		
C/(N+I) overall	dB	12.0
C/(N+I) required	dB	9.3
Margin	dB	2.7