

Link Parameters	Units	6M33G7W
Uplink frequency	GHz	14.38
Downlink frequency	GHz	11.33
User data rate	kbit/s	8448
Modulation		QPSK
Total coding rate		0.801
Carrier bandwidth	kHz	6330
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	68.6
Earth station diameter	m	4.5
Earth station gain	dBi	54.8
Uplink input power per carrier	dBW	13.8
Uplink input power density	dBW/Hz	-54.2
Atmospheric loss	dB	0.2
Free space path loss	dB	207.3
G/T satellite (-3 dB contour)	dB/K	2.4
C/N thermal uplink	dB	24.1
C/I XPOL, ACI, ASI	dB	20.3
C/(N+I) uplink	dB	18.8
Downlink:		
Satellite e.i.r.p. per carrier (-3 dB contour)	dBW	31.2
Atmospheric loss	dB	0.1
Free space path loss	dB	205.2
Earth station diameter	m	4.5
Earth station gain	dBi	52.7
Noise temperature	K	130.0
Earth station G/T	dB/K	31.6
C/N thermal downlink	dB	18.0
C/I XPOL, ACI, IM, ASI	dB	13.1
C/(N+I) downlink	dB	9.6
Overall:		
C/(N+I) overall	dB	9.1
C/(N+I) required	dB	5.8
Margin	dB	3.3