

Link Parameters	Units	6M33G7W
Uplink frequency	GHz	13.89
Downlink frequency	GHz	11.60
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	67.1
Earth station diameter	m	4.5
Earth station gain	dBi	54.5
Uplink input power per carrier	dBW	12.6
Uplink input power density	dBW/Hz	-55.4
Atmospheric loss	dB	0.2
Free space path loss	dB	207.0
G/T satellite	dB/K	4.3
C/N thermal uplink	dB	24.8
C/I XPOL, ACI, ASI	dB	19.8
C/(N+I) uplink	dB	18.6
Downlink:		
Satellite e.i.r.p. per carrier	dBW	40.5
Atmospheric loss	dB	0.1
Free space path loss	dB	205.4
Earth station diameter	m	2.0
Earth station gain	dBi	45.9
Noise temperature	K	120.0
Earth station G/T	dB/K	25.1
C/N thermal downlink	dB	20.6
C/I XPOL, ACI, IM, ASI	dB	15.1
C/(N+I) downlink	dB	11.9
Overall:		
C/(N+I) overall	dB	11.0
C/(N+I) required	dB	5.8
Margin	dB	5.2