

Link Parameters	Units	27M0G7W
Uplink frequency	GHz	13.89
Downlink frequency	GHz	11.60
User data rate	kbit/s	28828
Modulation		QPSK
Total coding rate		0.641
Carrier bandwidth	kHz	27000
Uplink:		
Nominal E/S e.i.r.p. per carrier	dBW	72.0
Earth station diameter	m	4.5
Earth station gain	dBi	54.5
Uplink input power per carrier	dBW	17.5
Uplink input power density	dBW/Hz	-56.8
Atmospheric loss	dB	0.2
Free space path loss	dB	207.0
G/T satellite	dB/K	4.3
C/N thermal uplink	dB	23.4
C/I XPOL, ACI, ASI	dB	18.7
C/(N+I) uplink	dB	17.4
Downlink:		
Satellite e.i.r.p. per carrier	dBW	48.3
Atmospheric loss	dB	0.1
Free space path loss	dB	205.4
Earth station diameter	m	1.2
Earth station gain	dBi	41.4
Noise temperature	K	120.0
Earth station G/T	dB/K	20.6
C/N thermal downlink	dB	17.7
C/I XPOL, ACI, IM, ASI	dB	13.4
C/(N+I) downlink	dB	9.6
Overall:		
C/(N+I) overall	dB	9.0
C/(N+I) required	dB	3.9
Margin	dB	5.1