

TABLE 9: Link Budgets - Analog TV

Parameter	Typical TV/FM link
Carrier designation	36M0F3F
Uplinks:	
Transmit Power (dBW)	22.00
Transmit Loss (dB)	-1.00
Antenna diameter	6.10
Antenna Gain (dBi)	57.31
Ground Station EIRP (dBW)	78.31
Uplink Rain Loss (dB)	-2.00
Free Space Loss (dB)	-207.00
Satellite G/T (dB/K)	3.00
Bandwidth (dB-Hz)	75.56
Boltzmann's Constant (dBW/K-Hz)	-228.60
C/N, uplink (dB)	25.35
Downlinks:	
Satellite Carrier EIRP (dBW)	48.20
Downlink Rain Loss (dB)	-3.00
Free Space Loss (dB)	-205.40
Ground station antenna dia, m	1.20
Ground Station G/T (dB/K)	20.87
C/N, DL (dB)	13.71
C/I ASI (dB)	18.00
C/Ntot, dB	12.33
Required (dB)	11.00
Margin (dB)	1.33