

MSAT GC-S Carrier EOC Link Budget			
PARAMETER	UNITS	FORWARD (Hub to User)	RETURN (User to Hub)
Noise Bandwidth	kHz	4	4
Boltzmann's constant	dBW/Hz. ^o K	-228.6	-228.6
UPLINK			
		Clear	Clear
Frequency	GHz	13	1.64
Earth Station EIRP	dBW	54.5	12
Body Shielding Loss	dB	x	0
Polarization Loss	dB	x	-0.5
Free Space Loss	dB	-206.7	-188.8
Uplink Fade	dB	0	0
Satellite Antenna Gain, EOC	dB _i	29	29
Received Carrier Power	dBW	-123.2	-148.3
Satellite G/T	dB/ ^o K	-1	5
Intersystem Interference Allowance	dB	0.5	1
C/No	dB·Hz	74.9	55.3
C/Imo	dB·Hz	58.0	60.0
Satellite C/(No+Io)	dB·Hz	57.9	54.0
DOWNLINK			
Frequency	GHz	1.55	11
Satellite Active Gain	dB	123.3	122
Satellite Antenna Gain, EOC	dB _i	29	29
Satellite EOC EIRP	dBW	29.1	2.7
Free Space Loss	dB	-188.5	-205.2
Downlink Fade	dB	x	0
Earth Station G/T	dB/ ^o K	-16	36.5
Interference Allowance	dB	1	0.5
C/No	dB·Hz	52.2	62.1
LINK			
Link C/(No+Io)	dB·Hz	51.2	53.4
Required C/No	dB·Hz	45.0	45.0
Margin	dB	6.2	8.4