

Parameter	Value	Unit	Budget
fc_DL	8E+9	Hz	
lamb_DL	37.5E-3	m	
Orbiter p_tx	65	W	
P_tx	18.1291336	dBW	
Orbiter HGA ø	3.2	m	
Ground Dish ø	35.0	m	
Path Loss	290.1	dB	-290.1
Orbiter a_eff	0.65		
Ground a_eff	0.75		
Orbiter G_a	46.7	dB	
Ground G_aRx	68.1	dB	
Orbiter Tx2Ant Loss: Lt	0.5	dB	-0.5
Orbiter EIRP	64.8	dBW	64.8
Elevation Ang	10	deg	
Atm Loss	2.9	dB	-2.9
Sky Noise @ 90deg	25	K	
Sky Noise @ 10deg	125	K	
Rx frontend loss Lr	0.8	dB	
F_LNA	1.2	dB	
G_LNA	35	dB	
Subsys Noise Temp T2	600	K	
Rx sys, Tsys			
T_Rx	169.85	K	
T_a	125	K	
T_sys	294.85	K	
G/T	43.4	dB/K	43.4
Symbol Constallation	1	bits/symb	
Symbol Rate	4.9E+3	Baude	
Daily Window (8h)	28.8E+3	s	
Bit Rate	4.9E+3	bps	-36.9
Telemetry	140.0E+6	bits	
Eb/No			6.5 dB
Required Eb/No	1	dB	
Margin			5.46 dB